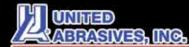
## SAIT

## The Leaders In Metal Fabrication!



Cutting • Grinding • Blending • Finishing





### **GRINDING** - PG. 7

### **Grinding Wheels (1/4" Thick)**



Introduction Pg 7 Type 27 8-14 Type 28 15-17

### Pipeline Wheels (1/8" Thick)



Introduction Pg 23 1/8" Wheels 24-25

#### Contaminant-Free Wheels



XA24Q (1/4") Pg 12 XA24Q (1/8") 37 XA46R (1/16" Cutting) 31

### Flexible Grinding/Blending



Type 29 Wheels Pg 18

### **Cup Stones**



Type 11 Pg 20-21

### **Cones, Plugs & Mounted Points**



Type 16, 17, 18 Pg 19 Type A, B, W 22

#### Hand and Floor Rubs



Plain, Fluted, Handle, Scored Pg 58

### **Bench Wheels**



A, GC Pg 59

#### **Cotton Fiber**



Cotton Fiber Pg 56-57

#### Wire Brushes & Carbide Burs



Introduction Pg 127-128
Wire Brushes 129-135
Carbide Burs 136-137

### CUTTING - PG. 26

### .045" Cutting Wheels



Type 27 Pg 28-29 Type 1 30-31, 38 Type 1 Contaminant-Free 1/16" 31

### .090" Cutting/Notching Wheels



Type 27 Pg 32-33 Type 1 34

### 3/32" & 1/8" Cutting Wheels



Type 27 Pg 35-37

### **Thin High Speed Cut-Off**



.035", 1/16" & 1/8" Pg 38-39

### **Chop Saw Wheels**



Chop Saw Pg 41-43

### Portable Saw Cut-Off Wheels



Type 1 (4-1/2" - 9") Pg 40 Type 1 (12" - 16") 44-46

### **Stationary Saw Wheels**



Stationary Saw Pg 48-49

### **Street Saw Wheels**



Street Saw Pg 47

### **Metal-Cutting Carbide Blades**



Introduction Pg 50 Carbide Blades 51-53

#### **Diamond**



Diamond Pg 54-55

### BLENDING & FINISHING (COATED - PG. 60)

### **Fiber Discs**



Introduction Pg 69 Fiber Discs 70-74

### **Flap Discs**



Introduction Pg 86 **Encore & Mini** 87 88-89 Ovation® Saitlam™ 90-92 Sand-Light™ (Non-Woven) 91, 122

### **Belts**



Pq 62-63 Introduction 64-67 **Belt Specifications Custom Belts** 68

### **Laminated Discs**



SAIT-LOK™ Pg 75-77 SAIT-LOK-R™

### **Paper Discs**



Introduction Pg 78 **PSA Disc Rolls** 79 **PSA Disc Individual** 80-81 Hook & Loop 82-83

### **Cloth Discs**



Pg 78 Introduction Zirconium 84 **Aluminum Oxide** 85

### Flap Wheels



Pg 93 Small Diameter **Large Diameter** 94 **5/8-11 Threaded** 94

### **Sheets**



Introduction Pq 95 Cloth 96 **Paper** 96-97 Fileboard 98-99 Saitscreen™/Drywall 100 **Sanding Sponges** 101

### **Shop Rolls**



Pq 102 Industrial/Handy Mini/Custom 103 Saitscreen™/Plumber 104

### **Specialties**



**Spiral Bands** Pg 105 Cartridge Rolls 106-107 **Cross Pads** 108 **Square Pads** 108

### Floor Sanding



Sheets/Belts Pq 109 110 Discs Rolls 111 112-113 **Pads** 

### **Accessory Items**



Pg 139 Introduction Accessories 140-146 SAIT-PAK™ 138

#### NON-WOVEN - PG. 114



















Introduction	Pg 114
Hand Pads	115
Belts	116
Discs	117-118
SAIT-Strip™ Products	119
Flap Brushes	120

**Interleaf Wheels** Pa 121 Sand-Light™ (Flap Discs) 122 **Unitized Wheels/Type 27** 122-123 **Convolute Wheels** 124 Sand-Light™ Blending Discs 125 **Buffing Pads/Compounds** 126

# How To USE THIS CATALOG

### **COLOR CODING SYSTEM**

- Uniform color identification throughout our bonded abrasives section and on our product labels.
- Quickly recognize the right product for the type of material you are working with.

PRODUCT	COLOR CODING TO MATERIAL	PRODUCT	COLOR CODING TO MATERIAL
April Marian	METAL	AAAA - se	ALUMINUM
No. SATE	STAINLESS	COM A STATE OF THE	CONCRETE

### TECHNICAL & REFERENCE MATERIAL - PG. 147

Anatomy of a Wheel	156
Bonded Abrasives Application Chart	162-163
Coated Abrasives Application Chart	154-155
Coated Abrasives Information and Manufacturing	151-153
Common Occurrences With Grinding/Cutting Applications	157
How a Wheel Works	
Index by Product Description and Number	164-167
Marking System	158
Metal-Cutting Carbide Blade Technical Data	
Promotional Information and Displays	147-149
Safety Information	161
Storage and Handling	
Super-Lock™ Hub	
Wheel Configurations	158
Wheel Label Example	159

### **UNITED ABRASIVES, INC. // SAIT**

- Privately held company established in 1970.
- •Relationship with SAIT, an Italian corporation founded in 1953, began as we first manufactured coated abrasive belts.
- By 1975, we had expanded our production to include bonded abrasives.
- •Well known worldwide for quality, consistency, and the highest levels of service.
- One of the largest and leading manufacturers of abrasive products in the world for both bonded and coated.
- •Only premium raw materials are used.
- Demand consistent manufacturing operations and have the most rigorous quality control testing in the industry.
- EVERY order is a RUSH delivery! From phone order to truck in minutes!



United Abrasives, Inc. warrants that all industrial products it manufactures will be as represented in its catalog and will be free from defects in material and workmanship under normal use for which the product was intended if, but only if, it has been properly stored and used. Our obligation under this Warranty shall be limited to either the exchange of any product proven to be defective under normal use or to refund the purchase price thereof, at our option, within six months from the date of purchase by the original purchaser. The term "original purchaser", as used in this Warranty, shall be deemed to mean that person or company to whom the product was originally sold. This remedy is purchaser's exclusive remedy against United Abrasives, Inc. for any damages to either person or property caused by any defect or other failure in the product. Said refund or exchange shall constitute a fulfillment of any and all liabilities of United Abrasives, Inc. with respect to the quality of the product sold by it.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS. THIS WARRANTY SHALL NOT APPLY TO ANY PRODUCT SOLD BY US WHICH HAS BEEN SUBJECT TO ACCIDENT, NEGLIGENCE, ALTERATION, ABUSE, OR MISUSE. WE MAKE NO WARRANTY WITH RESPECT TO ACCESSORIES OR PARTS EMPLOYED BY THE USER WITH OUR PRODUCT WHICH WERE NOT SUPPLIED BY UNITED ABRASIVES, INC. UNDER NO CIRCUMSTANCES IS UNITED ABRASIVES, INC. LIABLE FOR ANY DIRECT INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS) IN ANY WAY RELATING TO THE PRODUCTS SOLD BY UNITED ABRASIVES, INC.

All products listed in this catalog must be used in accordance with the safety regulations set by **OSHA**, by the directive described by the **American National Safety Institute B7.1** ("Safety Requirements for the Use, Care and Protection of Abrasive Wheels") and by the **American Brush Manufacturers Association**. The user of any United Abrasives, Inc. product should be thoroughly familiar with the above safety rules and regulations before use of the product.









## **Products By Tool Index**

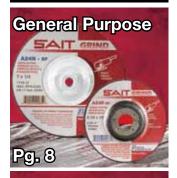
The tool graphic found on each page of the catalog represents the appropriate tool the product can be used on. These icons are also located on our product and box labels for easy identification.

Tool Icon	Page #	Tool Icon	Page #
Angle Grinder	8-18, 20-21, 24-25,	Benchstand Belt Sa	
	28-38, 40, 54-57, 70-74, 87-92, 94,		
<u> </u>	118-119, 122, 126, 129-132, 135		64-67, 116
Portable Grinder	120 102, 100	Backstand Sander	0107,110
	57, 75-77, 117-119,		
	125-126	<b>1</b>	64, 67, 116
Die Grinder		Floor Sander	
	19, 22, 39, 56-57, 105-108, 119, 121,		
-	123, 133, 135-137		109-113
Circular Saw	,	Disc Sander	
402	30-31, 34, 38, 40		105 100
	51-52, 54-55		125-126
Chop Saw		Disc Sander	
	42-43	<b>—</b>	79-85, 118
Stationary Saw		Edge Sander	
	48-49		110
Portable Saw		Fileboard	
	44-46, 55		98-99
Walk-Behind/Street	Saw	Drywall Sander	
THE STATE OF THE S			
( ) S	47, 133	<i></i>	100
Bench Grinder/Pede	·	File Sander	
	59, 124-125,	<del>-   _</del>	64, 116
B. 4.14. B. 11.0	129, 135	Low RPM Metal-Cut	
Portable Belt Sande	er	Low helvi ivietai-Cut	ung saw
	64-66, 116		51-52
Metal-Cutting Circu	lar Saw	Worm Drive Saw	
	51-52		51-52
	J: 0L		01.02

## GRINDING INTRODUCTION

- This section contains ten 1/4" thick grinding specifications (Type 27, 28 and 29).
- You will also find Cones, Plugs, Cup Stones, Mounted Points and Challenger II.

#### **TYPE 27**



#### **PAGES 8-11**

#### **A24N**

**Fast Grinding** 

#### **A24R**

Long Life

#### **A24T**

**Edge Grinding** 

#### A24Turbo™

Smooth, Edge Grinding Better Control Long Life



**High Performance** 

#### Sait Z-tech™

**Extremely Fast Stock Removal** 

Special Zirconium Grain

Can be used on Stainless Steel



**Extremely Fast Stock Removal** 

**Non-loading Formula** 



#### **TYPE 28**



#### **PAGES 15-17**

A24N A24R Saitech™ Concrete

#### **TYPE 27**



**Stainless Steel** 

### PAGES 12-14

#### **XA24Q**

Contaminant Free Grinding

contaminant C



Free of Iron, Sulphur & Chlorine

### Saitech Attacker®

**Fast Grinding** 

Saitech Ultimate Performance™

Long Life

### **C24N**

General Purpose Grinding on Masonry, Concrete and Stone







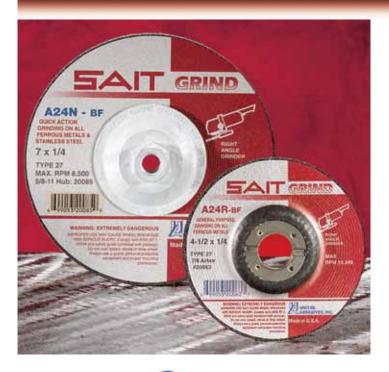




## Grinding

### TYPE 27

### **Depressed Center Wheels**



### A24N - Fast Grinding

- Aluminum oxide grain
- Soft bond for fast stock removal

METAL Ferrous Metals (iron, steel, welds, etc.)

**STAINLESS** Low grade stainless steel

### A24R - Long Life

- Aluminum oxide grain; our most popular wheel
- For general purpose grinding
- Longer life for fewer wheel changes

**METAL** Ferrous Metals (iron, steel, welds, etc.)

### A24T - Edge Grinding

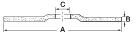
- Aluminum oxide grain
- Hard bond designed for edge and bevel grinding and other applications where a harder wheel is preferred
- Longer life for fewer wheel changes

METAL Ferrous Metals (iron, steel, welds, etc.)



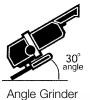
#### **Quick Tip**

The "softer" a grinding wheel is (A24N) the faster it will remove metal.



	Size		Grades Available			able	Qty	Qty	Lbs
Α	В	С	Max	Р	art Numb	er	Per	Per	Per
Dia.	Width	Bore	RPM	A24N	A24R	A24T	Вох	Ctn	Box
3	3/16	3/8	18,000	20001	-	-	25	100	3
3	1/4	3/8	18,000	20002	20005	-	25	100	4
4	3/16	3/8	13,500	20010	-	-	25	100	6
4	1/4	3/8	13,500	20012	20019	-	25	100	7
4	1/4	5/8	13,500	20015	20013	-	25	100	7
4-1/2	3/16	7/8	13,300	20050	-	-	25	100	8
4-1/2	3/16	5/8-11	13,300	20150	-	-	10	40	5
4-1/2	1/4	7/8	13,300	20060	20063	20065	25	100	9
4-1/2	1/4	5/8-11	13,300	20160	20163	20165	10	40	6
5	1/4	7/8	12,200	20070	20073	20075	25	100	11
5	1/4	5/8-11	12,200	20170	20173	20175	10	40	6
6	1/4	7/8	10,200	20078	20079	20280	25	50	18
6	1/4	5/8-11	10,200	20178	20076	20180	10	40	10
7	1/4	7/8	8,500	20081	20080	20285	25	50	24
7	1/4	5/8-11	8,500	20085	20086	20185	10	40	14
9	1/4	7/8	6,600	20091	20090	20295	25	50	42
9	1/4	5/8-11	6,600	20095	20096	20195	10	40	20





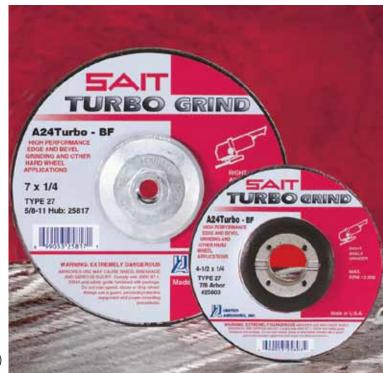




- Virgin aluminum oxide grain assures consistent high stock removal for tough applications
- All sizes are made with uniform grain throughout, no filler grain used in the backing
- All wheels internally reinforced with the highest quality fiberglass for maximum safety
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

### **Depressed Center Wheels**



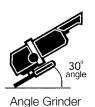


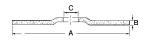
### A24Turbo™ - Hard Edge

- Special combination aluminum oxide grain
- Hard bond system for all edge and tough applications requiring a harder wheel
- Very hard edge which breaks down evenly for smooth operation
- Very long life for fewer wheel changes

**METAL** Ferrous Metals (iron, steel, welds, etc.)







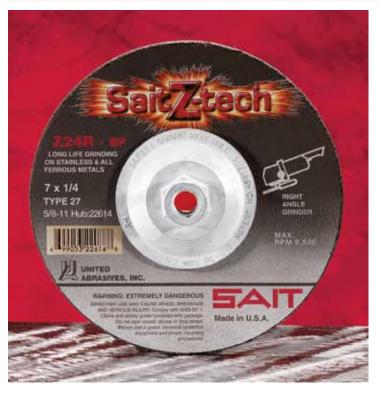
	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Box	Ctn	Box
4-1/2	1/4	7/8	13,300	25803	25	100	9
4-1/2	1/4	5/8-11	13,300	25813	10	40	6
5	1/4	7/8	12,200	25805	25	100	11
5	1/4	5/8-11	12,200	25815	10	40	6
6	1/4	7/8	10,200	25806	25	50	17
6	1/4	5/8-11	10,200	25816	10	40	10
7	1/4	7/8	8,500	25807	25	50	24
7	1/4	5/8-11	8,500	25817	10	40	9
9	1/4	7/8	6,600	25809	25	50	39
9	1/4	5/8-11	6,600	25819	10	40	19



- Virgin aluminum oxide grain assures consistent high stock removal for tough applications
- All sizes are made with uniform grain throughout, no filler grain used in the backing
- All wheels internally reinforced with the highest quality fiberglass for maximum safety
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

## Grinding

### **Depressed Center Wheels**







TYPE 27

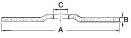
### **Z24R** - Zirconium

- Tough zirconium grain
- High performance grinding for the toughest applications

METAL Ferrous metals (iron, steel, welds)

STAINLESS Stainless steel, high tensile alloys





	Size			Part	Qty	Qty	Lbs
Α	В	С	Max	Number	Per	Per	Per
Dia.	Width	Bore	RPM	Z24R	Вох	Ctn	Box
4	1/4	5/8	13,500	22599	25	100	7
4-1/2	1/4	7/8	13,300	22600	25	100	9
4-1/2	1/4	5/8-11	13,300	22610	10	40	6
5	1/4	7/8	12,200	22602	25	100	12
5	1/4	5/8-11	12,200	22612	10	40	6
6	1/4	7/8	10,200	22603	25	50	20
6	1/4	5/8-11	10,200	22613	10	40	9
7	1/4	7/8	8,500	22604	25	50	25
7	1/4	5/8-11	8,500	22614	10	40	14
9	1/4	7/8	6,600	22606	25	50	42
9	1/4	5/8-11	6,600	22616	10	40	21







- The highest quality zirconium grain
- All sizes made with uniform grain throughout, no filler grain used
- Super-Lock™ Hub on all 5/8-11 threaded arbors is the safest, vibration-free design



### **Depressed Center Wheels**



Grinding

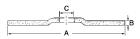
#### A46N - Aluminum

- Aluminum oxide grain
- Soft bond for aggressive removal of material without loading
- Outlasts competition by as much as 40%

ALUMINUM Non-ferrous metals (aluminum, copper, brass, etc.)



See pages 56-57 for Cotton Fiber grinding and blending products for aluminum



	Size			Part	Qty	Qty	Lbs
Α	В	С	Max	Number	Per	Per	Per
Dia.	Width	Bore	RPM	A46N	Вох	Ctn	Box
4	1/4	5/8	13,500	20018	25	100	7
4-1/2	1/4	7/8	13,300	20062	25	100	9
4-1/2	1/4	5/8-11	13,300	20162	10	40	6
5	1/4	7/8	12,200	20072	25	100	11
5	1/4	5/8-11	12,200	20172	10	40	6
7	1/4	7/8	8,500	20083	25	50	24
7	1/4	5/8-11	8,500	20088	10	40	13
9	1/4	7/8	6,600	20093	25	50	41
9	1/4	5/8-11	6,600	20098	10	40	20





Angle Grinder



- Special aluminum oxide formulation prevents "loading" on soft (non-ferrous) metals
- All sizes internally reinforced with the highest quality fiberglass for maximum safety and performance
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

Grinding 1/4<sup>55</sup>

## TYPE 27

### **Depressed Center Wheels**



### XA24Q - Contaminant-Free

- Specially formulated for nuclear and food processing plants
- Free of iron, chlorine and sulphur compounds (Fe + Cl + S <0.1%)</li>

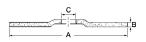
STAINLESS Stainless steel and other high tensile alloys

METAL Ferrous metals (iron, steel, welds, etc.)

 Available in 1/8" for pipeline work (for more information see page 37)



 Will not contaminate stainless steel



	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Numbers	Box	Ctn	Box
4-1/2	1/4	7/8	13,300	24210	25	100	9
5	1/4	7/8	12,200	24215	25	100	9
6	1/4	7/8	10,200	24220	25	50	20
7	1/4	7/8	8,500	24225	25	50	25
9	1/4	7/8	6,600	24230	25	50	49



Angle Grinder



- Specially formulated for contaminant-free stock removal on stainless steel
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance

### Saitech High Performance Wheels



#### Saitech Attacker®

- High performance, ceramic aluminum oxide grain
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Extremely fast stock removal on hard metals with minimal pressure

STAINLESS Stainless steel and other high tensile alloys

METAL Ferrous metals (iron, steel, welds, etc.)

#### Saitech Ultimate Performance™

- High performance, ceramic aluminum oxide grain
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- · Combines fast stock removal with long life

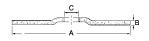
STAINLESS Stainless steel and other high tensile alloys

METAL Ferrous metals (iron, steel, welds, etc.)









	Size			Grades	Qty	Qty	Lbs	
Α	В	С	Max	Part N	lumbers	Per	Per	Per
Dia.	Width	Bore	RPM	Attacker®	Saitech™ UP	Box	Ctn	Box
3	3/16	3/8	18,000	-	20101	25	100	3
3	1/4	3/8	18,000	-	20102	25	100	4
4	1/4	3/8	13,500	-	20112	25	100	7
4	1/4	5/8	13,500	-	20014	25	100	8
4-1/2	1/4	7/8	13,300	20046	20064	25	100	11
4-1/2	1/4	5/8-11	13,300	20146	20164	10	40	6
5	1/4	7/8	12,200	20047	20074	25	100	13
5	1/4	5/8-11	12,200	20147	20174	10	40	8
7	1/4	7/8	8,500	20048	20084	25	50	28
7	1/4	5/8-11	8,500	20148	20089	10	40	14
9	1/4	7/8	6,600	20049	20094	25	50	43
9	1/4	5/8-11	6,600	20149	20099	10	40	21



- Manufactured with patented 3M™ ceramic abrasive grain to outlast standard aluminum oxide wheels
- Special bonding formula allows for very fast stock removal on many types of metals
- Designed to provide very long life for fewer wheel changes and less downtime
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance

## Grinding

## TYPE 27 Depressed Center Wheels



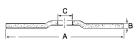
#### C24N - Concrete

- Silicon carbide grain
- Soft bond for fast stock removal

CONCRETE Masonry, concrete, stone

METAL Cast iron and other ferrous metals

Quick Tip
Use the C24N wheel on hard to grind metal like cast iron



	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Вох	Ctn	Box
4	1/4	5/8	13,500	20017	25	100	6
4-1/2	1/4	7/8	13,300	20061	25	100	8
4-1/2	1/4	5/8-11	13,300	20161	10	40	6
5	1/4	7/8	12,200	20071	25	100	10
5	1/4	5/8-11	12,200	20171	10	40	6
7	1/4	7/8	8,500	20082	25	50	24
7	1/4	5/8-11	8,500	20087	10	40	12
9	1/4	7/8	6,600	20092	25	50	33
9	1/4	5/8-11	6,600	20097	10	40	7





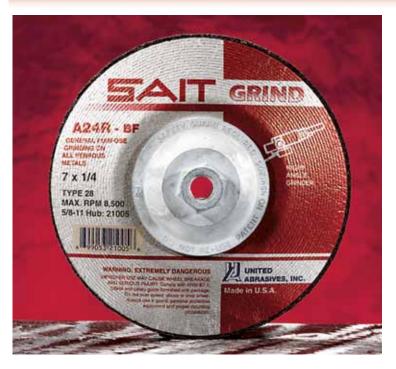
Angle Grinder



- Special Silicon Carbide grain formula is excellent for grinding masonry, concrete, stone and aggregate
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

### **Depressed Center Wheels**





#### A24N - Fast Grinding

- Aluminum oxide grain
- Soft bond for fast stock removal

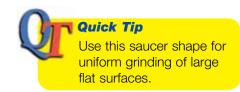
METAL Ferrous metals (iron, steel, welds, etc.)

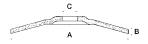
STAINLESS Low-grade stainless steel

### A24R - Long Life

- Aluminum oxide grain
- Medium bond for longer life and fewer wheel changes

**METAL** Ferrous metals (iron, steel, welds, etc.)





A	Size B	С	Max	Grades Available		Qty Per	Qty Per	Lbs Per
Dia.	Width	Bore	RPM	Part Number A24N A24R		Box	Ctn	Box
							~	
4-1/2	1/4	7/8	13,300	21020	21021	25	100	9
4-1/2	1/4	5/8-11	13,300	21025	21026	10	40	6
7	1/4	7/8	8,500	21001	21000	25	50	23
7	1/4	5/8-11	8,500	21004	21005	10	40	13
9	1/4	7/8	6,600	21011	21010	25	50	38
9	1/4	5/8-11	6,600	21014	21015	10	40	19



Angle Grinder





- Type 28 saucer shape (see diagram above) allows greater surface area coverage and provides the operator with greater grind visibility
- Additional fiberglass reinforcement for maximum safety in high lateral pressure applications
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

## Grinding



### Saitech High Performance Wheels

### Saitech Ultimate Performance™

- High performance, ceramic aluminum oxide grain
- · Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Exclusive formula with patented 3M<sup>™</sup> ceramic abrasive grain
- Combines maximum material removal with long life

**STAINLESS** Stainless steel

**METAL** 

Ferrous metals (iron, steel, welds, etc.)

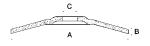






Super-Lock™ Hub





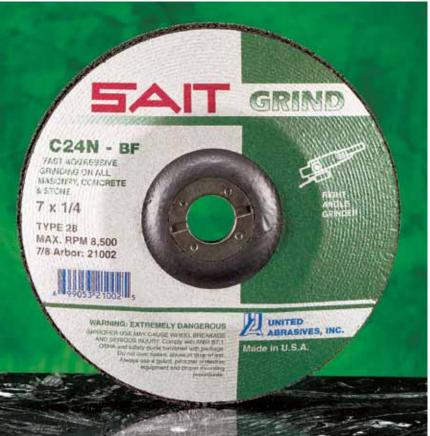
	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Вох	Ctn	Box
7	1/4	7/8	8,500	21084	25	50	23
7	1/4	5/8-11	8,500	21089	10	40	12
9	1/4	7/8	6,600	21094	25	50	34
9	1/4	5/8-11	6,600	21099	10	40	19



- Type 28 saucer shape (see diagram above) allows greater surface area coverage and provides the operator with greater grind visibility
- Patented 3M<sup>™</sup> ceramic abrasive grain formulation outlasts standard aluminum oxide wheels
- Additional fiberglass reinforcement for maximum safety in high lateral pressure applications
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

### Depressed Center Wheels



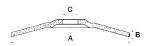


### C24N - Concrete

- Silicon carbide grain
- Soft bond for fast stock removal

**CONCRETE** Masonry, concrete, stone, brick





	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Вох	Ctn	Box
7	1/4	7/8	8,500	21002	25	50	20
7	1/4	5/8-11	8,500	21006	10	40	11
9	1/4	7/8	6,600	21012	25	50	32
9	1/4	5/8-11	6,600	21016	10	40	16



Angle Grinder





- · Special silicon carbide grain formula is excellent for grinding masonry, concrete, stone and aggregate
- Type 28 saucer shape (see diagram above) allows greater surface area coverage and provides the operator with greater grind visibility
- Additional fiberglass reinforcement for maximum safety in high lateral pressure applications
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

### Blending



### Flexible Grinding/Blending Wheels





### Challenger II™

- Aluminum oxide grain
- Open pattern on wheel for cool grinding and blending
- Safe for use in the nuclear industry

METAL Steel, iron, bronze

**STAINLESS** Stainless steel

**ALUMINUM** Non-ferrous metals (aluminum, copper, brass, etc.)

**CONCRETE** Also for use on masonry, plastic, fiberglass

#### Packaging

Each box of 25 supplied with a backing pad and one 5/8-11 nut Additional pad assembly: 4-1/2" & 5" - #95245

7" - #95247

For additional pads & nuts see pg. 140





Angle Grinder

ANGLE GRINDER

PROPER CLAMPING PROCEDURES

FLANGE NUT

CHALLENGER BACKING PAD

Size A C Max			Pa	art Numl Challer	Qty Per	Lbs Per		
Dia.	Bore	RPM	24	36	Box	Box		
4-1/2	7/8	13,280	-	27500	27501	27502	25	6
5	7/8	12,200	-	27506	27507	27508	25	5
7	7/8	8.600	27510	27511	27512	27513	25	14

### Challenger 3 NEW High Performance

- Semi-Flexible
- Grind and blend welds in one step
- · Open pattern on wheel for cool grinding and blending
- Contaminate Free Safe for use in the nuclear industry

**STAINLESS** Stainless steel

METAL

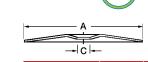
Steel, iron, bronze

**ALUMINUM** Non-ferrous metals

(aluminum, copper, brass, etc.)

#### REQUIRES NO BACKING PAD! -

- Available in the Spring -



contaminant (C)



Siz	ze		Part Num	bers/Grits	Qty	Lbs
Α	С	Max	Challenger 3		Per	Per
Dia.	Bore	RPM	36	60	Вох	Вох
4-1/2	7/8	13,280	27610	27611	10	3
5	7/8	12,200	27615	27616	10	3



- Type 29 shape (see diagram above) allows easy control in grinding and blending applications
- Honeycomb, dimpled pattern on face allows for greater cooling action and longer life
- Grind and blend welds in one-step, no need for multiple steps and products
- Available in many grits for all your grinding and blending needs

# **TYPE 16, 17, 18**Cones & Plugs



### **Cones and Plugs**

- Aluminum oxide grain
- For grinding and snagging in hard to reach areas
- · Fast stock removal

**METAL** Ferrous metals (iron, steel, welds, etc.)

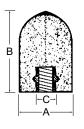
Grinding

#### **Packaging**

10 per box



Die Grinder

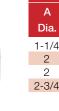
















Type 17 Cone											
1-1/2	2-1/2	3/8-24	A20	24,100	25101	10	3				
1-1/2	2-1/2	5/8-11	A20	24,100	25102	10	3				
1-1/2	3	3/8-24	A16	24,100	25103	10	3				
1-1/2	3	5/8-11	A16	24,100	25104	10	4				
2	3	3/8-24	A16	18,100	25105	10	6				
2	3	5/8-11	A16	18.100	25106	10	5				



Type 18 Plug											
2-1/2	3/8-24	A20	24,100	25201	10	5					
2-1/2	5/8-11	A20	24,100	25202	10	5					
3	3/8-24	A16	24,100	25203	10	5					
3	5/8-11	A16	24,100	25204	10	6					
3	3/8-24	A16	18,100	25205	10	10					
3	5/8-11	A16	18,100	25206	10	11					
	2-1/2 2-1/2 3 3 3	2-1/2 3/8-24 2-1/2 5/8-11 3 3/8-24 3 5/8-11 3 3/8-24	2-1/2 3/8-24 A20 2-1/2 5/8-11 A20 3 3/8-24 A16 3 5/8-11 A16 3 3/8-24 A16	2-1/2     3/8-24     A20     24,100       2-1/2     5/8-11     A20     24,100       3     3/8-24     A16     24,100       3     5/8-11     A16     24,100       3     3/8-24     A16     18,100	2-1/2     3/8-24     A20     24,100     25201       2-1/2     5/8-11     A20     24,100     25202       3     3/8-24     A16     24,100     25203       3     5/8-11     A16     24,100     25204       3     3/8-24     A16     18,100     25205	2-1/2     3/8-24     A20     24,100     25201     10       2-1/2     5/8-11     A20     24,100     25202     10       3     3/8-24     A16     24,100     25203     10       3     5/8-11     A16     24,100     25204     10       3     3/8-24     A16     18,100     25205     10					



Ty	ре	18R	Plug					
1-1	1/2	2-1/2	3/8-24	A20	24,100	25301	10	5
1-1	1/2	2-1/2	5/8-11	A20	24,100	25302	10	5
1-1	1/2	3	3/8-24	A16	24,100	25303	10	6
1-1	1/2	3	5/8-11	A16	24,100	25304	10	6
2	2	3	3/8-24	A16	18,100	25305	10	8
2	2	3	5/8-11	A16	18,100	25306	10	9



- Available in the most common application shapes
- Large grit size for heavy-duty grinding and snagging





#### Z16 - Zirconium

- Special Zirconium grain formulation
- Coarse grit and hard bond for the toughest grinding applications
- Outlasts standard Aluminum Oxide cup wheels 2:1

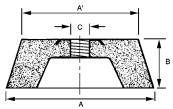
**METAL** Ferrous metals

**STAINLESS** Stainless steel

### A16 - General Purpose

- Aluminum oxide grain
- Coarse grit wheel for tough grinding applications
- Excellent for cleaning castings, mold marks, removing flashing

**METAL** Ferrous metals



Available with an optional metal backing

	s	ize						Qty	Lbs
Α	A'	В	С	Grades	Max	Part	MB*	Per	Per
Dia.	Dia.	Width	Bore	Available	RPM	Number	Number	Box	Box
4	3	2	5/8-11	A16	9,050	26000	26003	12	25
5	4	2	5/8-11	A16	7,250	26010	26013	6	20
5	4	2	5/8-11	Z16	7,250	26050	26053	6	23
6	4-3/4	2	5/8-11	A16	6,050	26020	26023	5	25
6	4-3/4	2	5/8-11	Z16	6,050	26060	26063	5	25

MB\* = metal backing



Angle Grinder



- Type 11 shape (see diagram above) provides maximum surface area coverage for grinding and cleaning applications
- Offered with a metal backed option for greater stability in high-pressure applications

### TYPE 11 **Cup Stones**





#### C16 - Concrete

- Silicon carbide grain
- Coarse grit for tough grinding applications
- Excellent for cleaning castings, mold marks, and removing flashing

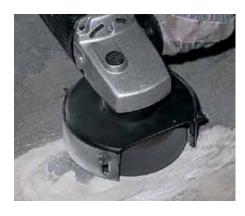
**CONCRETE** Masonry, concrete, stone

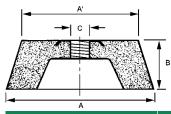
#### CA16 - Combination

- Combination of aluminum oxide and silicon carbide grains
- Excellent for cleaning castings, mold marks, and removing flashing

**METAL** Use on combination of ferrous metals

**CONCRETE** and/or concrete materials





Available with an optional metal backing



Angle Grinder

		ize						Qty	LDS
Α	Α'	В	С	Grades	Max	Part	MB*	Per	Per
Dia.	Dia.	Width	Bore	Available	RPM	Number	Number	Box	Box
4	3	2	5/8-11	C16	9,050	26001	26004	12	21
4	3	2	5/8-11	CA16	9,050	26002	26005	12	24
5	4	2	5/8-11	C16	7,250	26011	26014	6	17
5	4	2	5/8-11	CA16	7,250	26012	26015	6	19
6	4-3/4	2	5/8-11	C16	6,050	26021	26024	5	20
6	4-3/4	2	5/8-11	CA16	6,050	26022	26025	5	30

MB\* = metal backing



- Type 11 shape (cup shape) is excellent for maximum surface area coverage for foundry and cleaning applications
- Available in popular sizes for right angle grinders on the market
- Metal-back option provides greater stability in tough grinding applications

### Type A, B, **Mounted Points**

#### A36Q - Resin Bonded

- Aluminum oxide grain
- For deburring and finishing
- Fast stock removal

METAL Ferrous metals (iron, steel, welds)

• Shank length 1-1/2"



Mandrel overhang "O" must always be the lowest possible. Maximum speeds given refer to overhang "O" equal to 1/2"



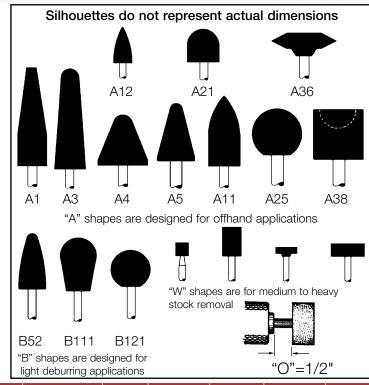
#### A60R - Vitrified

- Aluminum oxide grain
- Ideal for ID grinding and mold finishing

**METAL** Ferrous metals

• Shank length 1-1/2"





	Si	ze	Shank	A36Q Part	A60R Part	"O" = 1/2"	Qty
Type	Dia.	Length	Dia.	Number	Number	Max RPM	Per Box
A1	3/4	2-1/2	1/4	27401	27010	19,800	10
A3	1	2-3/4	1/4	27402	27020	16,100	10
A4	1-1/4	1-1/4	1/4	27403	27030	30,560	10
A5	3/4	1-1/8	1/4	27404	27035	45,000	10
A11	7/8	2	1/4	27405	27040	19,860	10
A12	11/16	1-1/4	1/4	-	27050	48,000	10
A21	1	1	1/4	-	27060	34,500	10
A25	1	Round	1/4	-	27070	35,620	10
A36	1-5/8	3/8	1/4	-	27086	23,520	10
A38	1	1	1/4	27406	27088	34,500	10
B52	3/8	3/4	1/4	27407	-	45,370	10
B52	3/8	3/4	1/8	-	27110	45,370	20
B111	7/16	11/16	1/8	-	27120	33,750	20
B121	1/2	1/2	1/8	-	27130	45,370	20
W160	1/4	1/4	1/8	-	27308	81,370	10
W177	3/8	3/4	1/8	-	27310	33,750	20
W179	3/8	1-1/4	1/4	27408	-	45,750	10
W189	1/2	2	1/4	27409	27327	24,000	10
W196	5/8	1	1/4	-	27329	35,250	10
W204	3/4	3/4	1/4	27410	27320	42,750	10
W208	3/4	2	1/4	27411	27330	18,750	10
W215	1	1/8	1/8	-	27338	38,200	10
W220	1	1	1/4	27412	27360	25,500	10
W222	1	2	1/4	27413	27340	15,900	10
W225	1-1/4	1/4	1/4	-	27350	30,560	10
W236	1-1/2	1/2	1/4	27414	27349	25,470	10



- These mounted bonded points are a low cost alternative to carbide burs
- Each point is dressed for perfect balance to perform without vibration or run-out

# PIPELINE



- This section contains four 1/8" thick specifications
- Designed and manufactured to perform both cutting and light grinding



A24R Pipeline Long Life



**A24 Turbo**<sup>™</sup> High Performance



**Z24R**High Performance



Saitech™ Pipeline
High Performance
Stainless Steel



### **Cutting/Grinding**





### **A24R Pipeline - Long Life**

- Aluminum oxide grain
- For the pipeline industry
- Designed and manufactured to perform both cutting and light grinding
- · Long life

METAL

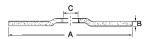
Ferrous metals (steel, cast iron, etc.)



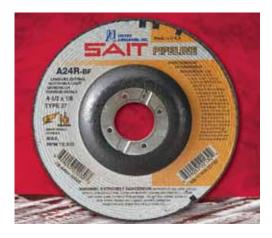
### A24 Turbo™ - High Performance

- Aluminum oxide grain
- For the pipeline industry
- · High performance cutting, notching and light grinding
- Long life

**METAL** Ferrous metals (steel, cast iron, etc.)



	Size			Pa	ırt	Qty	Qty	Lbs
Α	В	С	Max	Num	nber	Per	Per	Per
Dia.	Width	Bore	RPM	Pipeline	Turbo™	Box	Ctn	Box
3	1/8	3/8	18,000	22005	-	25	100	2
4	1/8	3/8	13,500	22007	-	25	100	4
4	1/8	5/8	13,500	22015	-	25	100	4
4-1/2	1/8	7/8	13,300	22030	23703	25	100	6
4-1/2	1/8	5/8-11	13,300	22130	23713*	10	40	5
5	1/8	7/8	12,200	22040	23705	25	100	7
5	1/8	5/8-11	12,200	22140	23715*	10	40	5
6	1/8	7/8	10,200	22042	23706	25	50	10
6	1/8	5/8-11	10,200	22046	23716	10	40	8
7	1/8	7/8	8,500	22055	23707	25	50	15
7	1/8	5/8-11	8,500	22052	23717	10	40	10
9	1/8	7/8	6,600	22065	-	25	50	25
9	1/8	5/8-11	6.600	22062	_	10	40	13



YPE 27







Note: Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8" available on page 141 (part #95055).

\* Part numbers 23713 and 23715 do not use Super-Lock™ Hub.



- Only wheel designed for both cutting and light grinding, eliminating the need for 2 separate wheels
- · General purpose formulation provides optimum performance over a wide range of applications
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance

### Specialty Pipeline Wheels



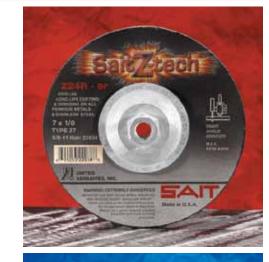


- Tough zirconium grain
- High performance cutting and light grinding for the toughest applications

METAL

METAL Ferrous metals (iron, steel, welds)

STAINLESS Stainless steel, high tensile alloys



Saitech

**Cutting/Grinding** 

### Saitech™ Pipeline

- High performance, ceramic aluminum oxide grain
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Designed and manufactured to perform both high performance cutting and light grinding
- Long life combined with versatility for the pipeline industry

-----

STAINLESS Stainless steel, high tensile alloys

METAL

Ferrous metals (iron, steel, welds, etc.)

High performance cutting and light grinding on stainless steel



	Size			P	art	Qty	Qty	L	bs
Α	В	С	Max	Nur	nber	Per	Per	Per	Вох
Dia.	Width	Bore	RPM	Z-tech™	Saitech™	Вох	Ctn	Z-tech	<sup>™</sup> Saitech <sup>™</sup>
4	1/8	5/8	13,500	22619	-	25	100	4	-
4-1/2	1/8	7/8	13,300	22620	22264	25	100	6	7
4-1/2	1/8	5/8-11	13,300	22630	22269	10	40	5	5
5	1/8	7/8	12,200	22622	22274	25	100	8	8
5	1/8	5/8-11	12,200	22632	22279	10	40	11	10
6	1/8	7/8	10,200	22623	-	25	100	11	-
6	1/8	5/8-11	10,200	22633	-	10	40	8	-
7	1/8	7/8	8,500	22624	22284	25	50	17	20
7	1/8	5/8-11	8,500	22634	22289	10	40	9	10
9	1/8	7/8	6,600	22626	22294	25	50	26	32
9	1/8	5/8-11	6,600	22636	22299	10	40	14	16





**BULL HINGS** 

Note: Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8" available on page 141 (part #95055)



- Only wheel designed for both cutting and light grinding, eliminating the need for 2 separate wheels
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design
- Patented 3M™ ceramic abrasive grain formulation outlasts standard aluminum oxide wheels (Saitech™)

# NTRODUCTION

- This section contains cut-off wheels (Type 27 and Type 1).
- These wheels will cut a wide range of materials.
- Some of the categories contain Specialty Wheels that are used for a specific application.
- For example, our Stud King® Chop Saw Wheel is specifically designed to cut metal studding and thin gauge metals.

#### **TYPE TOOL SPECIFICATIONS PAGE**

#### Thin High Speed Cut-Off Wheels









A24R 38-39 **General Purpose A36T Long Life A60S Extremely fast cutting A60T Burr-free Cutting** Saitech™ **Stainless Steel** 

.045, .090 & 1/16 High Speed Cut-Off Wheels







XA46R **Contaminant-Free Saitech**<sup>™</sup> **Stainless Steel** 



28-34

41-43

35-37

**Chop Saw Wheels** 





**Chop Saw** 



**A60S** 

**EZ-Chop Attacker®** EZ-Chop® Saitech™ **General Purpose** Steel Worker® Stud King® Aluminum **Metal Studding** Iron Worker™

3/32 & 1/8







**Angle Iron** 

**General Purpose** 

Saitech Ultimate Performance™ **High Purpose/Stainless Steel** 

> **C24R Concrete XA24Q** Contaminant-Free

# INTRODUCTIO

**TYPE TOOL SPECIFICATIONS PAGE** 

Stationary Saw Cut-Off Wheels





**A24N Fast Cutting A24R General Purpose A36R Stainless Steel C24R** 

48-49 Concrete

**Portable Saw Cut-Off Wheels** 







**Circular Saw** 





**Long Life** 

Hobo<sup>®</sup> **Rail Steel** Ductile™ **Ductile Pipe C24R** Concrete Big M.A.C.™ Masonry, Asphalt, Concrete

Street Saw Wheels





C16 **Fast Cutting C24R General Purpose** Street Walker™ **Asphalt** Street Runner™

47 **Asphalt, Green Concrete** 

**Metal-Cutting Carbide Blades** 











Saw



50-53

40

44-46

### Cutting \_045<sup>9</sup>

### TYPE 27

### **Depressed Center Wheels**

### PATENTED!

### A60S - General Purpose

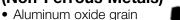
- So unique it has a patent
- Thin .045 width
- Special aluminum oxide grain
- Hard bond for extremely long life
- Fast, burr-free cutting



Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)





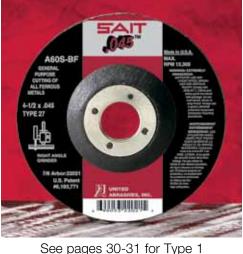


• Thin .045 width

 Soft bond for aggressive cutting without loading

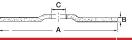
**ALUMINUM** Non-ferrous metals

(aluminum, copper, brass, etc.)



See pages 30-31 for Type 1 .045 cutting wheels for metal.





	Size			Grades Available		Qty	Qty	Lbs
Α	В	С	Max	Part N	umbers	Per	Per	Per
Dia.	Width	Bore	RPM	A60S	A46N	Вох	Ctn	Вох
4	.045	5/8	19,000	22011	22340	50	200	4
4-1/2	.045	7/8	13,300	22021	22345	50	200	4
5	.045	7/8	12,200	22071	22350	50	200	6
6	.045	7/8	10,200	22047	22360	50	200	8
7	.045	7/8	8,500	22053	22370	50	200	14





- Unique, thin Type 27 shape can be used on all angle grinders in accordance with ANSI B7.1
- Special Aluminum Oxide formulation offers the fastest cutting, longest lasting thin wheels
- Externally reinforced with fiberglass layers to provide ultimate safety in a thin wheel

### High Performance Wheels

## Saitech Cutting



### PATENTED!







### **Z-Tech High Performance**

- So unique it has a patent
- Thin .045 width
- Special zirconium grain
- Hard bond for extremely long life
- · Fast, burr-free cutting

METAL

Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)

**STAINLESS** Stainless steel. high tensile alloys



- High performance, ceramic aluminum oxide grain
- · Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- So unique it has a patent
- Thin .045 width
- Fast cutting with long life

**STAINLESS** Stainless steel, high tensile alloys

METAL

Ferrous metals (iron, steel, welds, etc.)

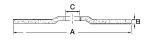


#### The Ultimate Cut™

- Best in class cutting a wide range of STAINLESS thin & thick gauge, flat stock, bar stock, square tubing, etc.
- Exceptional cutting performance on

METAL ALUMINUM

- Available in the Summer -



See pages 30-31 for Type 1 .045 wheels

	Size			Grades Available			Qty	Qty	Lbs
Α	В	С	Max	P	art Numbe	ers	Per	Per	Per
Dia.	Width	Bore	RPM	Z-Tech™	Saitech™	Ult. Cut™	Box	Ctn	Box
4	.045	5/8	19,000	23333	22068	-	50	200	4
4-1/2	.045	7/8	13,300	23334	22072	22380	50	200	4
5	.045	7/8	12,200	23335	22073	22385	50	200	6
6	.045	7/8	10,200	23336	22082	22390	50	200	8
7	.045	7/8	8,500	23337	22088	-	50	200	14



Note: Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8" available on page 141 (part #95055)



- Unique bonding system lets you make faster burr-free cuts
- Designed to provide very long life for fewer wheel changes and less downtime
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance

## Cutting

### TYPE 1

### Thin High Speed Cut-Off



See pages 28-29 for Type 27 depressed center .045 cutting wheels for metal.



### A60S - General Purpose



- Thin .045 width
- Use with reusable 5/8-11 adaptor to fit angle grinders
- · Extremely fast cutting with long life

METAL

Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)

### SAIT.M.X.™ (Ferrous Metals)



- Special bond for cutting sheet metal and other thin gauge metals
- · Fast, burr-free cutting

**METAL** Ferrous metals (carbon steel, etc.)

**STAINLESS** Stainless steel

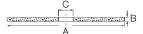
### A46N - Aluminum (Non-Ferrous Metals)



- Aluminum oxide grain
- · Soft bond for aggressive cutting without loading
- Use with reusable 5/8-11 adaptor to fit angle grinders

**ALUMINUM** Non-ferrous metals (aluminum, copper, brass, etc.)

> Note: Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8" available on page 141 (part #95055)



	Size Grades Available		ble	Qty	Qty	Lbs			
Α	В	С	Max	Pai	rt Number	s	Per	Per	Per
Dia.	Width	Bore	RPM	A60S	SAIT.M.X.	™ A46N	Box	Ctn	Вох
4	.045	5/8	19,000	23099	-	23304	50	200	4
4-1/2	.045	7/8	13,300	23101	23604	23314	50	200	4
5	.045	7/8	12,200	23103	23605	23315	50	200	6
6	.045	5/8	10,200	23105	-	23310	50	200	8
6	.045	7/8	10,200	23106	23606	23316	50	200	8
7	.045	5/8	8,500	23107	-	23317	50	200	14



Angle Grinder





- Type 1 shape for square, burr-free cutting
- Special aluminum oxide formulation offers the fastest cutting, longest lasting thin wheels
- Externally reinforced with fiberglass layers to provide ultimate safety in a thin wheel
- Wide range of sizes available to fit both angle grinders and circular saws

### TYPE 1 Thin High Speed Cut-Off













#### Z-tech - High Performance

- Special zirconium grain formula
- Fast, non-binding cutting

METAL

Ferrous metals

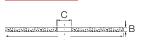
STAINLESS Stainless steel, high tensile alloys



- High performance, ceramic aluminum oxide grain
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Thin .045 width
- Use with reusable 5/8-11 adaptor to fit angle grinders
- Combines fast cutting with extremely long life

**STAINLESS** Stainless steel, high tensile alloys

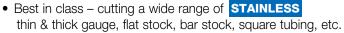
Ferrous and/or non-ferrous metals



	Size			Grades Available					Qty	Lbs
Α	В	С	Max		Part Num	bers		Per	Per	Per
Dia.	Width	Bore	RPM	Z-Tech™	Saitech™	Ult. Cut™	XA46R	Box	Ctn	Box
4	.045	5/8	19,000	23323	23172	-	-	50	200	4
4-1/2	.045	7/8	13,300	23324	23174	22230	-	50	200	4
4-1/2	1/16	7/8	13,300	-	-	-	24251	50	200	7
5	.045	7/8	12,200	23325	23177	22235	-	50	200	6
5	1/16	7/8	12,200	-	-	-	24252	50	200	7
6	.045	5/8	10,200	23326	23181	-	-	50	200	8
6	.045	7/8	10,200	23327	23182	22240	-	50	200	8
6	1/16	7/8	10,200	-	-	-	24253	50	200	14
7	.045	5/8	8,500	23328	23184	-	-	50	200	14
7	1/16	7/8	8,500	-	-	-	24254	50	200	14



### The Ultimate Cut™



• Exceptional cutting performance on

METAL ALUMINUM

- 6" Available in the Spring -

#### XA46R

### contaminant



- · Specially formulated for nuclear and food processing plants
- Free of iron, chlorine and sulphur compounds (Fe + Cl + S < 0.1%)
- All wheels are 1/16" thick

STAINLESS Stainless steel and other high tensile alloys

Note: Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8" available on page 141 (part #95055)

See pages 28-29 for Type 27 depressed center .045 cutting wheels for metal.





Angle Grinder

Circular Saw



- Type 1 shape for square, burr-free cutting
- Patented 3M™ ceramic abrasive grain formulation outlasts standard aluminum oxide wheels (Saitech™)
- Externally reinforced with fiberglass layers to provide ultimate safety in a thin wheel
- Wide range of sizes available to fit both angle grinders and circular saws
- Specially formulated for contaminant-free stock removal on stainless steel (XA46R)

### **Cutting**



### **Depressed Center Wheels**



### A60S - General Purpose

- Thin .090 width
- Special aluminum oxide grain
- Hard bond for extremely long life
- · Excellent for notching and cutting

METAL Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)

TYPE 27

	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Box	Ctn	Box
4	.090	5/8	19,000	20902	25	100	4
4-1/2	.090	7/8	13,300	20903	25	100	4
4-1/2	.090	5/8-11	13,300	20913	10	40	5
5	.090	7/8	12,200	20904	25	100	6
5	.090	5/8-11	12,200	20914	10	40	5
6	.090	7/8	10,200	20905	25	100	8
6	.090	5/8-11	10,200	20915	10	40	7
7	.090	7/8	8,500	20906	25	100	14
7	.090	5/8-11	8,500	20916	10	40	11
9	.090	7/8	6,600	20909	25	50	21
9	.090	5/8-11	6.600	20919	10	40	11

### Patented!



Note: Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8" available on page 141 (part #95055)

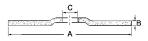




- Tough zirconium grain
- · High performance cutting and notching for the toughest applications

**METAL** Ferrous metals (iron, steel, welds)

STAINLESS Stainless steel, high tensile alloys



	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Box	Ctn	Box
4	.090	5/8	19,000	20942	25	100	4
4-1/2	.090	7/8	13,300	20943	25	100	4
4-1/2	.090	5/8-11	13,300	20953	10	40	5
5	.090	7/8	12,200	20944	25	100	6
5	.090	5/8-11	12,200	20954	10	40	5
6	.090	7/8	10,200	20945	25	100	8
6	.090	5/8-11	10,200	20955	10	40	7
7	.090	7/8	8,500	20946	25	100	14
7	.090	5/8-11	8,500	20956	10	40	11



- Unique, thin Type 27 shape can be used on all angle grinders in accordance with ANSI B7.1
- Special bond formulation offers the fastest cutting, longest lasting thin wheels
- Externally reinforced with fiberglass layers to provide ultimate safety in a thin wheel

### Saitech High Performance Wheels \_0



Saitech Cutting



### Saitech Ultimate Performance™

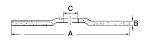
- High performance, ceramic aluminum oxide grain
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Combines fast cutting with extremely long life for tough cutting applications
- Ideal for foundry applications (gates, risers)

STAINLESS Stainless steel, high tensile alloys

METAL

Ferrous metals (iron, steel, welds, etc.)







	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Box	Ctn	Box
4	.090	5/8	19,000	20922	25	100	4
4-1/2	.090	7/8	13,300	20923	25	100	4
4-1/2	.090	5/8-11	13,300	20933	10	40	5
5	.090	7/8	12,200	20924	25	100	6
5	.090	5/8-11	12,200	20934	10	40	5
6	.090	7/8	10,200	20925	25	100	8
6	.090	5/8-11	10,200	20935	10	40	7
7	.090	7/8	8,500	20926	25	100	14
7	.090	5/8-11	8,500	20936	10	40	11



- Manufactured with patented 3M<sup>™</sup> ceramic abrasive grain to outlast standard aluminum oxide wheels
- Unique bonding system lets you make faster burr-free cuts
- Designed to provide very long life for fewer wheel changes and less downtime
- All sizes externally reinforced with the highest quality fiberglass for maximum safety and performance

### **Cutting**





### High Speed Cut-Off Wheels





### A60S - General Purpose

- Aluminum oxide grain
- Provides consistent performance with long life

METAL

Ferrous metals (steel, angle iron, rebar)





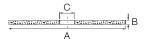
### **Z-tech High Performance**

- Tough zirconium grain
- · High performance cutting and notching for the toughest applications

Ferrous metals (iron, steel, welds)

STAINLESS Stainless steel,

high tensile alloys



	Size			Grades Available		Qty	Qty	Lbs
Α	В	С	Max	Part Numbers		Per	Per	Per
Dia.	Width	Bore	RPM	A60S	Z-tech	Box	Ctn	Вох
4	.090	5/8	19,000	23803	23823	25	100	4
4-1/2	.090	7/8	13,300	23804	23824	25	100	4
5	.090	7/8	12,200	-	23825	25	100	6
6	.090	7/8	10,200	23806	23826	25	100	8
7	.090	5/8	8.500	23807	23827	25	50	14







- Type 1 shape for square, burr-free cutting
- Externally reinforced with the highest quality fiberglass to withstand the toughest applications
- Available in many arbor sizes to fit a wide variety of tools

### Specialty Cutting Wheels



Cutting



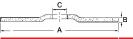




#### A24R - General Purpose

- Aluminum oxide grain
- For general purpose use
- Combines fast cutting and long life

METAL Ferrous metals (iron, steel, welds, etc.)



	Size			Part	Qty	Qty	Lbs
Α	В	С	Max	Number	Per	Per	Per
Dia.	Width	Bore	RPM	A24R	Box	Ctn	Box
3	1/8	3/8	18,000	22000	25	100	2
4	1/8	3/8	13,500	22010	25	100	3
4-1/2	3/32	7/8	13,300	22020	25	100	5
4-1/2	3/32	5/8-11	13,300	22120	10	40	7
5	3/32	7/8	12,200	22070	25	100	6
5	3/32	5/8-11	12,200	22170	10	40	7
6	1/8	7/8	10,200	22045	25	100	25
7	3/32	7/8	8,500	22056	25	100	14
7	3/32	5/8-11	8,500	22057	10	40	9
9	3/32	7/8	6,600	22066	25	50	22
9	3/32	5/8-11	6,600	22067	10	40	12



### Z24R - Zirconium

- Tough zirconium grain
- High performance cutting for the toughest applications

METAL

Ferrous metals (iron, steel, welds)

STAINLESS Stainless steel, high tensile alloys

	A			
	Size			Part
Α	В	С	Max	Numbe
Dia.	Width	Bore	RPM	SAIT Z-te
4	3/32	5/8	13,500	22640
4-1/2	3/32	7/8	13,300	22641

Α	В	С	Max	Number	Per	Per	Per
Dia.	Width	Bore	RPM	SAIT Z-tech™	Box	Ctn	Box
4	3/32	5/8	13,500	22640	25	100	3
4-1/2	3/32	7/8	13,300	22641	25	100	7
4-1/2	3/32	5/8-11	13,300	22651	10	100	5
5	3/32	7/8	12,200	22643	25	100	6
5	3/32	5/8-11	12,200	22653	10	40	5
6	3/32	7/8	10,200	22644	25	25	10
6	3/32	5/8-11	10,200	22654	10	40	7
7	3/32	7/8	8,500	22645	25	100	14
7	3/32	5/8-11	8,500	22655	10	40	9
9	3/32	7/8	6,600	22646	25	50	22
9	3/32	5/8-11	6,600	22656	10	40	12

Qty Qty Lbs



- For use on angle grinders
- Aggressive cutting performance over a wide range of applications
- Super-Lock™ Hub on all 5/8-11 threaded arbors is the safest, vibration-free design
- · All sizes reinforced with the highest quality fiberglass for maximum safety and performance

### Saitech Cutting

### TYPE 27

### Saitech High Performance Wheels



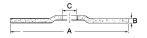
### Saitech Ultimate **Performance**™

- High performance, ceramic aluminum oxide grain
- · Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Combines fast cutting with extremely long life for tough cutting applications
- Ideal for foundry applications (gates, risers)

STAINLESS Stainless steel, high tensile alloys

**METAL** Ferrous metals (iron, steel, welds, etc.)





	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Box	Ctn	Box
4-1/2	3/32	7/8	13,300	22064	25	100	7
4-1/2	3/32	5/8-11	13,300	22069	10	40	5
5	3/32	7/8	12,200	22074	25	100	7
5	3/32	5/8-11	12,200	22079	10	40	5
7	3/32	7/8	8,500	22084	25	100	13
7	3/32	5/8-11	8,500	22089	10	40	10
9	3/32	7/8	6,600	22094	25	50	21
9	3/32	5/8-11	6,600	22099	10	40	11





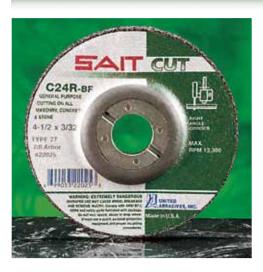


- Manufactured with patented 3M<sup>™</sup> ceramic abrasive grain to outlast standard aluminum oxide wheels
- Unique bonding system lets you make faster burr-free cuts
- Designed to provide very long life for fewer wheel changes and less downtime
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design

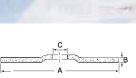
### **Depressed Center Wheels**



Cutting







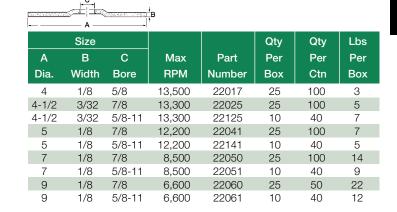
	— A —		f				
	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Box	Ctn	Box
4-1/2	1/8	7/8	13,300	24310	25	100	5
5	1/8	7/8	12,200	24315	25	100	5
6	1/8	7/8	10,200	24320	25	100	8
7	1/8	7/8	8,500	24325	25	50	13
a	1/8	7/8	6 600	2/1330	25	50	20

#### C24R - Concrete

- Silicon carbide grain
- General purpose cutting, hard bond for long life

**CONCRETE** Masonry, concrete, stone

METAL Cast iron and other ferrous metals



#### XA24Q - Contaminant-Free

- Specially formulated for nuclear and food processing plants
- Free of iron, chlorine and sulphur compounds (Fe + Cl + S <0.1%)</li>

STAINLESS Stainless steel and other high tensile alloys

**METAL** Ferrous metals (iron, steel, welds, etc.)









- Special silicon carbide grain formula is excellent for cutting masonry, concrete, stone and aggregate (C24R)
- All sizes reinforced with the highest quality fiberglass for maximum safety and performance
- Super-Lock™ Hub on all 5/8-11 threaded wheels is the safest, vibration-free design
- Specially formulated for contaminant-free stock removal on stainless steel (XA24Q)

### **Cutting**

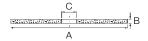




### Thin High Speed Cut-off



These sizes are typically used for tool room applications



A	Size B	С	Max		des Avail rt Numbe		Qty Per	Qty Per	Lbs Per
Dia.	Width	Bore	RPM	A36T	A60S	A60T	Box	Ctn	Box
4-1/2	.045	7/8	13,300	-	23101	-	50	200	4
5	.045	7/8	12,200	-	23103	-	50	200	2
6	1/16	1/2	10,186	23202	-	23203	50	50	8
6	1/16	5/8	10,186	23200	-	23201	50	50	8
6	.035	1/2	10,186	23206	-	23207	50	50	5
6	.035	7/8	10,186	23210	-	23211	50	50	5
6	.035	5/8	10,186	23204	-	23205	50	50	5
6	.045	5/8	10,200	-	23105	-	50	200	4
6	.045	7/8	10,200	-	23106	-	50	200	4
7*	1/16	1-1/4	8,732	23250	-	23251	50	50	12
7	1/16	5/8	8,732	23265	-	23266	50	50	6
7*	.035	1-1/4	8,732	23252	-	23253	50	50	4
7	.045	5/8	8,500	-	23107	-	50	200	4
8	1/16	5/8	7,640	23275	-	23276	50	50	7
8*	1/16	1-1/4	7,640	23277	-	23278	50	50	7

#### A24R - General Purpose

- Aluminum oxide grain
- General purpose, long life

**METAL** Ferrous metals (iron, steel, welds, etc.)

TYPE 1

#### A36T - Fast Cutting

- Aluminum oxide grain
- Hard bond for aggressive cutting on rough applications

**METAL** Ferrous metals (iron, steel, welds, etc.)

**STAINLESS** Stainless steel

#### **A60S**

- Thin .045 width
- Use with reusable 5/8-11 adaptor to fit angle grinders
- · Extremely fast cutting with long life

METAL

Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)

#### A60T - Burr Free

- · Hard bond for smooth cutting
- For use in nuclear, aerospace, automotive, foundry industries, and plant maintenance

METAL

Ferrous metals (iron, steel, welds, etc.)

**STAINLESS** High tensile metals



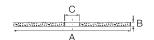


- Type 1 shape for square, burr-free cutting
- Externally reinforced with fiberglass layers to provide ultimate safety in a thin wheel
- Wide range of grit sizes available for aggressive action to burr-free cutting

### Thin High Speed Cut-off Wheels





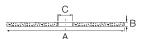


For items A24R, A36T, A60S, and A60T see descriptions on page 38

	Size			Grades Available Part Numbers			Qty	Qty	Lbs	
A Dia.	B Width	C Bore	Max RPM	A24R	A36T	A60S	A60T	Per Box	Per Ctn	Per Box
2	1/16	1/4	30,558	-	23004	-	23005	50	50	1
2	1/16	3/8	30,558	-	23002	-	23003	50	50	1
2	.035	1/4	30,558	_	23012	-	23013	100	100	1
2	.035	3/8	30,558	-	23010	-	23011	100	100	1
2-1/2	1/16	1/4	24,446	-	23022	-	23023	50	50	2
2-1/2	1/16	3/8	24,446	-	23020	-	23021	50	50	2
2-1/2	.035	1/4	24,446	-	23032	-	23033	100	100	2
2-1/2	.035	3/8	24,446	-	23030	-	23031	100	100	2
3	1/16	1/4	25,000	-	23042	-	23043	50	50	3
3	1/16	3/8	25,000	-	23040	-	23041	50	50	3
3	.035	1/4	25,000	-	23052	-	23053	100	100	3
3	.035	3/8	25,000	-	23050	-	23051	100	100	3
3	1/8	3/8	20,372	23060	-	-	-	25	100	2
4	1/16	1/4	19,000	-	23067	-	23068	50	50	5
4	1/16	3/8	19,000	-	23065	-	23066	50	50	5
4	1/16	5/8	19,000	-	23061	-	23062	50	50	5
4	.035	1/4	19,000	-	23071	-	23072	100	100	5
4	.035	3/8	19,000	-	23069	-	23070	100	100	5
4	.035	5/8	19,000	-	23063	-	23064	100	100	5
4	.045	5/8	19,000	-	-	23099	-	50	200	4
4	1/8	3/8	15,278	23075	-	-	-	25	100	4



1/4" shank adaptors for wheels up to 3" diameter available on page 141



Size



Qty

Qty Lbs

#### Saitech Ultimate Performance™

- High performance, ceramic aluminum oxide grain
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- High Performance
- Combines fast cutting with extremely long life

**METAL** 

STAINLESS Stainless steel, high tensile alloys

Ferrous and/or non-ferrous metals

						_	
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Вох	Ctn	Box
3	1/16	1/4	25,000	23142	50	50	2
3	1/16	3/8	25,000	23140	50	50	2
3	.035	1/4	25,000	23152	100	100	3
3	.035	3/8	25,000	23150	100	100	3
4	1/16	1/4	19,000	23167	50	50	4
4	1/16	3/8	19,000	23165	50	50	4
4	1/16	5/8	19,000	23161	50	50	4
4	.035	1/4	19,000	23171	100	100	5
4	.035	3/8	19,000	23169	100	100	5
4	.035	5/8	19,000	23163	100	100	5



- Type 1 shape for square, burr-free cutting
- Patented 3M<sup>™</sup> ceramic abrasive grain formulation outlasts standard aluminum oxide wheels (Saitech<sup>™</sup>)
- Externally reinforced with fiberglass layers to provide ultimate safety in a thin wheel

### **Cutting**





### Portable Saw Cut-off Wheels

TYPE 1

#### A24R - General Purpose

- Aluminum oxide grain
- Provides consistent performance with long life

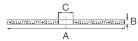
METAL Ferrous metals (steel, angle iron, rebar)

#### A30S - Long Life

- Special aluminum oxide grain formula
- · Fast, non-binding cutting

**METAL** Ferrous metals

**STAINLESS** Stainless steel, high tensile alloys



7

8

8

9

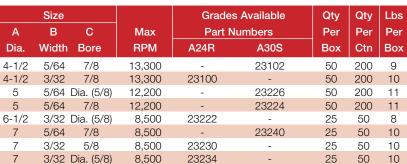
3/32

3/32

3/32 Dia. (5/8)

3/32 Dia. (5/8)

7/8



23232

23258

8,500

7,600

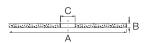
7,600

6,600

#### C24R - Concrete

- Silicon carbide grain
- Long life

**CONCRETE** Stone, brick, soft aggregate, masonry, concrete



	Size			Part	Qty	Qty	Lbs
Α	В	С	Max	Number	Per	Per	Per
Dia.	Width	Bore	RPM	C24R	Box	Ctn	Box
6-1/2	3/32	Dia (5/8)	8,500	23223	25	50	7
7	3/32	7/8	8,500	23233	25	50	9
7	3/32	Dia (5/8)	8,500	23235	25	50	9
7	3/32	5/8	8,500	23231	25	50	9
8	3/32	7/8	7,600	23257	25	50	11
8	3/32	Dia (5/8)	7,600	23259	25	50	11
8	3/32	5/8	7.600	23255	25	50	11



25

25

25

50

23246

23248

10

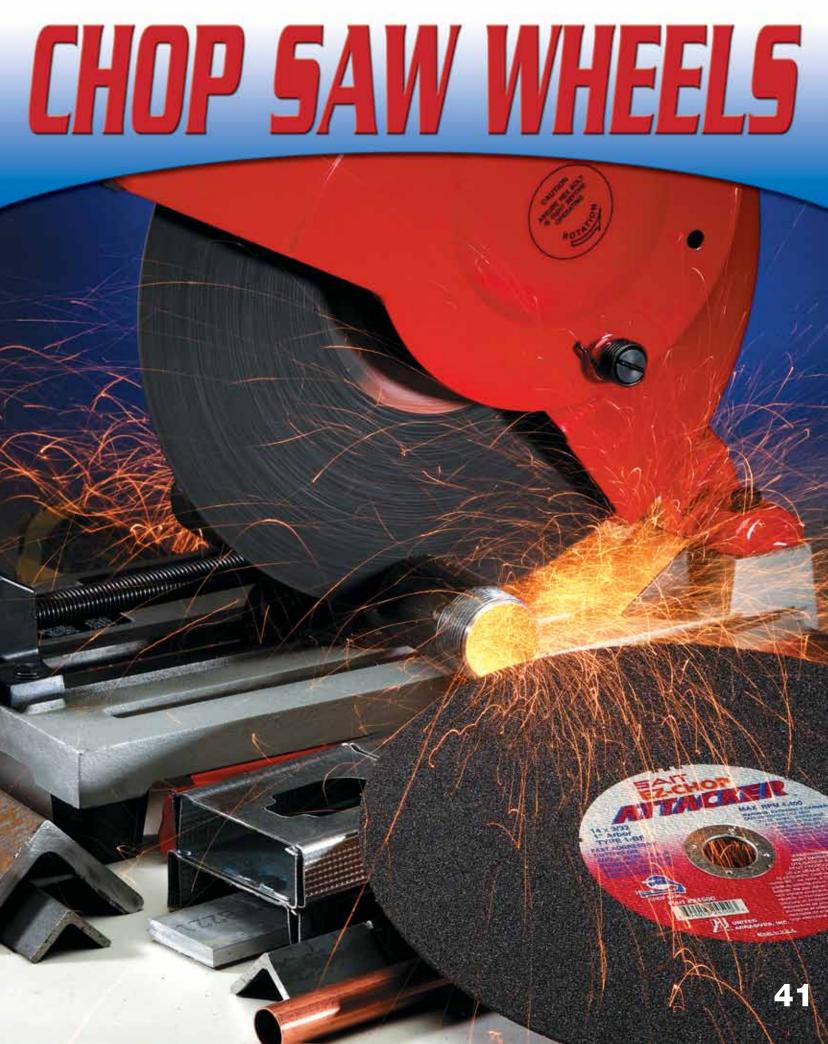
13

13

19



- Type 1 shape for square, burr-free cutting
- External fiberglass reinforcement withstands offhand lateral pressure for added safety and controlled performance









#### SAIT EZ-Chop Attacker®

- Aluminum oxide grain
- · General purpose economy cutting
- Fast cutting on thin metals

METAL Metal studding, thin rebar, light gauge and medium metals



Use this wheel as an economical alternative for general purpose cutting.

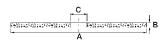




#### SAIT EZ-Chop®

- Aluminum oxide grain
- General purpose cool cutting on thin metals
- Burr-free finish

METAL Metal studding, thin rebar, light gauge and heavy metals



	Size			Part Nu	ımbers	Qty	Qty	Lbs
Α	В	С	Max	EZ-Chop	EZ-Chop®	Per	Per	Per
Dia.	Width	Bore	RPM	Attacker®		Box	Ctn	Box
12	3/32	1	5,100	-	24034	10	50	11
14	3/32	1	4,400	24500	24039	10	20	16



- EZ-Chop Attacker® is the best economy general purpose chop saw blade
- Specially formulated ultrathin design for fast cutting of thin gauge metals and heavy metals
- EZ-Chop® is externally reinforced with the highest quality fiberglass to withstand the toughest applications

### TYPE 1 **Chop Saw Wheels**









#### Z-tech - High Performance

- Special zirconium grain formula
- · Fast, non-binding cutting

**METAL** Ferrous metals

STAINLESS Stainless steel, high tensile alloys

#### Stud King®

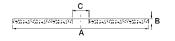
- Aluminum oxide grain
- General purpose cool cutting on thin metals
- Burr-free finish

METAL Metal studding, thin rebar, light gauge metals

#### Iron Worker™

- Aluminum oxide grain
- Fast cutting
- Excellent for use on angle iron, channel iron, heavy rebar, and other ferrous metals

Structural metal applications



A	Size B	С	Max	Grades Available Part Numbers					Qty Per	Qty Per	Lbs Per
Dia.	Width	Bore	RPM	Z-Tech™	S.K.	I.W.	Saitech™	Alum.	Вох	Ctn	Вох
10	3/32	5/8	6,100	-	24035	-	-	-	25	50	20
12	3/32	1	5,100	-	24030	24031	24033	-	10	50	11
14	3/32	1	4,400	24414	24050	24051	24053	24052	10	20	16
16	3/32	1	3,700	24416	24010	24011	24013	-	10	20	23

- · Specially formulated for use on low horsepower chop saw machines for fast cutting with minimal pressure
- Five specialty formulas give you the exact wheel for your cutting application
- 14" Z-tech is internally reinforced with the highest quality fiberglass to withstand the toughest applications

#### Saitech Steel Worker®

- Formulated with 3M™ ceramic abrasive grain
- Extremely fast, burr-free cutting

STAINLESS Stainless steel, high tensile alloys

**METAL** Ferrous metals (steel, iron, welds, etc.)

#### **Non-Ferrous Metals (Aluminum)**

- Aluminum oxide grain
- Special non-loading formulation

METAL

Non-ferrous metals (aluminum, bronze, brass, etc.)



#### Cutting











#### A24R - General Purpose/Durability

- Special aluminum oxide grain
- Provides consistent performance with long life

**METAL** Ferrous metals (steel, angle iron, rebar)

#### XFC™ - Extremely Fast Cutting

- Special aluminum oxide grain formula
- · Fast cutting action
- Non-binding cutting formula

**METAL** Ferrous metals

**STAINLESS** Stainless steel, high tensile alloys



#### SAIT Pro - Metal

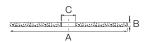
- Aluminum oxide grain
- Best value for a fast cut

**METAL** Ferrous metals



TYPE 1

### All 14" and 16" portable wheels now formulated for high powered saws



	Size			(	Grades Availabl	е	Qty	Qty	Lbs
Α	В	С	Max		Part Numbers		Per	Per	Per
Dia.	Width	Bore	RPM	A24R	SAIT Pro	XFC™	Box	Ctn	Box
12	1/8	1	6,300	23410	23414	-	10	50	13
12	1/8	20mm	6,300	23420	23421	-	10	50	14
14	1/8	1	5,400	23450	24135	24150	10	20	19
14	1/8	20mm	5,460	23455	24140	24160	10	20	24
16	1/8	1	4,800	23459	-	-	10	20	30

14" (20mm) with higher RPM rating for STIHL saws



- Type 1 shape for square, burr-free cutting
- Externally reinforced with the highest quality fiberglass to withstand the toughest applications
- Available in many arbor sizes to fit a wide variety of tools

### Portable Saw Cut-off Wheels



#### Brute™

- Long life
- Extremely hard bond for **cutting metals that** present a very sharp edge to the wheel

**METAL** Thin metal, sheet metal, decking, other ferrous metals

#### **HOBO®**

- For use on high horsepower machines
- Rugged fiberglass reinforcement for maximum safety
- Excellent for the railroad industry

METAL Mainline, secondary, spur rail steel Also for use on heavy sections of ferrous metals (I-beams, bar stock, etc.)

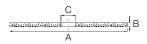


#### Ductile™

Combination aluminum oxide and silicon carbide formulation

METAL Ductile pipe (very hard steel casing enclosing a cement lining), water mains, etc.

CONCRETE Combination metal/concrete, cast iron, hard metals, concrete coated steel, etc.



	Size				Qty	Qty	LDS
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Вох	Ctn	Box
				Brute™			
12	1/8	1	6,300	23412	10	50	15
12	1/8	20mm	6,300	23422	10	50	14
14	1/8	1	5,400	23452	10	20	22
14	1/8	20mm	5,460	23457	10	20	18
				HOBO®			
14	1/8	1	5,400	23501	10	20	22
16	1/8	1	4,800	23502	10	20	30
				Ductile™			
12	1/8	1	6,300	23415	10	50	15
12	1/8	20mm	6,300	23425	10	50	15
14	1/8	1	5,400	23453	10	20	22
14	1/8	20mm	5,460	23458	10	20	22
16	1/8	1	4,800	23480	10	20	30
16	1/8	20mm	4,800	23478	10	20	30



#### **Quick Tip**

Use this Ductile™ wheel for extra hard metals, hydraulic hose and PVC pipe.

All 14" and 16" portable wheels now formulated for high powered saws

> 14" (20mm) with higher RPM rating for STIHL saws



- Type 1 shape for square, burr-free cutting
- Externally reinforced with the highest quality fiberglass to withstand the toughest applications
- Available in many arbor sizes to fit a wide variety of tools

### **Cutting**





### Portable Saw Cut-off Wheels

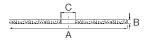


#### SAIT Pro - Concrete

- Silicon carbide grain
- Best value for a fast cut



**CONCRETE** Stone, brick, soft aggregate, masonry, concrete



		BIG.II	A-C	
			SAIT	
				7
DIC M	A C	TM		

BIG M.A.C.™ - Very Long Life

- Special silicon carbide grain
- · Superior cutting action
- 40% longer life than general purpose concrete wheels

**CONCRETE** Masonry, Asphalt, Concrete

	Size			Part	Qty	Qty	Lbs
Α	В	С	Max	Number	Per	Per	Per
Dia.	Width	Bore	RPM	C24R	Box	Ctn	Вох
12	1/8	1	6,300	23413	10	50	12
12	1/8	20mm	6,300	23423	10	50	12
14	1/8	1	5,400	23451	10	20	16
14	1/8	20mm	5,460	23456	10	20	15
16	1/8	1	4,800	23461	10	20	30
16	1/8	20mm	4,800	23466	10	20	30

				BIG M.A.C.™	1		
12	1/8	1	6,300	23460	10	50	14
12	1/8	20mm	6,300	23462	10	50	14
14	1/8	1	5,400	23463	10	20	18
14	1/8	20mm	5,460	23464	10	20	18
				SAIT Pro			
12	1/8	1	6,300	23418	10	50	12

23427

24122

24127

10

10

10

50

20

12

16

15

6,300

5,400

5,460

#### C24R - Concrete

- Silicon carbide grain
- Long life

**CONCRETE** Stone, brick, soft aggregate, masonry, concrete, schedule 40 and schedule 80 PVC pipe

## All 14" and 16" portable wheels now formulated for high powered saws

14" (20mm) with higher RPM rating for STIHL saws



20mm

20mm

14

14

1/8

1/8

- External fiberglass reinforcement withstands offhand lateral pressure for added safety and controlled performance
- Special silicon carbide grain formula provides excellent cutting action on masonry, concrete, stone and aggregate

### Street Saw Wheels



### **Premium Formula Outlasts Competition!**



#### **C16**

- Silicon carbide grain
- · Fast, free cutting

**CONCRETE** Green concrete, asphalt

#### Street Walker™

- Silicon carbide grain
- Hot pressed wheel
- Combines fast cutting with long life

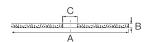
**CONCRETE** Concrete, green concrete, asphalt



#### **Street Runner**<sup>™</sup>

- Silicon carbide grain
- Hot pressed wheel
- Extremely dense wheel with coarse grain
- · Combines fast cutting with extra-long life

**CONCRETE** Green concrete and asphalt



A	Size B	С	Max	Gra	Qty Per	Qty Per	Lbs Per		
Dia.	Width	Bore	RPM	C16	S.W.	S.R.	Вох	Ctn	Вох
14	1/8	1	4,400	24045	-	-	10	20	19
14	3/16	1	4,400	24061	-	-	5	10	12
14	1/4	1	4,400	24066	-	-	5	10	16
14	3/16	1	4,365	-	24120	24130	10	50	27
14	1/4	1	4,365	-	24121	24131	10	50	36
18	1/4	1	3,000	-	-	24145	5	25	35

All wheels have a pinhole



- All wheels have a pinhole for mounting on various machines, street saws, etc.
- These wheels can be used with cooling sprays for dust-free cutting needs
- The Street Walker™ blade is an excellent economical alternative to cutting with diamond blades



### Stationary Saw Cut-off Wheels



#### A24N - Fast Cutting

- Aluminum oxide grain
- General purpose
- Soft bond for fast stock removal

METAL Ferrous metals (iron, cast iron, etc.)

**STAINLESS** Low grade stainless steel

#### A24R - Long Life

- Aluminum oxide grain
- General purpose, long life

METAL Ferrous metals (iron, steel, angle iron, etc.)

#### A36R - Burr-Free

- Aluminum oxide grain
- A finer grit for burr-free finish

METAL F

Ferrous metals (metal tubing, etc.)

STAINLESS Stainless steel, high tensile steel





Size				Gra	des Avail	Qty	Qty	Lbs	
Α	В	С	Max	Pa	art Numbe	ers	Per	Per	Per
Dia.	Width	Bore	RPM	A24N	A24R	A36R	Вох	Ctn	Box
10	1/8	5/8	6,100	24001	-	24002	25	50	23
10	1/8	1	6,100	-	24004	-	25	50	23
12	1/8	1	5,100	-	24020	-	10	50	14
14	1/8	1	4,400	-	24040	24042	10	20	19
16	5/32	1	3,800	-	24070	24072	10	20	29
18	3/16	1	3,400	24081	24080	24082	5	20	22
20	3/16	1	3,000	24091	24090	24092	5	20	27
24	1/4	1	3,150	24101	24100	24102	5	15	49



- Type 1 shape for square, burr-free cutting
- Maximum grain exposure to cut through large diameter solid stock
- Internal fiberglass reinforcement for maximum safety and controlled performance
- Dual external mounting area reinforcement on 14" 24" wheels

### Stationary Saw Cut-off Wheels



#### C24R - Concrete

- Silicon carbide grain
- General purpose, long life
- Square cutting

**CONCRETE** Masonry, concrete, stone, brick





	С	
r	1	1 1_
Sphinistic Control of the Control of		February Anna Menting B
	- 1	t <sup>D</sup>

	Size				Qty	Qty	Lbs
Α	В	С	Max	Part	Per	Per	Per
Dia.	Width	Bore	RPM	Number	Вох	Ctn	Вох
10	1/8	5/8	6,100	24003	25	50	23
10	1/8	1	6,100	24007	25	50	23
12	1/8	1	5,100	24023	10	50	14
14*	1/8	1	4,400	24043	10	20	19
16*	5/32	1	3,800	24073	10	20	29
18	3/16	1	3,400	24083	5	20	22

\* with Pinhole



- Special grain to fiberglass ratio provides added safety and excellent cutting performance on heavy-duty stationary saws
- Cutting wheels are balanced to provide straight, even cuts for alignment and aesthetics



**Cutting Saw** 

Long Life | Cool Cutting | Fast, Burr-Free Cutting

#### **KEY FEATURES** -

- Designed for use on professional metal-cutting saws
- Premium micro grain carbide: Smaller grains mean more carbide per tooth stays sharp and provides longer life over competitive blades
- Cuts cool and fast
- Reduced fire hazards and less dust: Metal blades cut cleanly with minimal sparks

### Metal-Cutting Carbide Blades



Thin Metal Xtra

#### **Cool cutting action** with long life



#### Fast, burr free cutting on:

- Angle Iron
- Rebar
- Steel Plate
- Channel Iron
- Pipe
- Threaded Rod
- C-Channel
- And other ferrous metals

#### Fast, burr free cutting on:

- Thin Metals
- Metal Studs
- Duct Work
- Sheet Metals
- Galvanized Roofing
- Thin Walled Pipe
- Conduit
- Strut Channel

	EEL WORKER®	Diameter	Teeth	Grind	Arbor	RPM	Machine
NE	<b>W</b> 77915	5-3/8 137mm	30		20mm (10mm & 5/8" Bushing)	4,200	
	77920	6-1/2 165mm	40	TCG	5/8 16mm	5,800	A CONTRACTOR OF THE PARTY OF TH
	77936	7 178mm	36	TCG	20mm	5,800	
	77930	7-1/4 184mm	40	MTCG	5/8 16mm Diamond	5,800	
	77940	8 203mm	42	MTCG [	5/8 16mm Diamond	5,800	
	77947	9 229mm	48	TCG	1 26mm	3,200	
	77953	10 254mm	52	TCG	5/8 16mm	5,200	<b>1</b> .
	77962	12 305mm	60	TCG	1 26mm	2,000	*
	77972	14 356mm	72	MTCG	1 26mm	1,800	*
						*Low RP	M Metal Cutting Saw

TMX	Diameter	er Teeth Grind		Arbor	RPM	Machine		
77921	6-1/2 165mm	48	ATB	5/8 16mm	5,800			
77931	7-1/4 184mm	68	ATB	5/8 16mm Diamond	5,800			
77965	12 305mm	80	MTCG	1 26mm	2,000		*	
77975	14 356mm	90	MTCG	1 26mm	1,800	Ď	*	
				+1 D				

Low RPM Metal Cutting Sav







Circular Saw

Circular Saw

Low RPM Metal-Cutting Worm Drive Saw Metal-Cutting Saw

#### NOTE

Blades must be run in the direction of the arrow as indicated on the blade.

#### TYPICAL END USERS/INDUSTRIES

- STEEL WORKER®: Steel Fabricators, Electricians, Welding, Weld Shops, Plumbers, Power Generation, Metal Contractors, Manufacturing/Fabrication, Maintenance/Repair
- TMX Thin Metal Extra: General Contractors, Plumbers, Roofing Contractors, Maintenance/Repair, Electricians, Power Generation Contractors, Heating and Air Conditioning

### Metal-Cutting Carbide Blades

### **STAINLESS**

### Cool cutting action with long life and minimal distortion



#### Fast, burr free cutting on:

• Tubing, bars, pipe, and stainless steel plate

## ALUMINUM

Cool cutting action with long life and minimal melting of aluminum



#### Fast, burr free cutting on:

Aluminum, other non-ferrous metals and pipe

STAINLESS	Diameter	Teeth	Grind	Arbor	RPM	Machine	
77938	7 178mm	48	TCG	20mm	5,800		ß
77933	7-1/4 184mm	48	TCG	5/8 16mm Diamond	5,800 d		
77977	14 356mm	90	MTCG	1 26mm *	1,800 Low RPN	*  Metal Cuttir	ng Saw

	ALUMINUM	Diameter	Teeth	Grind	Arbor	RPM	Machine	
E	77917 77917	5-3/8 137mm	50	ATB	20mm (10mm & 5/8" Bushing)	4,200		
	77922	6-1/2 165mm	60	ATB	5/8 16mm	5,800		
	77937	7 178mm	54	ATB	20mm	5,800		
	77932	7-1/4 184mm	60	ATB	5/8 16mm Diamond	5,800		þ
	77942	8 203mm	60	TCG	5/8 16mm Diamond	5,800		<b>}</b> -
	77955	10 254mm	80	TCG	5/8 16mm	5,200		*
	77966	12 305mm	80	TCG	1 26mm	2,000		*
	77976	14 356mm	80	ATB	1 26mm	1,800		*
						*Low RPI	M Metal Cutting Saw	

#### NOTE

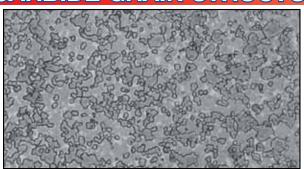
 Blades must be run in the direction of the arrow as indicated on the blade.

#### TYPICAL END USERS/INDUSTRIES

- Stainless: Stainless Steel Contractors / Fabricators, Water Treatment Contractors, Kitchen Equipment Manufacturing, Power Generation Contractors
- Aluminum: Aluminum Contractors, Aluminum Foundries, Aluminum Grating and Fencing Contractors

# Metal-Cutting Carbide Blades Technical Data

#### **CARBIDE GRAIN STRUCTURE**



#### **SAIT Carbide Matrix**

Consistent size of carbide grains.

More carbide per tooth as grains are smaller.

Smaller grain = harder tooth, more durability.

#### TOOTH CONFIGURATION

	Front	Profile	Тор
Triple Chip Grind (TCG)	W O		

#### Triple Chip Grind (TCG):

- FEATURE: Maximizes blade life by reducing the size of the metal chips that are produced during the cutting operations.
   Also provides maximum tooth strength for longer life.
- BENEFIT: Cleaner and cooler cuts and less stress on material being cut.
- WHERE USED: Steelworker® (all sizes), 7-1/4"
   Stainless, 8", 10" and 12" Aluminum blades

	Front	Profile	Тор
Alternate Top Bevel (ATB)			

#### Alternate Top Bevel (ATB)

- FEATURE: A multi-purpose grind that allows for durable, long life as well as productive work across a wide range of materials.
- BENEFIT: Clean, easy cutting without binding in the material.
- WHERE USED: 6-1/2" and 7-1/4" TMX, and 14" Aluminum Blades

	Front	Profile	Тор
Modified Triple Chip Grind (MTCG)		N	

#### Modified Triple Chip Grind (MTCG):

- FEATURE: Excels at reducing chip size for more effective cutting of material. Also improves cutting tooth durability.
- BENEFIT: Lower heat build-up and less blade stress while cutting.
- WHERE USED: 12" and 14" TMX and 14" Stainless Steel Blades



#### Competitor Carbide Matrix

Very inconsistent size of carbide grains. Less life due to larger grain sizes.

#### **BLADE OPERATION TIPS**

- Be sure to mount the blade with the rotational arrow positioned the same direction as the tool rotates
- Follow circular saw manufacturer's warnings and instruction manual
- Check blade prior to use for any visible cracks, loose or missing teeth, etc. and change blade if found
- Use blade only on recommended material
- Mount blade between designated sides of blade washers matching arbor size and shape
- Always wear ANSI-approved eye protection and proper protective equipment
- Always wear gloves
- Adjust foot-plate of the saw to proper depth (check circular saw manual - 3 teeth exposed below material surface is a common rule of thumb)
- Always work in a clean and unobstructed work environment
- Never operate saw without working blade guard
- Do not use excessive pressure when cutting (this causes the blade to wear prematurely)
- Tighten blade bolt as instructed by saw manufacturer







Available in a variety of sizes and styles for common cutting applications.



#### **Continuous Rim (CR)**

- Continuous uniform rim for smooth, dry and wet cutting of tiles and ceramic materials
- Longer lasting and faster cutting
- For use on small diameter electric saws

#### C Tile:

• Thin .060 for precise tile cutting

Tile & Ceramic

	Size			Part No.	Qty	Qty	Lbs
Α	В	С	Max	C Tile	Per	Per	Per
Dia.	Width	Bore	RPM	CR	Вох	Ctn	Вох
4-1/2	.060	7/8	13,300	48721	1	1	1
4-1/2	.060	5/8	13,300	48521	1	1	1



#### Serrated Rim (Turbo)

- Continuous rim with alternating serrations for fast, cool cutting
- · Smooth cutting of almost any aggregate material
- For use on small diameter electric saws

#### CE/CC:

- CE is for general purpose cutting
- CC is a longer lasting and faster cutting premium wheel

**CONCRETE** Concrete, ceramic, granite, brick, blocks, marble

	Size			Part	Number	Qty	Qty	Lbs
Α	В	С	Max	Turbo CE	Turbo CC	Per	Per	Per
Dia.	Width	Bore	RPM	Prem	Prem +	Вох	Ctn	Box
4-1/2	.090	7/8	13,300	48701	48711	1	1	1
4-1/2	.090	5/8	13,300	48501	48511	1	1	1
5	.090	7/8	12,200	48702	48712	1	1	1
5	.090	5/8	12,200	48502	48512	1	1	1
7	.090	7/8	8,500	48704	48714	1	1	1
7	.090	5/8	8.500	48504	48514	1	1	1









Circular Saw Angle Grinder Portable Saw



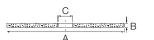
#### **Segmented Rim (Laser)**

- · Segmented rim allows for a cool cutting
- Laser welded, segmented wheels

#### LU/LV:

- LU is for general purpose dry cutting
- LV is a longer lasting and faster dry cutting premium wheel
- For use on small diameter electric saws

**CONCRETE** Concrete, ceramic, granite, brick, blocks, marble

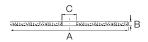


Size			Part	Qty	Qty	Lbs		
Α	В	С	Max	Laser LU	Laser LV	Per	Per	Per
Dia.	Width	Bore	RPM	Prem	Prem +	Вох	Ctn	Box
4-1/2	.090	7/8	13,300	48731	48741	1	1	1
4-1/2	.090	5/8	13,300	48531	48541	1	1	1
5	.090	7/8	12,200	48732	48742	1	1	1
5	.090	5/8	12,200	48532	48542	1	1	1
7	.090	7/8	8,500	48734	48744	1	1	1
7	.090	5/8	8,500	48534	48544	1	1	1

#### Premium/Premium+ 12 & 14 inch

- Premium is a general purpose dry and wet fast cutting blade
- Premium Plus is a longer lasting dry and wet faster cutting premium wheel
- For use on high speed gasoline and electric hand held saws

**CONCRETE** Concrete, ceramic, granite, brick, blocks, marble



	Size			Qty	Qty	Lbs		
Α	В	С	Max			Per	Per	Per
Dia.	Width	Bore	RPM	Prem	Prem +	Вох	Ctn	Вох
12	.110	1	5,100	48767	48757	1	1	6
12	.110	20mm	5,100	48567	48557	1	1	6
14	.125	1	4,300	48768	48758	1	1	7
14	.125	20mm	4,300	48568	48558	1	1	6



- Premium quality diamond for exceptional cutting and long life
- Laser welded bonding to the metal core on segmented wheels for cutting wet or dry
- Specifications available in general purpose wheels and premium wheels



### COTTON FIBER

#### **A24 UA-MTX**

- Aluminum oxide grain
- UA-MTX tough resin combined with coarse grit
- Excellent for light or medium weld removal

**STAINLESS** Stainless steel

**ALUMINUM** Non-ferrous metals

**METAL** Ferrous metals

#### A36 UA-GFX

- · UA-GFX latex bond for weld blending
- Resilient for use on contours, non-loading

**STAINLESS** Stainless steel

**ALUMINUM** Non-ferrous metals

**METAL** Ferrous metals

#### A54 UA-GFX

• UA-GFX latex bond for weld blending and finishing

**STAINLESS** Stainless steel

**ALUMINUM** Non-ferrous metals

METAL Ferrous metals

	Size			Gra	Qty	Lbs		
Α	В	С	Max	Max Part Numbers			Per	Per
Dia.	Width	Bore	RPM	A24	A36	A54	Вох	Box
4	1/4	5/8	13,500	29200	29201	29202	10	3
4-1/2	1/4	7/8	13,300	29206	29207	29208	10	3
7	1/4	7/8	8,500	29212	29213	29214	10	9

#### **Cotton Fiber Mounted Points**

- A54MTX Resin Bond light removal/blending
- A80GFX Latex Bond finer grit for ultimate finishing

STAINLESS Blending on stainless steel, high tensile alloys

**ALUMINUM** Non-ferrous metals

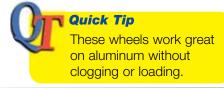
**METAL** Ferrous metals

	Size		Shank	Part	No.	"O" = 1/2"	Qty
Туре	Dia.	Length	Dia.	A54MTX	A80GFX	Max RPM	Per Box
A5	3/4	1-1/8	1/4	50560	50360	38,550	10
B42	1/2	3/4	1/4	50561	50361	61,120	10
B52	3/8	3/4	1/4	50562	50362	78,340	10
B121	1/2	1/2	1/4	-	50363	69,310	10
B122	3/8	3/8	1/4	-	50364	69,310	10
W163	1/4	1/2	1/4	-	50365	33,750	10
W189	1/2	2	1/4	50566	50366	26,830	10
W220	1	1	1/4	-	50367	25,500	10
W222	1	2	1/4	-	50368	15,900	10



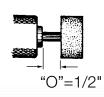
#### RA (roughness average) Values

Grinding/Blending Wheels									
Specification	304 Stainless Steel	6061 Aluminum							
A24UA-MTX	140 RA	N/A							
A36UA-GFX	40 RA	130 RA							
A54UA-GFX	30 RA	80 RA							





Mandrel overhang "O" must always be the lowest possible. Maximum speeds given refer to overhang "O" equal to 1/2"







- Multiple layers of cotton impregnated with abrasive grain and special bonding agents allow for the coolest blending and finishing wheels
- Special cotton formula will never load on soft non-ferrous metals like aluminum
- Available in two bonding agents for use in many applications

### COTTON FIBER





SAIT-LOK-R™ discs are made of multiple layers of cotton fiber abrasive impregnated material. These quick change discs produce a smooth finish in one step.

#### Finishing discs **A24M**

- Aluminum oxide grain
- Coarse grit with medium flexibility for aggressive action

**STAINLESS** Blending on stainless steel, high tensile alloys

**ALUMINUM** Non-ferrous metals

**METAL** Ferrous metals

#### **A36F**

· Medium grit with higher flexibility for smoother action

**STAINLESS** Blending on stainless steel, high tensile alloys

**ALUMINUM** Non-ferrous metals

METAL Ferrous metals

#### **A54F**

· Fine grit with higher flexibility for finishing

**STAINLESS** Blending on stainless steel, high tensile alloys

**ALUMINUM** Non-ferrous metals

METAL Ferrous metals

#### **A80F**

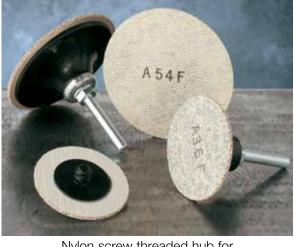
· Finer grit for ultimate finishing

STAINLESS Blending on stainless steel, high tensile alloys

**ALUMINUM** Non-ferrous metals

METAL Ferrous metals





Nylon screw threaded hub for easy mounting to the backing pad

See page 143 for backing pad

#### RA (roughness average) Values

Sait-Lok-R™									
Specification	304 Stainless Steel	6061 Aluminum							
A24M	70 RA	90 RA							
A36F	40 RA	60 RA							
A54F	30 RA	50 RA							
A80F	20 RA	45 RA							

## A54GFX/A54MTX

• Fine grit with higher flexibility for finishing

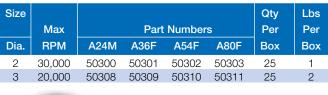
**Deburring wheels** 

**STAINLESS** Deburring of stainless steel, high tensile alloys

Qty Lbs

**ALUMINUM** Non-ferrous metals **METAL** Ferrous metals

	Size			Grades	Available			
Α	В	С	Max	Part Numbers				
Dia.	Width	Bore	RPM	A54GFX	A54MTX			
3	1/16	3/8	18,000	-	29310			
3	1/8	3/8	12 000	29312	_			



								Α	В	С	Max	Part N	umbers	Per	Per
Size						Qty	Lbs	Dia.	Width	Bore	RPM	A54GFX	A54MTX		Вох
	Max		Part Numbers				Per	Dia.	wiaiii	Dore	nrivi	ASAGEX	ASHIVITA	DUX	DUX
						1	Per Per		1/16	3/8	18,000	-	29310	10	1
Dia.	RPM	A24M	A36F	A54F	A80F	Box	Box	3	1/8	3/8	12,000	29312	-	10	1
2	30,000	50300	50301	50302	50303	25	1	4	1/16	3/8	13,500	-	29320	10	1
3	20,000	50308	50309	50310	50311	25	2	4	1/8	3/8	9,075	29322	-	10	1



- Multi-layer disc configuration provides longer life than coated abrasive discs
- · Cotton fiber abrasive material will not smear on titanium and stainless steel
- Outlasts coated discs 10 to 1 for less downtime and increased productivity

### HAND/FLOOR RUBS



The vitrified bonding technique uses a high temperature process whereby abrasive materials are heated to a point where the grains fuse to each other, forming the bond posts. Vitrified products, although somewhat brittle, are not affected by water, oil, most acids, or temperature changes. Used primarily for precision and fixed-feed applications, they are particularly well suited for bench grinders and offhand tool room applications.



#### **Hand and Floor Rubs**

Removes form marks

**CONCRETE** Concrete

• Configurations available:

Plain - For cleaning castings and

dressing bench grinding wheels

Fluted - For extra shearing action

Handle - For extra comfort and

working overhead

**Scored** - Breaks into two 4 x 2 x 2 floor rubs

#### Packaging

Each box of HR202 and FR521 contains 6 wood wedges

Additional wood wedges, see page 144

		Size				Part	Qty Per	Lbs Per
Туре	Length	Width	Height	Description	Grade	Number	Box	Вох
HR202	4	2	2	Plain	C24R	25010	6	7
HR241	6	2	2	Fluted	C24R	25020	5	10
HR242	8	2	2	Fluted	C24R	25030	5	12
HR252	6	3	1	Handle	C24R	25040	5	10
HR250	8	3-1/2	1-1/2	Handle	C24R	25050	5	19
FR521	8	2	2	Scored	C10R	25060	3	14
FR521	8	2	2	Scored	C24R	25061	3	14
FR521	8	2	2	Scored	C80R	25062	3	14



- Vitrified bond for long life
- Available in several configurations for a wide range of cleaning and dressing applications

### BENCH WHEELS



- Aluminum oxide grain
- General purpose
- · For sharpening tools and light stock removal

**METAL** Ferrous metals

(carbon steel, steel, iron, forgings, etc.)

#### GC

- Green silicon carbide grain
- Extremely sharp grain for faster, burr-free cutting
- Use on carbide tipped tools, cast iron

**METAL** Ferrous and/or non-ferrous metals



#### Reduction bushings enclosed with each wheel

Wheel Size	Bushings
6"	3/4, 5/8, 1/2
7"	3/4, 5/8, 1/2
8"	3/4, 5/8
10"	1, 3/4
12"	1-1/4, 1
14"	1-1/4, 1

#### **Aluminum Oxide**

	Size				Grades Available							
Α	В	С	Max		Part Numbers							
Dia.	Width	Bore	RPM	A24	A36	A46	A60	A80	Вох			
6	1/2	1	4,138	-	28003	-	28004	28005	1-1/2			
6	3/4	1	4,138	-	28000	-	28001	28002	2			
6	1	1	4,138	-	28006	-	28007	28008	2-1/2			
7	3/4	1	3,600	-	28010	-	28011	28012	2-1/2			
7	1	1	3,600	-	28013	-	28014	28015	3-1/2			
8	3/4	1	3,600	-	28020	-	28021	28022	3-1/2			
8	1	1	3,600	-	28023	-	28024	28025	4-1/2			
10	1	1-1/4	2,483	-	28040	28043	28041	28042	7			
10	1-1/2	1-1/4	2,483	-	28050	28053	28051	28052	10			
12	2	1-1/2	2,069	28060	28063	28061	28062	-	19-1/2			
14	2	1-1/2	1,773	28070	28073	28071	28072	-	28			

#### **Green Silicon Carbide**

	Size			Gra	Lbs		
Α	В	С	Max	Pa	art Numbe	ers	Per
Dia.	Width	Bore	RPM	GC60	GC80	GC120	Вох
6	3/4	1	4,138	28100	28101	28102	1-1/2
6	1	1	4,138	28103	28104	28105	2
7	1	1	3,600	28113	28114	28115	2-1/2
8	1	1	3,600	28123	28124	28125	3-1/2
10	1	1-1/4	2,483	28140	28141	28142	6-1/2
10	1-1/2	1-1/4	2,483	28150	28151	28152	10
12	2	1-1/2	2,069	28160	28161	28162	19-1/2
14	2	1-1/2	1.773	28170	28171	28172	28



- Vitrified bond for long life
- Available in two formulations for a wide range of applications
- Individually packaged for safety and convenience



### BLENDING & FINISHING (COATED - PG. 60)

#### **Fiber Discs**



Introduction Pg 69 **Fiber Discs** 70-74

#### **Flap Discs**



Introduction Pg 86 **Encore & Mini** 87 88-89 Ovation® Saitlam™ 90-92 Sand-Light™ (Non-Woven) 91, 122

#### **Belts**



Pq 62-63 Introduction **Belt Specifications** 64-67 **Custom Belts** 68

#### **Laminated Discs**



SAIT-LOK™ Pg 75-77 SAIT-LOK-R™

#### **Paper Discs**



Introduction Pg 78 **PSA Disc Rolls 79 PSA Disc Individual** 80-81 Hook & Loop 82-83

#### **Cloth Discs**



Pg 78 Introduction Zirconium 84 **Aluminum Oxide** 85

#### Flap Wheels



Pg 93 Small Diameter **Large Diameter** 94 **5/8-11 Threaded** 94

#### **Sheets**



Introduction Pq 95 Cloth 96 **Paper** 96-97 Fileboard 98-99 Saitscreen™/Drywall 100 **Sanding Sponges** 101

#### **Shop Rolls**



Pq 102 Industrial/Handy Mini/Custom 103 Saitscreen™/Plumber 104

#### **Specialties**



**Spiral Bands** Pg 105 Cartridge Rolls 106-107 **Cross Pads** 108 **Square Pads** 108

#### Floor Sanding



Sheets/Belts Pq 109 110 Discs Rolls 111 **Pads** 112-113

#### **Accessory Items**



Pg 139 Introduction **Accessories** 140-146 SAIT-PAK™ 138

#### NON-WOVEN - PG. 114



















Introduction Pa 114 **Hand Pads** 115 116 **Belts** 117-118 **Discs** SAIT-Strip™ Products 119 Flap Brushes 120

Interleaf Wheels Pa 121 Sand-Light™ (Flap Discs) 122 **Unitized Wheels/Type 27** 122-123 **Convolute Wheels** 124 Sand-Light™ Blending Discs 125 **Buffing Pads/Compounds** 126



- Belt offering encompasses a variety of abrasive types, lengths and widths, and grits, to cover a multitude of belt sanding needs.
- Belts are made with the highest quality industrial materials and a strong bi-directional tape splice.
- The selection of grain types and backing material is engineered to each application.
- Available in the Quick Ship™ or Blue Line™ programs, as well as Made-To-Order.



#### Quick Ship™ Belts

- These belts are the most popular in terms of the industrial user.
- Each package of belts is shrink-wrapped in quantities of 10.

Materials Available	Available Grits
Z-H (zirconium)	24-80
1A-X/2A-X (closed coat aluminum oxide)	24-320
AO-X (open coat aluminum oxide)	24-180
C-W (silicon carbide wet/dry belts)	60-220

See pages 64-67 for further information



#### Blue Line™ Belts

- These belts are the most popular sizes and packaged for retail.
- Supplied in either 5 or 10 belts per box, depending on grit.
- Specially designed boxes lend themselves to being displayed either on pegboard hooks or shelving.

Materials Available	Available Grits
Z-H (zirconium)	24-80
1A-X/2A-X (closed coat, aluminum oxide)	24-320
AO-X (open coat aluminum oxide)	24-180
C-W (silicon carbide wet/dry belts)	60-220

See pages 65-66 for further information



#### **SAIT-Saver**<sup>™</sup> Belts

- Economy alternative for portable belts.
- Available in aluminum oxide, closed coat material.
- Each package is shrink-wrapped in quantities of 10.

Materials Available	Available Grits
LA-X (closed coat, aluminum oxide)	40-120

See pages 64-67 for further information

#### **Custom (Made-To-Order) Belt Program**

- Broad product offering (economy Aluminum Oxide and Silicon Carbide to premium Zirconia Alumina).
- Custom made to your exact width (up to 18"), length, material, and grit.

See page 68 for further information

# SELTS

# INTRODUCTION

- Stock belt program provides the most popular industrial and commercial belt sizes in an easy to order program.
- The following materials are available through this program.



#### **Zirconia Alumina Cloth**

#### Z-H

24-80 Grit Range Closed Coat

- Zirconia alumina abrasive material.
- H-weight, waterproof polyester backing for heavy duty grinding and finishing.
- For use on ferrous and non-ferrous metals, cast iron, aluminum, and stainless steel.



#### **Aluminum Oxide Cloth**

#### 1A-X/2A-X

24-400 Grit Range Closed Coat

- Semi-friable (1A-X)/heat-treated (2A-X) aluminum oxide grain.
- X-weight cotton backing.
- For general purpose grinding and finishing.
- For use on alloyed steels, ferrous and non-ferrous metals, cast iron and wood.

#### AO-X

24-180 Grit Range Open Coat

- Semi-friable aluminum oxide grain.
- X-weight cotton backing.
- For general purpose, open coat grinding, polishing and finishing of materials that have the tendency to load.
- For use on non-ferrous metals, aluminum and wood.

#### LA-X - SAIT-Saver™

40-120 Grit Range Closed Coat

- Semi-friable aluminum oxide grain.
- X-weight cotton backing.
- For low cost grinding and finishing of alloyed steels, ferrous and non-ferrous metals, cast iron and wood.
- Used exclusively in SAIT-Saver<sup>™</sup>.



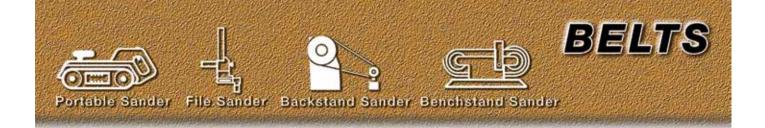
#### Silicon Carbide Cloth

#### C-W

60-220 Grit Range Closed Coat

- Silicon carbide grain.
- Waterproof X-weight cotton backing.
- For grinding and finishing hard cast iron, aluminum, glass, ceramics, non-ferrous metals, plastics, rubber, marble and stone.





		Closed Coat Aluminum Oxide	Closed Coat Zirconium			Closed Coat Aluminum Oxide	Closed Coat Aluminum Oxide	Open Coat Aluminum Oxide	Closed Coat Zirconium	Closed Coat Silicon Carbide
		1AX/2AX	ZH			1AX/2AX	LA-X	AO-X	Z-H	C-W
		Quick Ship™	Quick Ship™			Quick Ship™	SAIT-Saver™	Quick Ship™	Quick Ship™	Quick Ship™
Size	Grit	Part No.	Part No.	Size	Grit	Part No.	Part No.	Part No.	Part No.	Part No.
	36 40	60016 60017	64016 64017		24 36	61094		63200 63201		
	50	60018	64018		40	61095		63202		
1/4 x 18	60	60019	64019		50	61096		63203		
	80	60020	64020	1 x 30	60 80	61097		63204 63205		
	100 120	60021 60022			100	61098 61099		63206		
	36	60030	64030		120	61100		63207		
	40	60031	64031		150			63208		
1/4 x 24	50 60	60032 60033	64032 64033		180 24			63209 63210		
1/4 X 24	80	60034	64034		36	60310		63211	58152	
	100	60035			40	60311	60623	63212	58153	
	120 36	60036 61121			50 60	60312 60313	60624 60625	63213 63214	58154 58155	58000
	40	61122			80	60314	60626	63215	58156	58001
	50	61123		1 x 42	100	60315	60627	63216		58002
3/8 x 13	60	61124			120	60316	60628	63217		58003
	80 100	61125 61126			150 180	60317 60318		63218 63219		58004 58005
	120	61127			220	60319		002.0		58006
	36	60044			240	60320				
	40 50	60045 60046			320 36	60322 61133				
1/2 x 12	60	60047			40	61134				
	80	60048			50	61135				
	100 120	60049 60050		1-1/2 x 60	60 80	61136 61137				
	36	60058	64058		100	61138				
	40	60059	64059		120	61139				
1/2 x 18	50	60060	64060		24 36	60506		63220 63221		
	60 80	60061 60062	64061 64062		40	60507		63222		
	100	60063	5.55=		50	60508		63223		
	120	60064	64006	2 x 48	60 80	60509		63224 63225		
	36 40	60086 60087	64086 64087		100	60510 60511		63226		
	50	60088	64088		120	60512		63227		
1/2 x 24	60	60089	64089		180	00500		63229	0.4500	
	80 100	60090 60091	64090		36 40	60520 60521			64520 64521	
	120	60092			50	60522			64522	
	36	60114	64114	2 x 60	60	60523			64523	
	40 50	60115 60116	64115 64116		80 100	60524 60525			64524	
3/4 x 18	60	60117	64117		120	60526				
	80	60118	64118		36	60534			64534	
	100 120	60119 60120			40 50	60535 60536			64535 64536	
	36	60128	64128	2 x 72	60	60537			64537	
	40	60129	64129		80	60538			64538	
3/4 x 20-1/2	50 60	60130 60131	64130 64131		100 120	60539 60540				
3/4 X 20=1/2	80	60132	64132		36	60576				
	100	60133			40	60577				
	120	60134		2 x 132	50	60578				
	36 40	60141 60142		2 X 132	60 80	60579 60580				
	50	60143			100	60581				
1 x 12	60	60144			120	60582		62000		
	80 100	60145 60146			36 40		63381	63280 63281		
	120	60147			50		63382	63282		
	36	60254		2-1/2 x 14	60		63383	63283		
	40 50	60255 60256			80 100		63384 63385	63284		
1 x 21	60	60257			120		63386	63286		
	80	60258								
	100 120	60259 60260								
ı	120	00200								





		Closed Coat Aluminum Oxide	Closed Coat Aluminum Oxide	Closed Coat Aluminum Oxide	Open Coat Aluminum Oxide	Open Coat Aluminum Oxide	Closed Coat Zirconium	Closed Coat Zirconium	Closed Coat Silicon Carbide
Size	Grit	1AX/2AX Blue Line™ Part No.	1AX/2AX Quick Ship™ Part No.	LA-X SAIT-Saver™ Part No.	AO-X Blue Line™ Part No.	AO-X Quick Ship™ Part No.	Z-H Blue Line™ Part No.	Z-H Quick Ship™ Part No.	C-W Blue Line™ Part No.
	36		61108					65108	
	40		61109					65109	
	50		61110					65110	
2-1/2 x 60	60		61111					65111	
,	80		61112					65112	
	100		61113						
	120		61114						
	24	57100				63230			
	36	57101				63231			
	40	57102				63232			
	50	57103				63233			
	60	57104				63234			
	80	57105				63235			
3 x 18	100	57106				63236			
	120	57107				63237			
	150	57108				63238			
	180	57109							
	220	57110							
	240	57111							
	320	57113							
	24	57200			58160				
	36	57201	60604	550.40	58161		58112		
	40	57202	60605	55342	58162		58113		
	50	57203	60606	55343	58163		58114		50000
	60	57204	60607	55344	58164		58115		58200
0 4 01	80	57205	60608	55345	58165		58116		58201
3 x 21	100	57206 57207	60609	55346	58166				58202 58203
	120 150	57208	60610	55347	58167 58168				58204
	180	57209			58169				58205
	220	57210			30103				58206
	240	57211							00200
	320	57213							
	24	57500			58170		58121		
	36	57501	60646		58171		58122		
	40	57502	60647	55352	58172		58123		
	50	57503	60648	55353	58173		58124		
	60	57504	60649	55354	58174		58125		58500
	80	57505	60650	55355	58175		58126		58501
3 x 24	100	57506	60651	55356	58176				58502
	120	57507	60652	55357	58177				58503
	150	57508			58178				58504
	180	57509			58179				58505
	220	57510							58506
	240	57511							
	320	57513							

**1A-X/2A-X:** Aluminum oxide, closed coat, X weight cotton. For general purpose sanding, grinding and finishing of ferrous and non-ferrous metals, wood, cast iron, ordinary and alloyed steels and stainless steel.

**AO-X:** Aluminum oxide, open coat, X weight cotton. For general purpose sanding and grinding where an open coat structure is needed. Best choice for soft woods, non-ferrous metals, aluminum, leather, rubber and other materials that have the tendency to load.

LA-X (SAIT-Saver™): Economy Aluminum oxide, closed coat, X-weight cotton. For low cost sanding and finishing of ordinary and alloyed steels, ferrous and non-ferrous metals, cast iron, and wood. A good choice where price and best value is the determining factor.

**Z-H: Zirconium, closed coat, H weight waterproof polyester.** Designed for aggressive grinding of ferrous and non-ferrous metals, cast iron, stainless steel, and aluminum. Backing can be used wet or dry.

**C-W: Silicon Carbide, closed coat, X weight waterproof cotton.** For grinding and finishing glass, aluminum, marble, hard cast iron, ceramics, non-ferrous metals, plastics, rubber and stone. Backing can be used wet or dry.



	c
Ω	ŭ
П	≥
Ь	Ū
⋖	S
$\aleph$	Д
0	۳



Size			Closed Coat Aluminum Oxide	Closed Coat Aluminum Oxide	Closed Coat Aluminum Oxide	Open Coat Aluminum Oxide	Open Coat Aluminum Oxide	Closed Coat Zirconium	Closed Coat Zirconium	Closed Coat Silicon Carbide
4 x 24 1 100	Size	Grit	Blue Line™	Quick Ship™	SAIT-Saver™	Blue Line™	Quick Ship™	Blue Line™	Quick Ship™	Blue Line™
\$ x 00   00   00   00   00   00   00   0										
8 x 60										
80 000000 120 000077 120 000007 120 000007 120 000007 120 0000073 04773 64772 80 0 60774 64775 80 60 60775 64775 80 60 60775 64775 80 60 60775 64775 80 60 60775 64775 80 60 60776 80 60 60775 64775 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 607776 80 60776 80 60776 80 60776 80 60776 80 60776 80 60776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 6077776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 607776 80 70 70 70 70 70 70 70 70 70 70 70 70 70	3 x 60									
120		80		60206						
3 x 132										
40   60773   647774   647774   647774   647774   647774   647775   647774   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776   647776									64772	
\$ x 132										
80 60776 120 E0777 120 E0777 120 E0777 120 E07777 120 E07778 120 E07777 120 E	0 4 100									
100   60778	3 X 132									
36									01170	
40										
Section   Sect										
80										
100	3-1/2 x 15-1/2									
120										
24 57600 58180 36 57601 58181 40 57602 58182 50 57603 58183 60 57604 58184 4 x 21 100 57605 58185 60 57605 58185 60 57606 58185 60 57606 58185 60 57606 58185 60 57606 58186 60 57606 58186 60 57606 58186 60 57606 58186 60 57606 58186 60 57606 58186 60 57607 58186 60 57608 58186 60 57608 58186 60 57609 58189 60 57601 68189 60 57601 68189 60 57601 68189 60 57601 68189 60 57901 68189 58191 58132 60 57603 68184 58362 58191 58132 60 57904 68044 58363 58193 58134 60 57906 68044 58363 58193 58134 60 57906 68044 58365 58193 58134 60 57906 68046 58365 58195 58136 58851 60 57906 68046 58365 58195 58136 58851 60 57906 68046 58365 58195 58136 58851 60 57906 68046 58366 58195 58186 60 57906 68046 58367 58196 58186 60 57906 68046 58367 58196 58186 60 57906 68046 58367 58196 58186 60 57906 68056 6836 58196 60 58196 58196 58196 60 68056 6836 68340 60 68656 6836 683241 60 68656 6836 683241 60 68656 6866 63241 60 68656 6866 63241 60 68656 6866 63241 60 68656 68666 63241 60 68656 68666 63241 60 68656 68666 63241 60 68656 68666 63241 60 68656 68666 63241 60 68656 68666 63241 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 686666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246 60 68666 63246										
4 x 24										
S0   S7603   S8183										
60 57604 58184 80 57605 58185 80 57606 58185 120 57607 58187 150 57608 58188 180 57609 58189 220 57610 2240 57611 320 57613  24 57803 60842 58181 58182 24 57803 60843 55363 58182 50 57803 60844 55363 58182 50 57803 60844 55363 58193 58183 50 57803 60844 55363 58193 58183 50 57803 60844 55363 58193 58183 50 57803 60844 55363 58193 58183 50 57803 60844 55363 58193 58183 58183 50 57803 60844 55363 58193 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 58183 5818										
100   57606   58186   58187   120   57607   58187   150   57608   58188   180   57609   58189   220   57610   220   57610   220   57611   320   57613   24   57900   58190   58131   36   57901   60842   58191   58132   50   57903   60844   55363   58193   58134   560   57903   60844   55363   58193   58135   58850   60   57904   60845   55364   58194   58135   58850   60   57905   60846   55365   58195   58136   58851   120   57907   60848   55367   58197   58852   120   57907   60848   55367   58197   58853   180   57909   58198   58184   58854   180   57909   58199   58855   58198   58854   180   57909   58199   58856   58196   58850   58196   58850   58196   58850   58196   58850   58196   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58196   58850   58850   58196   58850   58196   58196   58850   58850   58196   58196   58850   58850   58196   58196   58850   58850   58850   58196   58196   58196   58850   58196   58850   58850   58196   58196   58196   58196   58196   58850   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196   58196		60	57604			58184				
120	4 04									
150	4 X 2 I									
220 57610 240 57613 320 57613  24 57900 57613  24 57900 5842 58191 58132  40 57902 60842 58191 58132  50 57903 60844 55382 58192 58134  60 57903 60844 55383 58193 58134  60 57905 60846 55385 58198 58136 58851  80 57905 60846 55385 58198 58138 58851  4 x 24 100 57906 60847 55366 58198 58136 58851  120 57907 60848 55367 58197 58853  150 57908 58198 58199 58855  220 57910 58199 58855  220 57910 58199 58856  240 57913 58853  4 x 36 60856 63241  4 0 60857 60663 63242  50 60858 60664 63243  80 60860 60666 63244  4 x 36 100 60867 60663 63245  150 60862 60668 63244  120 60862 60668 63247  150 60863 60864 63243  80 60864 6364 63243  80 60864 6364 63243  80 60864 6364 63243  80 60864 6364 63243  80 60864 6364 63243  80 60868 60664 63244  80 60869 60666 63247  100 60869 60666 63247  150 60863 60864 63247  150 60863 60864 63247  150 60863 60864 63247  150 60863 60864 63247  150 60863 60864 63248  80 60864 6364 63249  20 60865 60866 63247  100 60867 63688 63247  100 60867 63688 63248  80 60868 63688 63247  150 60868 63688 63248  80 60869 60868 63247  150 60868 63248  80 60869 60868 63247  150 60868 63688 63248  80 60869 60868 63247  150 60868 63688 63248  80 60868 63888 63888  80 60888 60888 60888 60888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608888 608										
240 57611 320 57613 24 57900 58190 58131 24 57900 58191 58191 58132 40 57902 60843 55362 58192 58133 50 57803 60844 55363 58193 58134 60 57904 60845 55364 58194 58135 58850 80 57805 60846 55365 58195 58136 58851 4 x 24 100 57906 60847 55366 58196 58196 58852 120 57907 60848 55367 58197 58853 180 57909 58199 58198 58854 180 57909 58199 58198 58856 240 57911 320 57913 320 57913 320 57913 324 60855 63240 40 60857 60863 63241 40 60857 60863 63244 40 60857 60868 63244 40 60869 60666 63244 40 60866 63244 120 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60866 63244 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60868 63249 180 60888 63249						58189				
320   \$7613     24										
36   57901   60842   58191   58132     40   57902   60843   55362   58192   58133     50   57903   60844   55363   58193   58134     60   57904   60845   55365   58194   58135   58850     80   57906   60846   55365   58195   58136   58851     4 x 24   100   57906   60847   55366   58196   58852     120   57907   60848   55367   58197   58853     150   57908   58199   58855     120   57910   58856     220   57910   58856     244   57913   58856     245   57913   58856     246   60856   63241     40   60857   60663   63241     40   60857   60666   63243     60   60869   60666   63245     4 x 36   100   60861   60667   63245     150   60863   63247     150   60863   63247     150   60863   63247     150   60866   63246     120   60866   63247     150   60868   63247     150   60868   63247     150   60868   63247     150   60868   63248     180   60861   60667   63248     180   60861   60667   63246     120   60865     220   60865     240   60866     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   6086										
40 57902 60843 55362 58192 58133 50 57903 60844 55363 58193 58134 60 57904 60845 55363 58195 58136 58136 80 57905 60846 55365 58195 58136 58850 80 57905 60847 55366 58195 58136 58852 120 57907 60848 55367 58197 58853 150 57908 58198 58853 160 57909 58199 58855 220 57910 58856 220 57910 58856 3224 57913 24 60856 63241 40 60857 60663 63241 40 60858 60664 63243 60 60858 60664 63243 60 60859 60665 63244 60 60859 60666 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60866 63245 80 60867 63246 80 60868 63249 80 60868 63249 80 60868 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60866 83249 80 60867 83268 80 60870 50 60868 80 60872 80 60874 120 60875 80 60886 80 60887 80 60888				00040						
50   57903   60844   55363   58194   58135   58850     60   57905   60846   55364   58195   58136   58851     80   57906   60847   55366   58196   58136   58851     100   57906   60847   55366   58197   58853     150   57908   58198   58854     180   57909   58199   58856     120   57910   58856     220   57910   58856     230   57913     24   60855   63240     36   60856   63241     40   60857   60663   63242     50   60858   60664   63243     60   60859   60665   63245     4 x 36   100   60861   60667   63246     120   60862   60668   63247     150   60863   63247     150   60863   63247     150   60863   63247     150   60863   63247     150   60863   63247     150   60863   63247     150   60863   63247     150   60863   63248     120   60866   63245     220   60865   63248     220   60865   63248     240   60866   63245     240   60866   63245     240   60866   63245     240   60866   63245     240   60868   63247     250   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60868     320   60888     320   60886     4 x 48   60   60872     320   60886     4 x 54   60   60887     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320   60888     320					55362					
80 57905 60846 55365 58195 58136 58851 100 57907 60848 55367 58197 58853 150 57908 58199 58199 58855 220 57910 58856 244 57911 320 57913  24 60855 63241 40 60857 60663 63241 40 60858 60664 63243 60 60859 60665 63244 80 60869 40 60865 180 60869 40 60869 40 60869 40 60869 40 60874 120 60874 120 60885 320 60888 60864 4 x 48 60 60872 36 60 60874 120 60885 36 60868 60868 4 x 4 x 48 60 60873 30 60874 120 60886 4 x 5 4 8 8 6 60879 30 60888 4 x 5 5 6 60871 4 x 6 6 6 60873 30 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888 50 60888										
4 x 24										
120	A v 2A							58136		
180   57909   58199   58855   58856   240   57911   320   57913     320   57913     320   57913     320   57913     320   36   60856   63241     40   60857   60663   63242     40   60857   60663   63242     60   60859   60665   63244     80   60860   60666   63245     60   60860   60666   63245     60   60861   60667   63246     60862   60863   63247     60862   60863   63248     60864   63249     60866   63249     60866   63249     60866   63249     60866   320   60868   63249     60866   320   60868     60870     60870     50   60873     60873   100   60874     120   60874     120   60875     36   60884     40   60885   50   60886     50   60886     50   60886     50   60886     50   60886     50   60886     50   60886     50   60886     50   60886     50   60888     50   60888   100   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60888   100   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   60889     50   608	7 7 27									
220 57910 240 57911 320 57913  24 60855 63240  40 60857 6063 63242  50 60858 6064 63243  60 60859 60665 63244  80 60860 60666 63245  100 60861 60667 63246  120 60862 60668 63247  150 60863 63248  180 60864 63249  220 60865 240 60866 320 60868  4 x 48 60 60870  50 60871  100 60872  80 60873  100 60874  120 60875  36 60884  4 0 60875  36 60884  4 0 60885  50 60888  50 60886  4 x 54 60 60886  50 60888  100 60886  4 x 54 60 60887  80 60888  100 60888  100 60888										
240 57911 320 57913  24 60855 63240 36 60856 63241 40 60857 60663 63242 50 60858 60664 63243 60 60859 60665 63244 80 60860 60859 60665 63245 4 x 36 100 60861 60667 63246 120 60862 60668 63248 180 60863 63248 180 60864 63248 180 60868 220 60868 220 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60870 50 60871 100 60874 1120 60875 36 60884 4 x 48 60 60885 50 60886 50 60888 4 x 54 60 60887 80 60888						58199				
24 60855 63240 36 60856 63241 40 60857 6063 63242 50 60858 60664 63243 80 60860 60866 63244 80 60860 60866 63245 4 x 36 100 60861 60667 63246 120 60862 60668 63247 150 60863 63248 180 60864 63249 220 60865 240 60866 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60868 320 60870 550 60871 4 x 48 60 60872 80 60875 36 60884 40 60885 55 60886 4 x 54 60 60888 100 60888										00000
36   60856   63241			57913	20055			00040			
40 60857 60663 63242 50 60858 60664 63243 60 60859 60665 63244 80 60860 60666 63245 4 x 36 100 60861 60667 63246 120 60862 60668 63247 150 60863 63248 180 60864 63249 220 60865 240 60866 320 60868 320 60868 320 60868 40 60870 50 60871 4 x 48 60 60872 80 60873 100 60874 120 60875 36 60884 40 60885 50 60888 4 x 54 60 60885 50 60886 4 x 54 60 60885 50 60886										
60 60859 60665 63244 80 60860 60666 63245 4 x 36 100 60861 60667 63246 120 60862 60668 63247 150 60863 63248 180 60864 63249 220 60865 240 60866 320 60868 320 60868 320 60869 40 60870 50 60871 100 60872 80 60873 100 60874 120 60875 36 60888 4 x 54 60 60885 50 60886 4 x 54 60 60887 80 60888 100 60888					60663					
80 60860 60666 63245 100 60861 60667 63246 120 60862 60668 63247 150 60863 63248 180 60864 63249 220 60865 240 60868 320 60868 320 60868 40 60870 50 60872 80 60872 80 60887 120 60886 4 x 54 4 x 54 6 6 60885 5 60886 4 0 60885 5 60886 100 60885 5 60886 100 60888										
4 x 36 100 60861 60862 60668 63247 150 60863 63248 180 60864 63249 220 60865 240 60866 320 60868 320 60868 320 60869 40 60870 50 60872 80 60873 100 60874 120 60875 36 60884 40 60885 50 60885 50 60886 4 x 54 80 60885 50 60888 100 60887 80 60888										
150 60863 63248 180 60864 63249 220 60865 240 60866 320 60868  36 60869 40 60870 50 60871 60 60872 80 60873 100 60874 120 60875 36 60884 40 60885 50 60886 4 x 54 60 60887 80 60888 100 60887	4 x 36									
180 60864 63249 220 60865 240 60866 320 60868 320 60868  36 60869 40 60870 50 60871 4 x 48 60 60872 80 60873 100 60874 120 60875 36 60884 40 60885 50 60886 4 x 54 60 60887 80 608888 100 60889					60668					
220 60865 240 60866 320 60868  36 60869 40 60870 50 60871 4 x 48 60 60872 80 60873 100 60874 120 60875 36 60886 40 60885 50 60886 40 60887 80 608888 100 60887										
320 60868  36 60869  40 60870  50 60871  4 x 48 60 60872  80 60873  100 60874  120 60875  36 60884  40 60885  50 60886  4 x 54 60 60887  80 60887  80 60888  100 60889							332 13			
36 60869 40 60870 50 60871 4 x 48 60 60872 80 60873 100 60874 120 60875 36 60884 40 60885 50 60886 4 x 54 60 60887 80 60888 100 60888										
4 x 48										
4 x 48										
80 60873 100 60874 120 60875 36 60884 40 60885 50 60886 4 x 54 60 60887 80 60888 100 60889	4 40									
100 60874 120 60875 36 60884 40 60885 50 60886 4 x 54 60 60887 80 60888 100 60889	4 x 48									
36 60884 40 60885 50 60886 4 x 54 60 60887 80 60888 100 60889		100								
40 60885 50 60886 4 x 54 60 60887 80 60888 100 60889		120		60875						
50 60886 4 x 54 60 60887 80 60888 100 60889										
80 60888 100 60889										
100 60889	4 x 54									





		Closed Coat Aluminum Oxide	Closed Coat Aluminum Oxide	Open Coat Aluminum Oxide	Closed Coat Zirconium	Closed Coat Silicon Carbide
Size	Grit	1AX/2AX Quick Ship™ Part No.	LA-X SAIT-Saver <sup>™</sup> Part No.	AO-X Quick Ship™ Part No.	Z-H Quick Ship™ Part No.	C-W Quick Ship™ Part No.
	36	60222				
	40	60223				
	50	60224				
4 x 60	60	60225				
	80	60226				
	100	60227				
	120	60228				
	80					64201
4 x 64	100					64202
	120					64203
	60					64210
4 x 106	80					64211
	100					64212
	120					64213
	36	60982			64982	
	40	60983			64983	
	50	60984			64984	
4 x 132	60	60985			64985	64220
	80	60986			64986	64221
	100	60987				64222
	120	60988		22252		
	24	61023		63250		
	36	61024		63251	58142	
	40	61025	60683	63252	58143	
	50	61026	60684	63253	58144	F0000
	60	61027	60685	63254	58145	58900
6 x 48	80	61028	60686	63255	58146	58901
6 X 48	100 120	61029 61030	60687 60688	63256 63257		58902 58903
	150		00000			
	180	61031		63258		58904 58905
	220	61032 61033		63259		58906
						20900
	240 320	61034 61036				
	36	61051				
	40	61052				
6 x 132	60	61054				
U X 132	80	61055				
	100	61056				
	120	61057				
	120	01007				

- **1A-X/2A-X:** Aluminum oxide, closed coat, X weight cotton. For general purpose sanding, grinding and finishing of ferrous and non-ferrous metals, wood, cast iron, ordinary and alloyed steels and stainless steel.
- AO-X: Aluminum oxide, open coat, X weight cotton. For general purpose sanding and grinding where an open coat structure is needed. Best choice for soft woods, non-ferrous metals, aluminum, leather, rubber and other materials that have the tendency to load.
- LA-X (SAIT-Saver<sup>TM</sup>): Economy Aluminum oxide, closed coat, X-weight cotton. For low cost sanding and finishing of ordinary and alloyed steels, ferrous and non-ferrous metals, cast iron, and wood. A good choice where price and best value is the determining factor.
- **Z-H: Zirconium, closed coat, H weight waterproof polyester.** Designed for aggressive grinding of ferrous and nonferrous metals, cast iron, stainless steel, and aluminum. Backing can be used wet or dry.
- **C-W: Silicon Carbide, closed coat, X weight waterproof cotton.** For grinding and finishing glass, aluminum, marble, hard cast iron, ceramics, non-ferrous metals, plastics, rubber and stone. Backing can be used wet or dry.

### CUSTOM BELTS (MADE-TO-ORDER)

- Broad product offering (economy Aluminum Oxide and Silicon Carbide to premium Zirconia Alumina).
- Custom made to your exact width (up to 18"), length, material, and grit.
   For example: 6" width x 108" length AZ-X 60 Grit
- Lead time: 7–10 working days.
- Allow for a quantity variance of plus or minus 10%.
- Custom belts are non-returnable.
- For additional information see price book.



#### SPECIFICATION MATERIAL & APPLICATION INFORMATION

#### **ALUMINUM OXIDE CLOTH**

#### 1A-X/2A-X 24-400 Grit Range Closed Coat

- Semi-friable (1A-X)/heat-treated (2A-X) aluminum oxide grain on a X-weight cotton backing.
- For general purpose grinding and finishing of ordinary and alloyed steels, ferrous and non-ferrous metals, cast iron and wood.

#### AO-X

24-180 Grit Range Open Coat

- Semi-friable aluminum oxide grain on a X-weight cotton backing.
- For general purpose, open coat grinding, polishing and finishing of materials that have the tendency to load.
- For use on non-ferrous metals, aluminum and wood.

#### 3A-X

36-180 Grit Range Closed Coat

- Semi-friable aluminum oxide grain with grinding aids on a X-weight cotton backing.
- Best for grinding and finishing heat sensitive materials (stainless steel, titanium, etc.) and non-ferrous metals.

#### 2A-H

24-120 Grit Range Closed Coat

- Heat-treated, aluminum oxide grain on a H-weight, waterproof polyester backing.
- Excellent for heavy duty grinding and finishing ferrous and non-ferrous metals, cast iron, and aluminum. Excellent foundry belt material.

#### SILICON CARBIDE CLOTH

#### C-W

60-400 Grit Range Closed Coat

- Waterproof, X-weight cotton backing.
- For grinding and finishing hard cast iron, aluminum, glass, ceramics, non-ferrous metals, plastics, rubber, marble and stone.

#### ZIRCONIA ALUMINA CLOTH

#### Z-H (Premium)

24-120 Grit Range Closed Coat

- H-weight, waterproof polyester backing.
- For heavy duty grinding and finishing on ferrous and non-ferrous metals, cast iron, aluminum, and stainless steel.

#### 3Z-H (Premium)

36-80 Grit Range Closed Coat

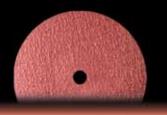
- H-weight, waterproof polyester backing with grinding aid.
- Excellent for grinding and finishing heat sensitive materials (stainless steel, titanium, etc.) and non-ferrous metals.

#### AZ-X

36-120 Grit Range Closed Coat

- X-weight, water-resistant polyester/cotton blended backing.
- For general purpose grinding and finishing on ferrous and non-ferrous metals, cast iron, aluminum, stainless steel and wood materials.

### FIBER DISCS INTRODUCTION



- Most comprehensive fiber discs product offering in the industry (8 types).
- Made with the highest quality materials using a premium resin over resin construction.
- Most renowned fiber discs in the world.

### MATERIAL APPLICATION

#### APPLICATION TECHNICAL INFORMATION

#### **Aluminum Oxide Fiber Discs - Page 70**



2A	
16-120 Grit Range	

• Closed coat for general purpose grinding and finishing.

### **3A** 36-120 Grit Range

- Closed coat with grinding aids to reduce heat and loading.
- Best for grinding and finishing heat sensitive materials and non-ferrous metals.

#### **Zirconium Fiber Discs - Page 71**



Z	
24-80	Grit Range

Closed coat for aggressive grinding and finishing.

#### **3Z** 24-80 Grit Range

- Closed coat with grinding aids to reduce heat and decrease loading.
- For aggressive grinding and finishing of heat sensitive materials and non-ferrous metals.

#### **Ceramic Fiber Discs - Page 72-73**



### **8S** 24-80 Grit Range

- High performance ceramic grain, closed coat.
- Very uniform, high density, grain structure is extremely durable and self-sharpening for long life and cooler cut.

### **9S** 24-80 Grit Range

- High performance ceramic grain, closed coat with grinding aids for reduced heat and decreased loading.
- Excels in heat sensitive materials and non-ferrous metals.

#### **Specialty Fiber Discs - Page 74**



## **AO**Aluminum Oxide 16-36 Grit Range

Open coat for fast stock removal and reduced loading.

#### Silicon Carbide 16-400 Grit Range

• Closed coat for performance grinding and finishing of glass, marble, ceramic, hard cast iron and ferrous/non-ferrous materials.

#### **Innovative Bulk Packaging** (see picture on page 71)

Our unique bulk spindle packaging assures that each disc remains perfectly flat. The unique design offers the convenience of easy access and can be retightened to assure that your discs are flat when you need them.

#### SAIT-LOK™ Quick Change 5/8-11 Hub

The SAIT-LOK™ hub recesses into the center cavity of the backing pad to provide a flat profile, thus increasing usable abrasive surface area up to 100% to get the job done faster and cooler.

- Eliminates the need for wrenches and spanner nuts.
- Threaded backing pad must be used with SAIT-LOK™ hub. Available in Blue Line™ packaging only.

### **Aluminum Oxide**



### FIBER DISCS



#### **2A**

- Aluminum oxide grain
- General purpose
- Closed coat structure for more material removal and better finishing

**METAL** Ferrous and/or non-ferrous metals

WOOD Wood

#### **3A**

- Premium aluminum oxide grain with grinding aid
- · Special aluminum oxide grain to reduce heat build up and reduce loading
- Closed coat structure for more material removal and better finishing

STAINLESS Stainless steel, high tensile steel, titanium, aluminum

METAL Ferrous metals

		Bulk (100 pcs.)			Blue Line		SAIT-LOK™			
		Parl	No.	Par	Part No. Pk Per			Part No.		
Size	Grit	2A	3A	2A	3A	Box	2A	3A	Pk Per Box	
	24	56024	-	50000	-	20				
	36	56036	-	50001	-	20				
	50	56050	-	50002	-	25		Not		
4 x 5/8	60	56060	-	50003	-	25		Available		
	80	56080	-	50004	-	25		Available		
	100	56100	-	50005	-	25				
	120	56120		50006	-	25				
	16	51022	-	50008	-	20	-	-	-	
	24	51024	-	50010	-	20	50120	-	15	
	36	51036	52890	50011	50060	20	50121	50148	15	
4-1/2 x 7/8	50	51050	52891	50012	50061	25	50122	50149	15	
	60	51060	52892	50013	50062	25	50123	50150	15	
	80	51080	52893	50014	50063	25	50124	50151	15	
	100	51100	52894	50015	50064	25	50125	50152	15	
	120	51120	52895	50016	50065	25	50126	50153	15	
	16	53016	-	50018	-	20	-	-	-	
	24	53024	-	50020	-	20	50127	-	15	
	36	53036	52810	50021	50040	20	50128	50154	15	
5 x 7/8	50	53050	52811	50022	50041	25	50129	50155	15	
	60	53060	52812	50023	50042	25	50130	50156	15	
	80	53080	52813	50024	50043	25	50131	50157	15	
	100	53100	52814	50025	50044	25	50132	50158	15	
	120	53120	52815	50026	50045	25	50133	50159	15	
	16	57016	-	50030	-	20	-	-	-	
	24	57024	-	50031	-	20	50134	-	15	
	36	57036	52836	50032	50070	20	50135	50160	15	
$7 \times 7/8$	50	57050	52850	50033	50071	25	50136	50161	15	
	60	57060	52860	50034	50072	25	50137	50162	15	
	80	57080	52880	50035	50073	25	50138	50163	15	
	100	57090	52100	50036	50074	25	50139	50164	15	
	120	57120	52125	50037	50075	25	50140	50165	15	
	16	58016	-	50080	-	20	-	-		
	24	58024	-	50081	-	20	50141	-	15	
	36	58036	-	50082	-	20	50142	-	15	
9-1/8 x 7/8	50	58050	-	50083	-	25	50143	-	15	
	60	58060	-	50084	-	25	50144	-	15	
	80	58080	-	50085	-	25	50145	-	15	
	100	58090	-	50086	-	25	50146	-	15	
	120	58120	-	50087	-	25	50147	-	15	



- Resin over resin construction for a strong bond that is resistant to heat and moisture
- Vulcanized fiber backing for heavy duty sanding
- Available with SAIT-LOK™ quick change hub which extends disc life and requires fewer disc changes
  Available in bulk and Blue Line™ packaging

## Zirconium Angle Grinder

- Zirconium grain
- Closed coat structure for aggressive stock removal and long life

**STAINLESS** Stainless steel, high tensile alloys

METAL

Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)

#### **3Z**

- Premium zirconium grain with grinding aid
- Special zirconium grain to reduce heat build up and reduce loading
- Closed coat structure for very aggressive material removal

STAINLESS Stainless steel, high tensile steel, titanium, aluminum

METAL

Ferrous metals

- SAIT-LOK™ is available in Blue Line™ package only See page 140 for SAIT-LOK™ backing pads
- Spiralcool™ backing pads and disc holder available for standard discs See page 140 for Spiralcool™ backing pads

#### **Packaging**

UPC bar coded Blue Line™ packaging or Industrial bulk pack of 100 pieces



Innovative Bulk Packaging Fiber Spindle Keeps Discs Flat in Storage



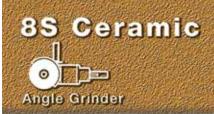
#### **Quick Tip**

Use the Zirconium fiber disc for aggressive stock removal on carbon steel

		Bulk (100 pcs.)		Blue Line™			SAIT-LOK™		
		Part No.		Part No.		Pk Per	Part No.		Pk Per
Size	Grit	Z	3Z	Z	3Z	Box	Z	3Z	Box
	24	59224	58224	59424	58424	20	50166	-	15
	36	59236	58236	59436	58436	20	50167	50187	15
4-1/2 x 7/8	50	59250	58250	59450	58450	25	50168	50188	15
	60	59260	58260	59460	58460	25	50169	50189	15
	80	59280	58280	59480	58480	25	50170	50190	15
	24	59324	58324	59524	58524	20	50171	-	15
	36	59336	58336	59536	58536	20	50172	50192	15
	50	59350	58350	59550	58550	25	50173	50193	15
5 x 7/8	60	59360	58360	59560	58560	25	50174	50194	15
	80	59380	58380	59580	58580	25	50175	50195	15
	24	59624	58624	59724	58724	20	50176	-	15
	36	59636	58636	59736	58736	20	50177	50197	15
7 x 7/8	50	59650	58650	59750	58750	25	50178	50198	15
	60	59660	58660	59760	58760	25	50179	50199	15
	80	59680	58680	59780	58780	25	50180	50200	15
	24	59824	-	59924	-	20	50181	-	15
	36	59836	-	59936	-	20	50182	-	15
	50	59850	-	59950	-	25	50183	-	15
9-1/8 x 7/8	60	59860	-	59960	-	25	50184	-	15
	80	59880	-	59980	-	25	50185	-	15



- Resin over resin construction for a strong bond that is resistant to heat and moisture
- Vulcanized fiber backing for heavy duty sanding
- Available with SAIT-LOK<sup>™</sup> quick change hub which extends disc life and requires fewer disc changes
- Available in bulk and Blue Line<sup>™</sup> packaging



### FIBER DISCS



#### Saitech™ 8S Ceramic

- High performance, ceramic aluminum oxide grain, closed coat
- Very uniform, high density grain structure is extremely durable and self sharpening for long life and cooler cut
- Exceptional performance and value
- Available in bulk and Blue Line™
- Excels on hard to grind alloys, carbon steel, cast iron, stainless steel, and non-ferrous metals

METAL

Carbon steel, cast iron

STAINLESS Stainless steel, high tensile steel, titanium

#### Why use 8S?

SAITECH™ 8S excels when used to grind carbon steel and other ferrous metals. 8S ceramic performs exceptionally well when used under high operating pressure with a hard backing pad. 8S ceramic offers very fast stock removal and long life.

Size	Grit	Bulk (100 pcs.) Part No.	Blue Li Part No.	ine <sup>™</sup> Qty Per Box	SAIT- Part No.	LOK™ Qty Per Box
	24	51242	50410	20	50238	300
	36	51243	50411	20	50239	300
4-1/2 x 7/8	50	51244	50412	25	50240	300
	60	51245	50413	25	50241	300
	80	51246	50414	25	50242	300
	24	51252	50420	20	50248	300
	36	51253	50421	20	50249	300
5 x 7/8	50	51254	50422	25	50250	300
	60	51255	50423	25	50251	300
	80	51256	50424	25	50252	300
	24	51292	50430	20	50258	300
	36	51293	50431	20	50259	300
7 x 7/8	50	51294	50432	25	50260	300
	60	51295	50433	25	50261	300
	80	51296	50434	25	50262	300

Note: All SAIT-LOK™ Ceramic 8S fiber discs are made to order (must order in multiples of 300 pcs)

#### **Packaging**

UPC bar coded Blue Line™ packaging or Industrial bulk pack of 100 pieces

See page 140 for backing pads



- Resin over resin construction for a strong bond that is resistant to heat and moisture
- Vulcanized fiber backing for heavy duty sanding
- Available with SAIT-LOK™ quick change hub which extends disc life and requires fewer disc changes Available in bulk spindle and Blue Line™ packaging

# HIGH PERFORMANCE

# Saitech<sup>™</sup> 9S Ceramic (with grinding aid)

- High performance, ceramic aluminum oxide grain, closed coat
- Grinding aids for reduced heat and decreased loading.
   Excels in heat sensitive materials (stainless steel, etc.) and non-ferrous metals (aluminum, etc.)
- Exceptional performance and value
- Excels on tough to grind materials

STAINLESS Stainless steel, high tensile steel, titanium

METAL

Carbon steel, cast iron

**ALUMINUM** Non-ferrous metals

(aluminum, copper, brass, etc.)



Grinds welds on stainless steel with no discoloration

# Why use 9S?

SAITECH™ 9S ceramic fiber discs are designed to keep the material that the disc is being used on very cool to prevent burning, discoloration and distortion. 9S is the ideal product for end users who frequently grind sensitive materials like stainless steel, high nickel, chrome alloys and titanium. 9S also works very well on aluminum and non-ferrous metals as the grinding aids act as a lubricant to prevent loading.

Size	Grit	Bulk (100 pcs.) Part No.	Blue L Part No.	ine™ Qty Per Box	SAIT- Part No.	LOK™ Qty Per Box
	24	51342	50510	20	50338	300
	36	51343	50511	20	50339	300
4-1/2 x 7/8	50	51344	50512	25	50340	300
	60	51345	50513	25	50341	300
	80	59113	56313	25	50342	300
	24	51352	50520	20	50348	300
	36	51353	50521	20	50349	300
5 x 7/8	50	51354	50522	25	50350	300
	60	51355	50523	25	50351	300
	80	59133	56333	25	50352	300
	24	51372	50530	20	50358	300
	36	51373	50531	20	50359	300
7 x 7/8	50	51374	50532	25	50370	300
	60	51375	50533	25	50371	300
	80	59153	56353	25	50372	300

Note: All SAIT-LOK™ Ceramic 9S fiber discs are made to order (must order in multiples of 300 pcs)

### Packaging

UPC bar coded Blue Line™ packaging or Industrial bulk pack of 100 pieces

See page 140 for backing pads



- Resin over resin construction for a strong bond that is resistant to heat and moisture
- Vulcanized fiber backing for heavy duty sanding
- Available with SAIT-LOK™ quick change hub which extends disc life and requires fewer disc changes
- Available in bulk spindle and Blue Line™ packaging

# Specialty Angle Grinder

# FIBER DISCS



# **AO**

- Aluminum oxide grain
- Open coat structure prevents loading
- · Fast material removal

METAL Ferrous and/or non-ferrous metals (iron, steel, copper, aluminum, etc.)

WOOD Wood, fiberglass

# C

- Silicon carbide grain
- · Closed coat structure for more material removal

**CONCRETE** Glass, marble, ceramic, hard cast iron **METAL** Ferrous and/or non-ferrous metals





Note: Fiber Discs must always be used with a backing pad.

		Bulk (100 pcs.)			Blue Line	м
Size	Grit		No. C	Par AO	t No. C	Pk Per Box
	16	52716	54016	50050	50100	20
	24	52724	54024	50051	50101	20
	36	52736	54036	50052	50102	20
	50	-	54050	-	50103	25
	60	-	54060	-	50104	25
	80	-	54080	-	50105	25
7 x 7/8	100	-	54100	-	50106	25
	120	-	54120	-	50107	25
	150	-	54150	-	50108	25
	180	-	54180	-	50109	25
	220	-	54220	-	50110	25
	320	-	54320	-	50112	25
	400	-	54400	-	50113	25

# **Packaging**

UPC bar coded Blue Line™ packaging or Industrial bulk pack of 100 pieces

See page 140 for backing pads



- Resin over resin construction for a strong bond that is resistant to heat and moisture
- Vulcanized fiber backing for heavy duty sanding
- Available in bulk and Blue Line<sup>™</sup> packaging

# LAMINATED DISCS



Triple laminated construction for severe pressure applications where conventional laminated discs have too much flex. Excellent for edge grinding, deburring, and weld preparation and removal.



# **2A-H**

- Aluminum oxide grain
- Fast stock removal
- Excellent edge grain retention

METAL Ferrous and/or non-ferrous metals

WOOD Wood, plastic, fiberglass, etc.

# Z-H

- High performance Zirconium grain
- · Extremely fast stock removal and long life

METAL Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile alloys

Size	Grit	_	LOK™ : No. Z-H		.OK-R™ : No. Z-H	Qty Per Box
Size						
	24	52320	55420	50320	55450	100
	36	52321	55421	50321	55451	100
2"	50	52322	55422	50322	55452	100
	60	52323	55423	50323	55453	100
	80	52324	55424	50324	55454	100
	24	52330	55430	50330	55460	50
	36	52331	55431	50331	55461	50
3"	50	52332	55432	50332	55462	50
	60	52333	55433	50333	55463	50
	80	52334	55434	50334	55464	50

# SAIT-LOK™



Improved nylon composite won't bend or break during aggressive applications.

Uses the same backing pad as conventional laminated discs.

# SAIT-LOK-R™



Nylon screw threaded hub for easy mounting to the backing pad



Heavy Duty Discs
Stiffer construction assures fast grinding
performance
Very durable edge performance and long life



**Conventional Discs** 

See page 143 for backing pads



- Triple lamination construction for severe duty applications where traditional discs fray
- Quick change backings make for fast easy disc changes and less downtime
- Universal style backings fit most major backing pad brands on the market

# Aluminum Oxide LAMINATED DISCS

Portable Grinder



# SAIT-LOK™

All-metal attachment on disc ensures a secure fit to the backing pad (see page 77 for photo)

# SAIT-LOK-R™

Nylon screw threaded hub for easy mounting to the backing pad (see page 77 for photo)

See page143 for backing pads

# **2A**

- Aluminum oxide grain
- · General purpose, long life
- Easy disc changes by twisting to unlock backing pad

METAL Ferrous and/or non-ferrous metals WOOD Wood, plastic, fiberglass, etc.

			SAIT-LOK™ Part No.		_OK-R™ t No.	Qty
Size	Grit	2A	3A	2A	3A	Per Box
	36	52208	50208	-	-	100
	40	52209	50209	-	-	100
	50	52210	50210	-	-	100
1"	60	52211	50211	-	-	100
	80	52212	50212	-	-	100
	100	52213	50213	-	-	100
	120	52214	50214	-	-	100
	36	52215	50215	52264	50264	100
	40	52216	50216	52265	50265	100
1-1/2"	50	52217	50217	52266	50266	100
	60	52218	50218	52267	50267	100
	80	52219	50219	52268	50268	100
	100	52220	50220	52269	50269	100
	120	52221	50221	52270	50270	100
	36	52222	50222	52271	50271	100
	40	52223	50223	52272	50272	100
	50	52224	50224	52273	50273	100
2"	60	52225	50225	52274	50274	100
	80	52226	50226	52275	50275	100
	100	52227	50227	52276	50276	100
	120	52228	50228	52277	50277	100
	36	52229	50229	52278	50278	50
	40	52230	50230	52279	50279	50
	50	52231	50231	52280	50280	50
3"	60	52232	50232	52281	50281	50
	80	52233	50233	52282	50282	50
	100	52234	50234	52283	50283	50

50235

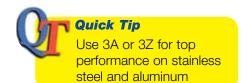
52284

50284

# **3A**

- Premium aluminum oxide grain with grinding aid
- Cooling agents for cool cutting and long life
- · Fast stock removal
- Easy disc changes by twisting to unlock backing pad

STAINLESS Stainless steel, high tensile steel, titanium METAL Ferrous and/or non-ferrous metals





- 2-ply construction is rugged enough for contoured surfaces or flat surfaces
- Quick-change backings make for fast easy disc changes and less downtime
- Universal backings fit most major backing pad brands on the market

# LAMINATED DISCS



# SAIT-LOK™



All-metal attachment on disc ensures a secure fit to the backing pad

# SAIT-LOK-R™



Nylon screw threaded hub for easy mounting to the backing pad

See page143 for backing pads

# Z

- Premium zirconium grain
- · Very fast stock removal, long life
- Easy disc changes by twisting to unlock backing pad

STAINLESS Stainless steel, high tensile alloys

**METAL** 

Ferrous and/or non-ferrous metals (iron, steel, welds, etc.)



• Premium zirconium grain with grinding aid

100

100

- Cooling agents for cool cutting and long life
- · Very fast stock removal, no discoloration
- Easy disc changes by twisting to unlock backing pad

STAINLESS Stainless steel, high tensile steel, titanium

METAL

Ferrous and/or non-ferrous metals



				LOK™ No.	Part	.OK-R™ : No.	Qty
Siz	e:e	Grit	Z	3Z	Z	3Z	Per Box
		36	55215	56215	55264	56264	100
		40	55216	56216	55265	56265	100
1-1/	′2"	50	55217	56217	55266	56266	100
		60	55218	56218	55267	56267	100
		80	55219	56219	55268	56268	100
		24	55221	-	55270	-	100
		36	55222	56222	55271	56271	100
2"	'	40	55223	56223	55272	56272	100
		50	55224	56224	55273	56276	100
		60	55225	56225	55274	56274	100
		80	55226	56226	55275	56275	100
		24	55228	-	55277	-	50
		36	55229	56229	55278	56278	50
3"	'	40	55230	56230	55279	56279	50
		50	55231	56231	55280	56280	50
		60	55232	56232	55281	56281	50
		80	55233	56233	55282	56282	50



- 2-ply construction is rugged enough for contour surfaces or flat surfaces
- Quick-change backings make for fast easy disc changes and less downtime
- Universal backings fit most major backing pad brands on the market



# Paper & Cloth Discs INTRODUCTION

# **Paper Discs**

# **SPECIFICATION**

# **MATERIAL & APPLICATION INFORMATION**



# Zirconium – Page 81, 83

# **Z-F Heavy Duty Paper Discs**

40-120 Grit Range F-weight paper Closed Coat

- Best choice for aggressive sanding and preparation, and stock removal.
- Aggressive material removal and long life.
- Heavy, F-weight paper prevents torn edges, which produce deep, uneven random scratches.
- Available in PSA and hook and loop fastening systems.



# Aluminum Oxide - Page 79 - 83

# A-E Heavy Duty Paper Discs

40-120 Grit Range E-weight paper Open Coat

- Aggressive sanding and preparation, and stock removal as well as finishing with long life.
- E-weight paper reduces torn edges, which produce deep, uneven random scratches.
- Available in PSA and hook and loop fastening systems.



# 4S/4V Premium Stearate Paper

80-1500 Grit Range C-weight paper Open Coat

- Premium stearate coating and open coat structure lubricates and prevents loading for long life and aggressive cutting.
- · Available in C-weight, low flexibility.
- Available in PSA and hook and loop fastening systems.



C-weight paper Open Coat

- Stearate coating and open coat structure lubricates and prevents loading.
- · Available in C-weight, normal flexibility.
- Available in PSA and hook and loop fastening systems in individual discs and PSA disc rolls.



80-400 Grit Range C and D weight paper Semi Open Coat

- Gold Stearated Aluminum Oxide | Stearate coating and semi open coat structure lubricates and prevents loading for fast cutting.
  - Available in PSA disc rolls.



# Silicon Carbide - Page 83

# C-E and C-F Paper Discs

40-1200 Grit Range E and F weight paper Closed Coat

- Premium Silicon Carbide paper for aggressive sanding and finishing.
- For use on granite, marble, fiberglass, solid surface materials, ceramics, concrete, plastics and cast iron materials.
- Heavy-duty paper prevents torn edges, which can produce deep, uneven scratches.
- Available in hook and loop fastening system.





# **MATERIAL & APPLICATION INFORMATION**



### Z-X

40-80 Grit Range X-weight cloth Closed Coat

- X-weight cotton backing for superior grinding and finishing performance. · Hot melt adhesive provides excellent adhesion while allowing for easy removal.
- Available in the most popular sizes and grits.



# Aluminum Oxide - Page 85

### TA-X

24-320 Grit Range X-weight cloth Closed Coat

- X-weight cotton backing for grinding and finishing performance.
- Hot melt adhesive provides excellent adhesion while allowing for easy removal.
- · Available in the most popular sizes and grits.

# PAPER DISCS PSA DISC ROLLS



# 4S Premium Stearated Aluminum Oxide

- EXCELS ON PAINTED AND PRIMED SURFACES
- Our best performing, longest lasting paper disc
- Long lasting performance and fast removal rates for fine finishing of auto body, wood, metal, and marine applications
- Premium Aluminum Oxide grain
- Premium Stearate coating and open coat structure lubricates and prevents loading - For dry use only
- Available in weights: "C" medium-weight, low flexibility

METAL Ferrous and/or non-ferrous metals

**WOOD** Body filler, paint, primers, plastics, wood and fiberglass



PSA Disc Rolls: 100 pcs/roll

4 rolls/box

See page 142 for backing pads

# **3S Stearated Aluminum Oxide**

- EXCELS ON WOOD AND BARE METAL SURFACES
- Aluminum oxide grain For dry use only
- Stearate coating and open coat structure lubricates and prevents loading
- · Available in weights: "C" medium-weight, average flexibility

**WOOD** Body filler, paint, primers, plastics, wood and fiberglass

METAL Ferrous and/or non-ferrous metals

Size	Grit	PSA Disc Rolls Part No
	80C	37800
	100C	37801
	120C	37802
	150C	37803
5"	180C	37804
4S	220C	37805
	240C	37806
	280C	37807
	320C	37808
	80C	37900
	100C	37901
	120C	37902
6"	150C	37903
4S	180C	37904
	220C	37905
	240C	37906
	280C	37907
	320C	37908
	400C	37909

ENHANCED

**FORMULA!** 

Size	Grit	PSA Disc Rolls Part No
	80C	36800
	100C	36801
	120C	36802
	150C	36803
5"	180C	36804
3S	220C	36805
	320C	36808
	400C	36809
	500C	36810
	80C	36900
	100C	36901
	120C	36902
	150C	36903
6"	180C	36904
3S	220C	36905
	320C	36908
	400C	36909
	500C	36910

# **Gold Stearated Aluminum Oxide**

- OUR BEST ECONOMY DISC
- Durable aluminum oxide grain provides a fast cut with long life
- Stearate coating and semi open coat structure prevents loading - For dry use only
- For automotive body work, removing varnish from wood, sanding fiberglass, and for use on metal

METAL Ferrous and/or non-ferrous materials

**WOOD** Body filler, paint, fiberglass, etc.

• For use on random orbital or low speed DA sanders

• Available weights: "C" - medium-weight, low flexibility

"D" - heavy-weight, low flexibility

Size	Grit	Part No. w/o vacuum holes
	80D	36500
	100D	36501
	120D	36502
	150D	36503
5"	180C	36504
	220C	36505
	240C	36506
	320C	36508
	400C	36509
	80D	36600
	100D	36601
	120D	36602
	150D	36603
6"	180C	36604
	220C	36605
	240C	36606
	320C	36608
	400C	36609
Packag	ging	100 pieces/box/roll



- Strong resin over resin bond construction is resistant to heat and moisture
- Special sharp and durable aluminum oxide grain cuts fast and is long lasting
- PSA discs rolls are perforated for easy disc tear away from roll



# PAPER DISCS INDIVIDUAL PSA

# 4S Premium Stearated Aluminum Oxide

- EXCELS ON PAINTED AND PRIMED SURFACES
- · Our best performing, longest lasting paper disc
- Long lasting performance and fast removal rates for fine finishing of auto body, wood, metal, and marine applications
- Premium Aluminum Oxide grain For dry use only
- Premium Stearate coating and open coat structure lubricates and prevents loading
- Available in weights: "C" medium-weight, low flexibility

WOOD Body filler, paint, primers, plastics, wood and fiberglass

METAL Ferrous and/or non-ferrous metals

Size	Grit	PSA Discs Part No. w/o vac. holes
	80C	37505
	100C	37506
	120C	37507
5"	150C	37508
	180C	37509
	220C	37510
	320C	37511
	80C	37605
	100C	37606
6"	120C	37607
	150C	37608
	180C	37609
	220C	37610
	320C	37611





### **Quick Tip**

Release paper keeps PSA discs clean in a dusty environment



### **Packaging**

PSA individual: 100/box See page 142 for backing pads

# 3S Stearate Aluminum Oxide

- EXCELS ON WOOD AND BARE METAL SURFACES
- Aluminum oxide grain For dry use only
- Stearate coating and open coat structure lubricates and prevents loading
- Fine finishing of wood, metal, auto body and marine applications
- Available in weights: "C" medium-weight, average flexibility

WOOD Body filler, paint, primers, plastics, wood and fiberglass

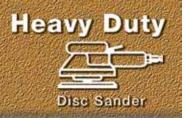
METAL Ferrous and/or non-ferrous metals

Size	Grit	PSA Discs Part No. w/o vac. holes
	80C	36520
	100C	36521
	120C	36522
5"	150C	36523
	180C	36524
	220C	36525
	320C	36528
	80C	36620
	100C	36621
	120C	36622
6"	150C	36623
	180C	36624
	220C	36625
	320C	36628



- Special sharp and durable premium aluminum oxide grain cuts fast and is long lasting
- Pressure sensitive adhesive (PSA) backing allows for quick changes
- PSA discs are tabbed for easy removal of release paper

# PAPER DISCS INDIVIDUAL PSA





# **Zirconium Paper Discs - Z-F (Premium)**

- Best choice for aggressive sanding and preparation, and stock removal
- · Zirconium grain for aggressive material removal and long life
- Heavy, F-weight paper prevents torn edges which produce deep, uneven random scratches

**METAL** Ferrous and non-ferrous metals

WOOD Wood



# **Aluminum Oxide Paper Discs - A-E**

- For aggressive sanding and preparation, and stock removal
- Aluminum Oxide grain for material removal, long life and finishing
- E-weight paper reduces torn edges which produce deep, uneven random scratches

WOOD

Wood, auto body applications, and fiberglass

METAL Ferrous and non-ferrous metals

		ZF - Zirconium	AE - Aluminum Oxide
Size	Grit	Part No.	Part No.
	40	34110	34150
5"	60	34112	34152
	80	34113	34153
	120	34115	34155
	40	34130	34170
6"	60	34132	34172
	80	34133	34173
	120	34135	34175
8"	40	34140	=
	80	34143	=

### **Packaging**

5" and 6"

PSA: 25/box PSA: 50/box

See page 142 for backing pads







- Special sharp and durable premium aluminum oxide grain cuts fast and is long lasting
- Pressure sensitive adhesive (PSA) allows for quick changes
- PSA discs are tabbed for easy removal of release paper



# PAPER DISCS HOOK & LOOP

# 4S/4V Premium Stearated Aluminum Oxide

- EXCELS ON PAINTED AND PRIMED SURFACES
- · Our best performing, longest lasting paper disc
- Long lasting performance and fast removal rates for fine finishing of auto body, wood, metal, and marine applications
- Premium Aluminum Oxide grain for dry use only
- Premium Stearate coating and open coat structure lubricates and prevents loading

WOOD Body filler, paint, primers, plastics, wood and fiberglass

METAL Ferrous and/or non-ferrous metals

4S/4V Hook & Loop Discs

### Packaging

50 pieces per box

See page 142 for backing pads now also available with vacuum holes

"C" medium-weight, low flexibility

p.400
 P-4
 P-400 EØ
SAIT

		4S/4V Saitech™ Hook & Loop Discs					
		Part No.	Part No.	Part No.	Part No.		
Size	Grit	w/o vac. holes	w/ 5 vac. holes	w/ 6 vac. holes	w/ 8 vac. holes		
	80C	37515	37525	-	37535		
	100C	37516	37526	-	37536		
	120C	37517	37527	-	37537		
	150C	37518	37528	-	37538		
	180C	37519	37529	-	37539		
	220C	37520	37530	-	37540		
5"	240C	37562	-	-	-		
	280C	37563	-	-	-		
	320C	37521	37531	-	37541		
	400C	37522	37532	-	37542		
	500C	37523	-	-	-		
	600C	37524	-	-	-		
	800C	37550	37554	-	37543		
	1000C	37551	37555	-	37544		
	1200C	37552	37556	-	37545		
	1500C	37553	37557	-	37546		
	80C	37615	-	37635	-		
	100C	37616	-	37636	-		
	120C	37617	-	37637	-		
	150C	37618	-	37638	-		
	180C	37619	-	37639	-		
	220C	37620	-	37640	-		
6"	240C	37650	-	-	-		
	280C	37651	-	-	-		
	320C	37621	-	37641	-		
	400C	37622	-	37642	-		
	500C	37623	-	-	-		
	600C	37624	-	-	-		
	800C	37625	-	37643	-		
	1000C	37626	-	37644	-		
	1200C	37627	-	37645	-		
	1500C	37628	-	37646	-		

# 3S Stearated Aluminum Oxide

- EXCELS ON WOOD AND BARE METAL SURFACES
- Aluminum oxide grain for dry use only
- Stearate coating and open coat structure lubricates and prevents loading
- Fine finishing of wood, metal, auto body and marine applications
- "C" medium-weight, average flexibility

Body filler, paint, primers, plastics, wood and fiberglass

METAL Ferrous and/or non-ferrous metals

# 3S Hook & Loop Discs

		3S Saitech" Hook & Loop Discs						
		Part No.	Part No.	Part No.	Part No.			
Size	Grit	w/o vac. holes	w/ 5 vac. holes	w/ 6 vac. holes	w/ 8 vac. holes			
	80C	36540	36550	-	36560			
	100C	36541	36551	-	36561			
	120C	36542	36552	-	36562			
5"	150C	36543	36553	-	36563			
	180C	36544	36554	-	36564			
	220C	36545	36555	-	36565			
	320C	36548	36558	-	36568			
	80C	36640	-	36650	-			
	100C	36641	-	36651	-			
	120C	36642	-	36652	-			
6"	150C	36643	-	36653	-			
	180C	36644	-	36654	-			
	220C	36645	-	36655	-			
	320C	36648	-	36658	-			



- · Hook and loop fastening system allows for quick changes and less downtime
- Available with or without vacuum holes for use on random orbital or low speed DA sanders with capture systems
- · Strong resin over resin bond construction is resistant to heat and moisture
- This special sharp and durable aluminum oxide grain cuts fast and lasts long

# PAPER DISCS HOOK & LOOP



# **Zirconium Paper Discs - Z-F (Premium)**

- · Best choice for aggressive sanding and preparation, and stock removal
- Zirconium grain for aggressive material removal and long life
- Heavy, F-weight paper prevents torn edges which produce deep, uneven random scratches

METAL Ferrous and non-ferrous metals

WOOD Wood

# **Z-F Zirconium Hook & Loop**

	Z-F Zirconium		
Size	Grit	Part No.	
	40	34210	
5"	60	34212	
	80	34213	
	120	34215	
	40	34230	
6"	60	34232	
	80	34233	
	120	34235	
8"	40	34240	
	80	34243	

# **Aluminum Oxide Paper Discs - A-E**

- For aggressive sanding and preparation, and stock removal
- Aluminum Oxide grain for material removal, long life and finishing
- E-weight paper reduces torn edges which produce deep, uneven random scratches

WOOD Wood, auto body applications, and fiberglass

METAL Ferrous and non-ferrous metals

### **Packaging**

50 pieces per box

See page 142 for backing pads now also available with vacuum holes

# A-E Aluminum Oxide Hook & Loop

		AE - Aluminum Oxide					
Size	Grit			H&L Part No. w/ 6 vac. holes			
	40	34250	34280	-	34290		
5"	60	34252	34282	-	34292		
	80	34253	34283	=	34293		
	120	34255	34285	=	34295		
	40	34270	-	34310	=		
6"	60	34272	=	34312	=		
	80	34273	=	34313	=		
	120	34275	-	34315	-		

# Silicon Carbide Paper Discs

		io i apoi b
Size	Grit	Hook & Loop Part No.
	40	34510
	60	34512
	80	34513
	100	34514
	120	34515
	150	34516
5"	180	34517
	220	34518
	320	34521
	400	34522
	500	34523
	600	34524
	800	34525
	1200	34527
	40	34610
	60	34612
	80	34613
	100	34614
	120	34615
	150	34616
6"	180	34617
	220	34618
	320	34621
	400	34622
	500	34623
	600	34624
	800	34625
	1200	34627

# Silicon Carbide Heavy Duty Paper Discs C-E/C-F Discs

- Premium Silicon Carbide grain on a tough paper backing
- Designed for fine finishing and long life
- Available with hook and loop backing

CONCRETE Marble, granite, solid surface, ceramics, concrete, plastic

METAL Ferrous and non-ferrous metals

Contour Hand Pads on page 142





- Hook and loop fastening system allows for quick changes and less downtime
- Available with or without vacuum holes for use on random orbital or low speed DA sanders with capture systems
- Strong resin over resin bond construction is resistant to heat and moisture
- This special sharp and durable aluminum oxide grain cuts fast and lasts long

# PSA Discs Disc Sander

# CLOTH DISCS



	Part No.	Grit
Size	TA-X	Available
	34987	24
	34988	36
	34989	40
	34990	50
1"	34991	60
	34992	80
	34993	100-120-150-
	thru	180-220-
	34999	240-*-320
	35000	24
	35001	36
	35002	40
	35003	50
1-1/2"	35004	60
	35005	80
	35006	100-120-150-
	thru	180-220-
	35013	240-*-320
	35020	24
	35021	36
	35022	40
	35023	50
2"	35024	60
	35025	80
	35026	100-120-150-
	thru	180-220-
	35033	240-*-320
	35040	24
	35041	36
	35042	40
	35043	50
3"	35044	60
	35045	80
	35046	100-120-150-
	thru	180-220-
	35053	240-*-320
	35060	24
	35061	36
	35062	40
	35063	50
4"	35064	60
	35065	80
	35066	100-120-150-
	thru	180-220-
	35073	240-*-320

# **Zirconium Z-X (Premium)**

Premium Zirconium Grain

- Specially formulated X-weight Egyptian cotton cloth backing
- Closed coat structure

METAL Ferrous and/or non-ferrous metals (iron, steel, aluminum, copper, etc.)

**STAINLESS** Stainless steel, high tensile steel

### **Packaging**

1" - 6" 50/pkg 7" - 12" 25/pkg 14" - 16", 18", 20" 10/pkg

See page 142 for backing pads

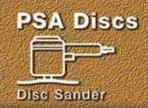
\* 280 grit not available

	Part No.		0.7
Size	TA-X	Z-X	Grit Available
	35080	_	24
	35081	-	36
	35082	37082	40
	35083	37083	50
5"	35084	37084	60
	35085	37085	80
	35086	-	100-120-150-
	thru	-	180-220-
	35093	-	240-*-320
	35094	-	24
	35095	-	36
	35096	37096	40
	35097	37097	50
6"	35098	37098	60
	35099	37099	80
	35100	-	100-120-150-
	thru	-	180-220-
	35107	-	240-*-320
	35108	-	24
	35109	-	36
	35110	-	40
	35111	-	50
7"	35112	-	60
	35113	-	80
	35114	-	100-120-150-
	thru	-	180-220-
	35121	-	240-*-320
	35122	-	24
	35123	-	36
	35124	37124	40
	35125	37125	50
8"	35126	37126	60
	35127	37127	80
	35128	-	100-120-150-
	thru	-	180-220-
	35135	-	240-*-320



- Strong resin over resin bond construction is resistant to heat and moisture
- Hot melt adhesive back allows for quick change and less downtime
- Label UPC bar coded for easy identification and inventory maintenance

# **CLOTH DISCS**



# **Aluminum Oxide TA-X**

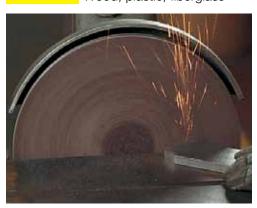
Aluminum Oxide Grain

- Strong X-weight Egyptian cotton cloth backing
- Closed coat structure

**METAL** Ferrous and/or non-ferrous metals (iron, steel, aluminum, copper, etc.)

WOOD

Wood, plastic, fiberglass



	Part	No.	Grit
Size	TA-X	Z-X	Available
	35136	-	24
	35137	-	36
	35138	37138	40
	35139	37139	50
9"	35140	37140	60
	35141	37141	80
	35142	-	100-120-150-
	thru	-	180-220-
	35149	-	240-*-320
	35150	-	24
	35151	-	36
	35152	37152	40
	35153	37153	50
10"	35154	37154	60
	35155	37155	80
	35156	-	100
	35157	-	120
	35158	-	150
	35163	-	320
	35164	-	24
	35165	-	36
	35166	37166	40
	35167	37167	50
12"	35168	37168	60
	35169	37169	80
	35170	-	100-120-150-
	thru	-	180-220-
	35177	-	240-*-320
	35179	-	36
	35180	-	40
	35181	-	50
14"	35182	-	60
	35183	-	80
	35184	-	100
	35185	-	120



See page 84 for packaging

	Part No. TA-X Z-X		Grit
Size			Available
	35193	-	36
	35194	-	40
	35195	-	50
15"	35196	-	60
	35197	-	80
	35198	-	100
	35199	-	120
	35207	-	36
	35208	-	40
	35209	-	50
16"	35210	-	60
	35211	-	80
	35212	-	100
	35213	-	120
	35221	-	36
	35222	-	40
	35223	-	50
18"	35224	-	60
	35225	-	80
	35226	-	100
	35227	-	120
	35235	-	36
	35236	37236	40
	35237	37237	50
20"	35238	37238	60
	35239	37239	80
	35240	-	100
	35241	-	120



- Strong resin over resin bond construction is resistant to heat and moisture
- Hot melt adhesive back allows for quick change and less downtime
  Label UPC bar coded for easy identification and inventory maintenance



# Flap Discs INTRODUCTION

### **PREMIUM**

### GENERAL PURPOSE

# PLASTIC BACKING



# **OVATION®**

- High Density
- Heavy Duty
- Long Life
- Flat Shape (Fiberglass Backing)



# **ENCORE**

- Regular Density
- Long Life
- Flat and Conical Shape (Fiberglass Backing)
- Now available in 2" & 3"



### Saitlam PN™

- Regular Density
- General Purpose
- Flat Shape (Plastic Backing)



# **OVATION®** ATTACKER®

- High Density
- Conformability
- Fast Cutting
- Flat Shape (Fiberglass Backing)



# Saitlam UP™

- Regular Density
- General Purpose
- Flat Shape (Fiberglass Backing)



# Saitlam™

- Regular Density
- High Performance
- Flat Shape (Nylon 6/6 Backing)



# Saitlam F™

- Regular Density
- High Performance
- Conical Shape (Fiberglass Backing)



# Saitlam UK™

- Regular Density
- General Purpose
- Conical Shape (Fiberglass Backing)

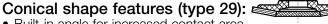


# Sand-Light™

- Long Life
- Surface preparation & finishina
- Flat Shape (Fiberglass Backing)

Product	<b>Product Type</b>	<b>Backing</b>	<b>Product Shape</b>	Specs.	Page No.
OVATION®	High Density	Fiberglass	Flat (Type 27)	Z	88-89
OVATION® ATTACKER®	High Density	Fiberglass	Flat (Type 27)	Z	88-89
SAITLAM F™	Regular Density	Fiberglass	Conical (Type 29)	2A, 3A, Z	90
ENCORE	Regular Density	Fiberglass	Flat (Type 27) &	Z	87
			Conical (Type 29)		
ENCORE	Mini Flap Disc	Plastic	Flat (Type 27)	Z	87
SAITLAM UP™	Regular Density	Fiberglass	Flat (Type 27)	Z	91
SAITLAM UK <sup>™</sup>	Regular Density	Fiberglass	Conical (Type 29)	Z	91
SAITLAM PN™	Regular Density	Plastic	Flat (Type 27)	Z	92
SAITLAM™	Regular Density	Nylon 6/6	Flat (Type 27)	2A, 3A, Z	92
Sand-Light <sup>™</sup>	Non-Woven	Fiberglass	Flat (Type 27)	Coarse,	91
				l Medium, ∖	/ery Fine

# **Backing Shape**



- Built-in angle for increased contact area
- Best for use on large, flat surfaces or complex work shapes
- Minimizes workpiece gouging
- More aggressive stock removal due to higher angle

# Flat shape features (type 27):

- Best for use on miter joints, corners and edges
- Best choice for finishing intricate and ornate surfaces
- More forgiving than conical shape

# **Backing Type**

# Fiberalass backing features:

- Lighter, quieter operation
- Will not splinter or smear on the workpiece
- · Backing will wear uniformly with abrasive cloth

# Plastic backing features:

- Non-scratching, high strength backing
- Resistant to temperature extremes, common chemicals and solvents

# FLAP DISCS **ENCORE**





### **KEY FEATURES**

- More flaps that are larger yield longer life
- Made with premium zirconium abrasive material which provides long-life and high stock removal
- Will not contaminate stainless steel
- Grind, blend and finish with one product
- Out performs competitive regular density flap discs
- Resists loading on aluminum unique in the industry

flat shape

(type 27)

Flap Design

Longer life vs. competition due to more flaps that

METAL Ferrous and/or non-ferrous metals STAINLESS Stainless steel, high tensile steel, titanium

**ALUMINUM** Non-ferrous metals

(aluminum, copper, brass, etc.)



Regular Density (Fiberglass Backing)

**Packaging** 10/box



**Packaging** 10/box

		10/00/
Size	Grit	SAIT-LOK-R™ Part No. Mini Encore
	40	74820
2"	60	74822
Zirconium	80	74823
	120	74825
	40	74830
3"	60	74832
Zirconium	80	74833
	120	74835

See page 143 for SAIT-LOK-R™ backing pads

# **Mini Flap Discs**

 Long life performance of a flap disc for use in confined spaces

conical shape

(type 29)

- More material, longer life than a single layer laminated disc
- SAIT-LOK-R™ thread allows easy changeover between sanding discs, surface conditioning discs and buffing discs

Available in the Spring

					10/00x
	Si		0 ::	Type 27 Part No.	Type 29 Part No.
Mat'l	Dia.	Arbor	Grit	Encore	Encore
	4-1/2	7/8	36	71205	79105
	4-1/2	7/8	40	71206	79106
	4-1/2	7/8	60	71208	79108
	4-1/2	7/8	80	71209	79109
	4-1/2	7/8	120	71211	79111
	4-1/2	5/8-11	36	71215	79115
	4-1/2	5/8-11	40	71216	79116
	4-1/2	5/8-11	60	71218	79118
	4-1/2	5/8-11	80	71219	79119
	4-1/2	5/8-11	120	71221	79211
	5	7/8	36	71225	79125
	5	7/8	40	71226	79126
	5	7/8	60	71228	79128
	5	7/8	80	71229	79129
	5	7/8	120	71231	79131
	5	5/8-11	36	71235	-
	5	5/8-11	40	71236	-
_	5	5/8-11	60	71238	-
Z	5	5/8-11	80	71239	-
Premium	5	5/8-11	120	71241	-
Zirconium	6	7/8	36	-	71245
	6	7/8	40	-	71246
	6	7/8	60	-	71248
6" & 7"	6	7/8	80	-	71249
Available	6	7/8	120	-	71251
in the	6	5/8-11	36	-	71255
Summer	6	5/8-11	40	-	71256
	6	5/8-11	60	-	71258
	6	5/8-11	80	-	71259
	6	5/8-11	120	-	71261
	7	7/8	36	-	71265
	7	7/8	40	-	71266
	7	7/8	60	-	71268
	7	7/8	80	-	71269
	7	7/8	120	-	71271
	7	5/8-11	36	-	71275
	7	5/8-11	40	-	71276
	7	5/8-11	60	-	71278
	7	5/8-11	80	-	71279
	7	5/8-11	120	-	71281

**APPLICATIONS** | Weld grinding and blending • Edge breaking Deburring
 Finishing and blending
 Contour finishing



# FLAP DISCS **OVATION®**



# **OVATION**<sup>®</sup>



High Density (Fiberglass Backing)

# **KEY FEATURES**

- Heavy duty for tougher applications
- High pressure is ideal for removing deeper scratches from the work surface
- Made with premium zirconium abrasive material which provides long-life and high stock removal

METAL Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel, titanium

High Density (Fiberglass Backing)

### **KEY FEATURES**

- Conformability a softer cushioned design that is ideal on irregular surfaces
- Flap design allows the use of light pressure to produce the perfect finish
- Specially designed abrasive flaps provide aggressive cutting action

**STAINLESS** Stainless steel, high tensile steel, titanium

METAL Ferrous metals and non-ferrous metals

**ALUMINUM** Non-ferrous metals

(aluminum, copper, brass, etc.)





# FLAP DISCS OVATION®



# Ovation® Design

# Flap Disc Configuration

A high density design that contains more flaps that are larger to provide long-life Control

Provides excellent operator control resulting in a consistent finish with controlled stock removal rates

# Ovation® Safety

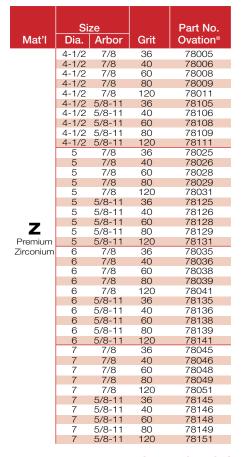
# **Fiberglass Backing**

Specially engineered fiberglass backing designed for strength and safety

# **Adhesive System**

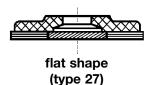
Specially formulated adhesive system designed for safety and to effectively secure the abrasive flaps to the backing







	<u>.</u>			Part No
	Si			Ovation®
Mat'l	Dia.	Arbor	Grit	Attacker®
<b>Z</b> Pr <b>e</b> mium	4-1/2	7/8	40	76206
	4-1/2	7/8	60	76208
	4-1/2	7/8	80	76209
	4-1/2	7/8	120	76211
	4-1/2	5/8-11	40	76316
	4-1/2		60	76318
	4-1/2	5/8-11	80	76319
	4-1/2	5/8-11	120	76321
	5	7/8	40	76226
	5	7/8	60	76228
	5	7/8	80	76229
	5	7/8	120	76231
	5	5/8-11	40	76336
	5	5/8-11	60	76338
	5	5/8-11	80	76339
	5	5/8-11	120	76341
Zirconium	6	7/8	40	76236
Zircoriium	6	7/8	60	76238
	6	7/8	80	76239
	6	7/8	120	76241
	6	5/8-11	40	76346
	6	5/8-11	60	76348
	6	5/8-11	80	76349
	6	5/8-11	120	76351
	7	7/8	40	76246
	7	7/8	60	76248
	7	7/8	80	76249
	7	7/8	120	76251
	7	5/8-11	40	76356
	7	5/8-11	60	76358
	7	5/8-11	80	76359
	7	5/8-11	120	76361



Packaging 10/box



# APPLICATIONS | Weld grinding and blending • Edge breaking Deburring • Finishing and blending • Contour finishing



# **Fiberglass Backing**

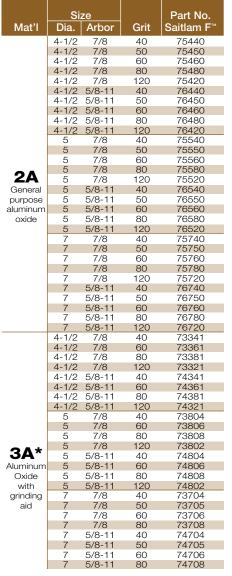
- Allows for lighter, quieter operation
- Will not splinter or smear on the workpiece
- · Backing wears with the abrasives cloth

# Saitlam F<sup>™</sup> (conical shape - type 29, fiberglass backing)

• Available in 2A, 3A aluminum oxide with grinding aid and Z zirconium

- Fiberglass backing for lighter, more silent operation
- Fiberglass backing will not splinter or smear on the workpiece
- · Backing wears with the abrasive cloth
- · Go from stock removal to finishing with one disc







RPM's	
4-1/2"	13,300
5"	12,200
7"	8,500

Packaging	ı
10/box	

	Size			Part No.	
Mat'l	Dia.	Arbor	Grit	Saitlam F™	
_	4-1/2	7/8	40	73940	
	4-1/2	7/8	50	73950	
	4-1/2	7/8	60	73960	
	4-1/2	7/8	80	73980	
	4-1/2	7/8	120	73920	
	4-1/2	5/8-11	40	74940	
	4-1/2	5/8-11	50	74950	
	4-1/2	5/8-11	60	74960	
	4-1/2	5/8-11	80	74980	
	4-1/2	5/8-11	120	74920	
	5	7/8	40	73941	
	5	7/8	50	73951	
	5	7/8	60	73961	
	5	7/8	80	73981	
Z	5	7/8	120	73921	
Premium	5	5/8-11	40	74941	
Zirconium	5	5/8-11	50	74951	
	5	5/8-11	60	74961	
	5	5/8-11	80	74981	
	5	5/8-11	120	74921	
	7	7/8	40	73942	
	7	7/8	50	73952	
	7	7/8	60	73962	
	7	7/8	80	73982	
	7	7/8	120	73922	
	7	5/8-11	40	74942	
	7	5/8-11	50	74952	
	7	5/8-11	60	74962	
	7	5/8-11	80	74982	
	7	5/8-11	120	74922	

<sup>\*</sup> Specially formulated to reduce heat build-up on workpiece

# Regular Density



# Fiberglass Backing

- Allows for lighter, quieter operation
- Will not splinter or smear on the workpiece

FLAP DISCS

Backing wears with the abrasives cloth



Saitlam UP™ (f	flat shape - type 27)
----------------	-----------------------

- · Flat shape ideal for use on miter joints, corners and edges
- · Provides an even "finish ready" surface
- For general purpose stock removal and finishing



# Saitlam UK<sup>™</sup> (conical shape - type 29)

- Conical shape ideal for working with large surfaces or complex shapes
- · Working angle is "built-in"
- For general purpose stock removal and finishing



	Si	ze		Part	Nos.
Mat'l	Dia.	Arbor	Grit	Saitlam UK™	Saitlam UP™
	4-1/2	7/8	40	73685	73890
	4-1/2	7/8	50	73686	73891
	4-1/2	7/8	60	73687	73892
	4-1/2	7/8	80	73688	73893
	4-1/2	7/8	120	73689	73894
	5	7/8	40	73694	73895
Ζ	5	7/8	50	-	73896
_	5	7/8	60	73696	73897
Zirconium	5	7/8	80	73697	73898
	5	7/8	120	73698	73899
	7	7/8	40	73714	-
	7	7/8	50	73715	-
	7	7/8	60	73716	-
	7	7/8	80	73717	-
	7	7/8	120	73718	-

### RPM's

4-1/2" 13,300 5" 12,200 8,500

# **Packaging**

10/box

# Sand-Light™ Flap Discs

- Durable material is suitable for surface preparation, cleaning, and finishing applications
- Contains more usable material yielding a longer disc life than conventional Sand-Light™ discs
- Layered flaps create a thicker, cushioned design which provides a better finish

**METAL** Ferrous metals STAINLESS Stainless steel, high tensile steel **ALUMINUM** Non-ferrous metals

Brown	71980	5
Maroon	71982	5
Blue	71984	5
Brown	71990	5
Maroon	71992	5
Blue	71994	5
	Brown Maroon	Brown 71990 Maroon 71992



# Regular Density



Angle Grinder

# FLAP DISCS

# **Plastic Backing**

• A non-scratching, high strength backing resistant to temperature extremes, common chemicals and solvents



# Saitlam PN™

(flat shape - type 27)

- Flat shape ideal for use on miter joints, corners and edges
- · Provides an even "finish ready" surface
- · For general purpose stock removal and finishing



# Saitlam PN™

	Size			Saitlam PN™
Mat'l	Dia.	Arbor	Grit	Part No.
_	4-1/2	7/8	40	73502
Z	4-1/2	7/8	50	73503
Premium	4-1/2	7/8	60	73504
Zirconium	4-1/2	7/8	80	73505
	4-1/2	7/8	120	73506



# Saitlam™

(flat shape - type 27)

- Available in 2A aluminum oxide, 3A aluminum oxide with grinding aid, and Z zirconium
- Nylon 6/6 backing a non-scratching, high strength backing resistant to temperature extremes, common chemicals, and solvents
- Provides an even "finish ready" surface
- Excellent for miter joints, corners, and edges



# Saitlam™

<u>Saiu</u>	alli				
	Size				
Mat'l	Dia.	Arbor	Grit	Part No.	
	4	5/8	40	73240	
	4	5/8	60	73260	
	4	5/8	80	73280	
	4	5/8	120	73220	
<b>~ ^</b>	4-1/2	7/8	40	73440	
2A	4-1/2	7/8	60	73460	
General	4-1/2	7/8	80	73480	
purpose	4-1/2	7/8	120	73420	
aluminum	6-1/2	7/8	36	73636	
oxide	6-1/2	7/8	50	73650	
	6-1/2	7/8	60	73660	
	6-1/2	7/8	80	73680	
	6-1/2	7/8	120	73620	
	4	5/8	40	73040	
	4	5/8	60	73060	
	4	5/8	80	73080	
	4	5/8	120	73020	
0 A +	4-1/2	7/8	40	73340	
3A*	4-1/2	7/8	60	73360	
Aluminum	4-1/2	7/8	80	73380	
Oxide	4-1/2	7/8	120	73320	
with	6-1/2	7/8	36	73836	
grinding	6-1/2	7/8	50	73850	
aid	6-1/2	7/8	60	73860	
	6-1/2	7/8	80	73880	
	6-1/2	7/8	120	73820	
	4	5/8	40	73140	
	4	5/8	50	73150	
	4	5/8	60	73160	
	4	5/8	80	73180	
7	4-1/2	7/8	40	73540	
Z	4-1/2	7/8	50	73550	
Premium	4-1/2	7/8	60	73560	
Zirconium	4-1/2	7/8	80	73580	
	6-1/2	7/8	36	73736	
	6-1/2	7/8	50	73750	

6-1/2

6-1/2

7/8

60

73760

# Tech INFO

# RPM's for

Saitlam™ / Saitlam PN™

4" 13,000 4-1/2" 11,000 6-1/2" 8,600

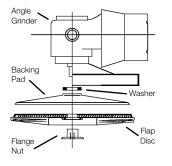
NOTE: • 4" and 4-1/2" Saitlam™ must be used with nut
• 6-1/2" must be used with backing pad and nut

See page 144 for additional pads and nuts

### Packaging

4" 10/box with nut 4-1/2" 10/box with nut 6-1/2" 10/box with nut and backing pad

### PROPER MOUNTING



**L** ...

<sup>\*</sup> Specially formulated to reduce heat build-up on workpiece

				Part Number		
	Siz	ze			1/4-20	
Mat'l	Dia.	Width	Grit	1/4	Threaded	
	1	3/4	60	70001	71000	
	1	3/4	80	70002 70003	71001 71002	
	1	3/4	120 180	70003	71002	
	1	3/4	240	70004	71003	
	1	1	60	70010	71010	
	1	1	80	70011	71011	
	1	1	120	70012	71012	
	1	1	180	70013	71013	
	1-1/2	1/2	240 40	70014 70024	71014	
	1-1/2	1/2	60	70025	71020	
	1-1/2	1/2	80	70026	71021	
	1-1/2	1/2	120	70027	71022	
	1-1/2	1/2	180	70028	71023	
	1-1/2	1/2 1	240 60	70029 70040	71024 71030	
	1-1/2	1	80	70040	71030	
	1-1/2	1	120	70042	71032	
	1-1/2	1	180	70043	71033	
	1-1/2	1	240	70044	71034	
	2	1	40	70049	-	
	2	1	60 80	70050 70051	71040 71041	
	2	1	120	70051	71041	
	2	1	180	70053	71043	
	2	1	240	70054	71044	
2A	2-1/2	1/2	60	70060	71050	
	2-1/2	1/2 1/2	80 120	70061	71051 71052	
General purpose	2-1/2	1/2	180	70062 70063	71052	
aluminum	2-1/2	1/2	240	70064	71054	
oxide	2-1/2	1	40	70069	-	
	2-1/2	1	60	70070	71055	
	2-1/2	1	80	70071	71056	
	2-1/2	1 1	120 180	70072 70073	71057 71058	
	2-1/2	1	240	70073	71059	
	3	1/2	60	70080	71060	
	3	1/2	80	70081	71061	
	3	1/2	120	70082	71062	
	3	1/2 1/2	180	70083	71063	
	3	3/4	240 60	70084 70090	71064 71070	
	3	3/4	80	70091	71071	
	3	3/4	120	70092	71072	
	3	3/4	180	70093	71073	
	3	3/4	240	70094	71074	
	3	1	40 60	70099 70100	71080	
	3	1	80	70101	71081	
	3	1	120	70102	71082	
	3	1	180	70103	71083	
	3	1	240	70104	71084	
	3	2	40 60	70110 70111	-	
	3	2	80	70112	-	
	3	2	120	70113	-	
	2	1	60	74050	71160	
ЗА	2	1	80	74051	71161	
	2 1/2	1	120	74052	71162	
Aluminum Oxide	2-1/2	1	60 80	74060 74061	71170 71171	
with	2-1/2	1	120	74062	71171	
grinding	3	1	60	74070	71180	
aid	3	1	80	74071	71181	
	3	1	120	74072	71182	

# **Aluminum Oxide 2A**

- Premium aluminum oxide grain
- General purpose
- Excellent for cleaning, deburring, polishing, blending

METAL Ferrous and/or non-ferrous metals (iron, steel, aluminum, copper, etc.)

**WOOD** Wood, plastic, fiberglass, etc.

# Aluminum Oxide with Grinding Aid 3A

- Premium aluminum oxide grain with grinding aid
- Excellent for reducing heat build-up on heat sensitive materials
- Excellent for cleaning, deburring, polishing, blending

STAINLESS Stainless steel, high tensile steel, titanium

METAL Ferrous and/or non-ferrous metals

Straight 1/4" and threaded 1/4-20 mandrels available See page 144 for 1/4-20 adapter





- Resin over resin construction for a strong bond resistant to heat and moisture
- Closed coat structure for more material removal
- High quality Egyptian cotton cloth backing provides superior durability
- UPC bar coded labeled boxes for easy identification and inventory maintenance

# Large Diameter



Pedestal Grinder Angle Grinder

# Aluminum Oxide 2A

- Premium aluminum oxide grain
- General purpose
- Excellent for cleaning, deburring, polishing, blending

**METAL** Ferrous metals

**ALUMINUM** Non-ferrous metals

WOOD

Wood, plastic, fiberglass, etc.

# Aluminum Oxide 3A with Grinding Aid

- Premium aluminum oxide grain with grinding aid
- Excellent for reducing heat build-up on heat sensitive materials
- Excellent for cleaning, deburring, polishing, blending

STAINLESS Stainless steel, high tensile steel, titanium

**ALUMINUM** Non-ferrous metals

**METAL** 

Ferrous metals

		0:		Maria	Ouite	
Mat'l	Dia.	Size Width	Spindle	Max RPM	Grits Available	Part No.
	6	1	1	6,000	60	72000
	6	1	1	6,000	80	72001
	6	1	1	6,000	100	72002
	6	1	1	6,000	120	72003
	6	1-1/2	1	6,000	60	72020
	6	1-1/2	1	6,000	80	72021
	6	1-1/2	1	6,000	100	72022
	6	1-1/2	1	6,000	120	72023
24	6	2	1	6,000	60	72030
2A	6	2	1	6,000	80	72031
Premium	6	2	1	6,000	100	72032
aluminum	6	2	1	6,000	120	72033
oxide	8	1	1	4,400	60	72040
	8	1	1	4,400	80	72041
	8	1	1	4,400	100	72042
Į.	8	1	1	4,400	120	72043
	8	2	1	4,400	60	72050
	8	2	1	4,400	80	72051
	8	2	1	4,400	100	72052
	8	2	1	4,400	120	72053
	6	1	1	6,000	60	72005
	6	1	1	6,000	80	72006
24	6	1	1	6,000	100	72007
ЗА	6	1	1	6,000	120	72008
Premium	6	1-1/2	1	6,000	60	72025
aluminum	6	1-1/2	1	6,000	80	72026
oxide	6	1-1/2	1	6,000	100	72027
with	6	1-1/2	1	6,000	120	72028
grinding	6	2	1	6,000	60	72035
aid	6	2	1	6,000	80	72036
	6	2	1	6,000	100	72037
	6	2	1	6,000	120	72038
	Saa n	11 ans	1 for			Packaging

See page 144 for:

1"-5/8" bushing - #95109

1/4" shank adapter kit - #95009

Packaging

6" - 5/box

8" - 3/box



FLAP WHEELS

# Threaded Flap Wheel

(5/8-11 for Right Angle Grinder)

- For use on standard 4-1/2" and 5" angle grinders
- Applies a linear scratch pattern, instead of a swirl; narrow profile is excellent for cleaning weld beads
- Suitable for surface preparation, paint and rust removal, cleaning, and finishing
- Increases the versatility of your angle grinder

STAINLESS Stainless steel, high tensile steel, titanium

**METAL** Ferrous materials

**ALUMINUM** Non-ferrous materials

	Size		Max	Grits	
Dia.	Width	Arbor	RPM	Available	Part No.
4-1/2	3/4	5/8-11	13,300	40	72130
4-1/2	3/4	5/8-11	13,300	60	72132
4-1/2	3/4	5/8-11	13,300	80	72133
4-1/2	3/4	5/8-11	13,300	120	72135
5	3/4	5/8-11	12,200	40	72140
5	3/4	5/8-11	12,200	60	72142
5	3/4	5/8-11	12,200	80	72143
5	3/4	5/8-11	12.200	120	72145



Packaging 5/box



# **Quick Tip**

Slower speeds = better flap wheel performance and life.



- Resin over resin construction for a strong bond resistant to heat and moisture
- · Closed coat structure for more material removal
- · High quality Egyptian cotton cloth backing provides superior durability
- Label UPC bar coded for easy identification and inventory maintenance

# INTRODUCTION

- Full product offering of cloth and paper sheets in a variety of sizes and materials to fit your needs.
- Whether you are working by hand or with mechanical assistance, these products are sure to exceed your expectations.



# Ultimate Performance Paper Sheets (pg. 96-97):

- Highest quality industrial paper.
- Available in:
  - Aluminum oxide (AW-C and AW-D) Premium stearate aluminum oxide (4S)
  - Stearate aluminum oxide (3S) Silicon carbide (CW-C) Garnet



# Premium Cloth 9 X 11 sheets (pg. 96):

- Highest quality cloth sheet.
- Made from SAIT DA-F material.
- Very flexible while maintaining the highest durability.
- Open coat design.



# Saitscreen™ 9 X 11 sheets (pg. 100):

- Cloth screen impregnated with silicon carbide grain.
- Non-loading, wet/dry design.



# Fileboard sheets (pg. 98-99):

- For use on straight line machine and hand held files with clip-on design and PSA design.
- Available in:
  - Clip on design (2-3/4" x 17-1/2") with our 4S premium aluminum oxide.
  - PSA (2-3/4" x 16-1/2") and PSA Roll with our 4S premium aluminum oxide stearate material.
  - Zirconium (Z-F) material is available in PSA and hook & loop (2-3/4" x 16-1/2") and clip on design.



# Dry Wall Sheets (pg. 100):

- Premium products to fit plaster and dry wall joint applications.
- Available in Saitscreen™ cloth screen and silicon carbide paper sheets and rolls.



# Sponges (pg. 101):

- Premium quality sanding sponges for top performance.
- Available in: 1" sanding blocks 1/2" fabric reinforced 5mm contour pads.





# Cloth **Sheets**

# **Aluminum Oxide (DA-F)**

- · Aluminum oxide grain on a flexible cloth backing
- Open coat structure prevents loading
- Water resistant
- Long life combined with excellent stock removal
- · Excellent for woodworking applications

WOOD

Wood, plastic, fiberglass

METAL

Ferrous and/or non-ferrous materials (iron, steel, copper, etc.)

Available in F-weight - high flexibility

	Size	Grit	Part No.	Std Pkg.
Aluminum		36	84907	25
Oxide	9 x 11	40	84908	25
		50	84909	25
		60	84910	25
		80	84911	25
		100	84912	50
	DA-F	120	84913	50
		150	84914	50
		180	84915	50
		220	84916	50
		240	84917	50
		320	84918	50



# **Paper Sheets**

	Size	Grit Wgt.	Part No.	Std Pkg.
Aluminum		40D	84211	100
Alullillulli		50D	84212	100
Oxide	9 x 11	60D	84213	100
Oxide	AW-D	80D	84214	100
		100D	84215	100
		120D	84216	100
	9 x 11 AW-C	150C	84200	100
		180C	84201	100
		220C	84202	100
		240C	84203	100
		320C	84204	100
		400C	84205	100
		500C	84206	100
		600C	84207	100
		800C	84208	100
		1200C	84209	100
Garnet		50D	84101	50
darnet		60D	84102	50
		80D	84103	50
	9 x 11	100C	84104	100
		120C	84105	100
		180A	84107	100
		220A	84108	100

# **Aluminum Oxide (AW-C & AW-D)**

- Extremely long lasting
- · Open coat structure prevents loading
- Use wet or dry

WOOD

Wood, sealers, fillers

Ferrous and/or non-ferrous metals

- Available in grits up to 1200 for ultra fine finishing
- Available in weights: "C"-medium weight,

medium flexibility

"D"-heavy weight, low flexibility

# Garnet

- Natural garnet grain
- Open coat structure prevents loading
- Use dry only

WOOD Soft woods

Available in weights: "A"-light weight, high flexibility

> "C"-medium weight, medium flexibility

"D"-heavy weight, low flexibility



- Resin over resin construction for a strong bond resistant to heat and moisture
- · Cloth backing for durability and flexibility
- Box label UPC bar coded for easy identification and inventory maintenance
- Our highest quality industrial paper for extra durability on all applications
- Broad assortment of grit sizes for a wide range of sanding and finishing applications
- Strong resin over resin bond construction is resistant to heat and moisture

# **Premium Stearate Aluminum Oxide (4S)**

- Premium aluminum oxide
- Stearate coating and open coat structure lubricates and prevents loading
- Long lasting performance and fast removal rates for fine finishing of automotive body works and wood finishing
- Use dry only
- Available in C-weight medium weight, low flexibility

**WOOD** Body filler, paint, fiberglass, wood and fiberglass

METAL Ferrous and non-ferrous metals

# **Stearate Aluminum Oxide (3S)**

- Extremely long lasting
- Open coat structure prevents loading
- Use dry only

WOOD Sealers, body filler, paint, fiberglass, wood

METAL Aluminum

- Available in grits up to 500 for fine finishing
- · Available in C-weight medium weight, medium flexibility

	Size	Grit Wgt.	Pai 3S	t No. 4S	Std Pkg.
Stearate		80C	84230	84283	100
Otcarate		100C	84231	84284	100
Aluminum		120C	84232	84285	100
Alaililliaili		150C	84233	84286	100
Oxide	9 x 11	180C	84234	84287	100
Oxide		220C	84235	84288	100
		240C	84236	84289	100
		320C	84237	84290	100
		400C	84238	84291	100
		500C	84239	84292	100
		600C	-	84293	100



# Waterproof Silicon Carbide (CW-C)

- Extremely long lasting
- Closed coat structure for more material removal
- Use wet or dry

WOOD Varnish, plastic, fiberglass, clear coat, primer

CONCRETE Marble, ceramics

- METAL Ferrous and/or non-ferrous metals
   Available in grits up to 2000 for ultra fine finishing
- Available in C-weight medium weight, medium flexibility

Waterproof Silicon Carbide

	Size	Grit Wgt.	Part No.	Std Pkg.
f		80C	84249	100
		100C	84250	100
•		120C	84251	100
•		150C	84252	100
9 >		180C	84253	100
		220C	84254	100
	9 x 11	240C	84255	100
	CW-C	320C	84256	100
		400C	84257	100
		500C	84258	100
		600C	84259	100
		800C	84260	100
		1200C	84261	100
		1000C	84270	50
	5-1/2 x 9	1200C	84271	50
	CW-C	1500C	84274	50
		2000C	84277	50





# 4S Premium Fileboard Sheets/Rolls

- EXCELS ON PAINTED SURFACES
- Premium Aluminum Oxide grain
- Top quality stearate coating and open coat structure lubricates and prevents loading
- Best choice for auto body applications
- Roll form allows user to cut roll as needed
- Available in PSA, hook & loop, Clip-on and Rolls



- AUTOBODY AND BARE METAL APPLICATIONS
- Aluminum Oxide grain
- Stearate coating and open coat structure lubricates and prevents loading
- Excellent choice for general auto body work



WOOD **METAL**  Auto body filler, paint and fiberglass

Ferrous and/or non-ferrous metals



	Size	Wgt.	Part No.	Pkg.
		80	84351	25
		100	84352	25
	2-3/4	120	84353	25
4S PSA	X	150	84354	25
_	16-1/2	180	84355	25
		220	84356	25
		320	84359	25
		400	84360	25
4S H&L		80	84371	25
		100	84372	25
	2-3/4 x 16-1/2	120	84373	25
		150	84374	25
		180	84375	25
		220	84376	25
		320	84379	25
		400	84380	25
		80	84331	25
		100	84332	25
40.01	2-3/4	120	84333	25
4S Clip-on	X	150	84334	25
•	17-1/2	180	84335	25
		220	84336	25
		320	84339	25
		80	34770	1
		120	34772	1
<b>4S PSA Rolls</b>	2-3/4	150	34773	1
40 1 OA 110113	x 25 yds.	180	34774	1
		220	34775	1
	0.0/4	320	34777	1
3S PSA	2-3/4	100C	84114	25
30 1 0/1	x 16-1/2	150C	84116	25

Grit



- Standard sizes for use in straight inline sanders and hand files with clip-on, PSA and hook and loop designs
- Available in 2 grain types
- High loft hook and loop backing provides optimum attachment
- For dry use only

# Zirconium Fileboard Sheets (Z-F)

- Premium Zirconium grain for aggressive stock removal and sanding
- Heavy duty F-weight prevents torn edges which produce deep, uneven, random scratches
- Best choice for heavy sanding and shaping on contours
- Available in hook and loop, PSA, and clip-on

# Aluminum Oxide clip-on Fileboard Sheets

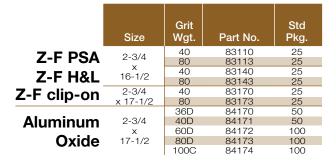
- Aluminum Oxide grain
- Open coat structure prevents loading

WOOD Auto body filler, paint and fiberglass

METAL Ferrous and/or non-ferrous metals











- Standard sizes for use in straight inline sanders and hand files with clip-on, PSA and hook and loop designs
- Available in 2 grain types
- High loft hook and loop backing provides optimum attachment
- For dry use only



# **Saitscreen**™

• Strong cloth screen impregnated with silicon carbide grain

Open coat structure prevents loading

• Use wet or dry

· Extremely long lasting

• Double sided and die cut

**WOOD** Plaster, dry wall joints

# **Paper**

- Aluminum oxide grain
- Paper backing
- Open coat structure prevents loading
- Use dry
- · Provides a smooth finish
- Easy-to-handle rolls for on-the-job "cut to size" use

**WOOD** Plaster, dry wall joints

# Saitscreen™ 9 x 11 Sheets

- · Cloth screen impregnated with silicon carbide grain
- Use wet or dry
- Non-loading
- · Strong, long lasting

WOOD

Body filler, paint, fiberglass

**CONCRETE** Ceramic, marble, cement

**METAL** 

Ferrous and/or non-ferrous metals



Size	Grit Wgt.	Part No.	Std Pkg.
Saitscreen™	80	84070	50
4-3/16 x 11	100	84071	50
Diecut	220	84075	50
	80C	84066	100
Paper	100C	84067	100
3-5/16 x 11	120C	84068	100
	150C	84069	100
Paper	80C	84051	100
4-3/16 x 11	100C	84050	100
Diecut	120C	84052	100
	150C	84053	100
Paper	80C	84056	1
3-5/16	100C	84057	1
x 50 yds.	120C	84058	1
	150C	84059	1
	80	84076	25
Saitscreen™	100	84077	25
9 x 11	120	84078	25
	150	84079	25

COAYED ABRASIVE 9x11 SHEETS
SAIT



• Available in screen or paper sheets offering the best product for your application

COATED ABRASIVE DRY WALL SHEETS

• Open coat structures on both backings prevents clogging and loading in extreme applications

# **Sanding Sponges**

- Premium abrasive grain on a soft, foam backing
- Foam backing provides ultimate conformability and is washable for long life
- For use on wood moldings, metal contours, drywall sanding, and paint removal applications

**WOOD** Hardwoods and softwoods, plastic, paint

fiberglass, auto body filler, and drywall compounds

METAL Ferrous and/or non-ferrous metals



	Size	Grit Available	Part Nos.	Per Box
		60	86355	24
		80	86356	24
Hi-Density Sanding Block	1"	100	86357	24
z onorty camaning zroom		120	86359	24
		180	86360	24
		60	86445	100
Contour Sanding Pad	5 mm	100	86447	100
oomon ounung i aa		180	86450	100
		280	86451	100
		60	86475	24
		100	86477	24
Fabric Reinforced Sanding Pad	1/2"	150	86479	24
		180	86480	24
		220	86481	24



- Sanding sponges can be used wet or dry for fine finishing and can be washed to extend cutting life (just wash with water)
- In general, the finish of sanding sponges will be finer than traditional coated abrasives
- Due to the ability to conform to different shapes, sanding sponges are able to sand and finish in hard to reach areas

# Industrial Rolls - EA-F

- Aluminum oxide grain
- Premium quality EA-F material for very high flexibility
- High tensile strength, extra durable backing
- Long life
- Primarily for machine applications

**METAL** Ferrous and/or non-ferrous metals (iron, aluminum, copper, normal and high tensile steel)

WOOD

Wood, fiberglass, etc.

# Handy Rolls - DA-F

- Aluminum oxide grain
- High quality DA-F material for high flexibility
- Medium tensile strength
- · Primarily for hand applications

METAL

Ferrous and/or non-ferrous materials (iron, aluminum, copper, normal and high tensile steel)

WOOD

Wood, fiberglass, etc



	WOOD	wood, liberglass, etc.			
			Size Width	Grit	Part No.
		EA-F Industrial		40	80415
		EA-1 IIIdustiiai		50	80515
		Rolls		60	80615
		110113		80	80815
				100	81015
			1"	120	81215
				150	81515
				180	81815
				220	82215
				240	82415
				320	83215
г	Dookoging			400	83415
	Packaging			40	80416
F	50 yd length	1/box		50	80516
•	o ya longu	1, 17,00%		60	80616

•		50	80515
3		60	80615
•		80	80815
		100	81015
	1"	120	81215
		150	81515
		180	81815
		220	82215
		240	82415
		320	83215
_		400	83415
		40	80416
		50	80516
	1-1/2"	60	80616
		80	80816
		100	81016
		120	81216
		150	81516
		180	81816
		220	82216
		240	82416
		320	83216
_		400	83416
		40 50	80430
		60	80530 80630
		80	80830
		100	81030
	2"	120	81230
	2	150	81530
		180	81830
		220	82230
		240	82430
		320	83230
		400	83430
		400	00400

	Size Width	Grit	Part No.
DA-F Handy		40	80405
DA-I Halluy		50	80505
Rolls		60	80605
110113		80	80805
		100	81005
	1"	120	81205
		150	81505
		180	81805
		220	82205
		240	82405
		320	83205
		400	83405
		40	80406
	1-1/2"	50	80506
		60	80606
		80	80806
		100	81006
		120	81206
		150	81506
		180	81806
		220	82206
		240	82406
		320	83206
		400	83406
		40	80420
		50	80520
		60	80620
		80	80820
		100	81020
	2"	120	81220
		150	81520
		180	81820
		220	82220
		240	82420
		320	83220
		400	83420



- Resin over resin construction for a strong bond resistant to heat and moisture
- Egyptian cotton cloth backing for superior durability
- Available in 2 tensile strengths for a wide range of applications
- Open coat structure prevents loading
- Box label UPC bar coded for easy identification and inventory maintenance



# **DA-F Mini Shop Rolls**

- Aluminum oxide grain
- DA-F material for high flexibility
- Open coat structure prevents loading
- · For hand applications

METAL Ferrous and/or non-ferrous materials WOOD Wood, fiberglass, etc.

# **Packaging**

10 yard lengths

	Size	Grit	Part No.
DA-F Mini	1-1/2"	60	80607
	X	80	80807
Shop Rolls	10 yds.	120	81207
J 7 110110		180	81807



# **EA-F Custom Rolls**

- · Premium quality EA-F material for very high flexibility used in industrial rolls
- Open coat structure prevents loading

# **DA-F Custom Rolls**

- Flexible DA-F material used in handy rolls
- Open coat structure prevents loading

**METAL** Ferrous and/or non-ferrous materials WOOD Wood, fiberglass, etc.

Can be slit up to 3 cuts, 3" minimum width Specify widths when ordering

# **EA-F Custom Rolls**

Size Width Grit Part No. 40 81640 50 81650 60 81660 80 81680 100 81610 12" 150 81615 180 81618 220 81622 240 320 400 81624 81632

# **Packaging**

50 yard lengths

a lengths	Size Width	Grit	Part No.
<b>DA-F Custom</b>		40	81440
DA I Gustom		50	81450
Rolls		60	81460
nolis		80	81480
		100	81410
	12"	120	81412
		150	81415
		180	81418
		220	81422
		240	81424
		320	81432
		400	81404



- Resin over resin construction for a strong bond resistant to heat and moisture
- · Egyptian cotton cloth backing for superior durability
- Available in 2 tensile strengths for a wide range of applications
- · Open coat structure prevents loading
- Box label UPC bar coded for easy identification and inventory maintenance

# Saitscreen™ Rolls

- Silicon carbide grain
- Long life
- Waterproof
- Non-loading screen cloth

METAL Ferrous and/or non-ferrous metals (steel, solder, copper)

**CONCRETE** Ceramic

WOOD

Wood, paint, etc.

Individually packaged rolls

	Size Width	Grit	Part No.
Saitscreen <sup>™</sup> Rolls	1-1/2" x	80	84089
	5 yds.	120	84092
		180	84095
110110	1-1/2" x	80	84090
	10 yds.	120	84093
		180	84096
	1-1/2" x	80	84091
	25 yds.	120	84094
		180	84097



# **Plumber Rolls**

- Aluminum oxide grain
- Open coat structure prevents loading
- Use dry only
- Excellent for cleaning pipe ends

METAL

Ferrous and/or non-ferrous materials, copper piping

Packaged 1/box

### **Plumber Rolls**

Size Width	Grit	Part No.
1-1/2" x 25 yds	120	80000





### Saitscreen™ Rolls

- Double sided for long life
- Box label UPC bar coded for easy identification and inventory maintenance Plumber Rolls
- Box label UPC bar coded for easy identification and inventory maintenance
- Cloth backed for durability and flexibility

# Spiral Bands Die Grinder

# TA-X

### Premium Aluminum Oxide Grain

• Excellent for removing parting lines, imperfections, and burrs on all surfaces

• Great in curved, corner, contoured, and hard to reach areas

METAL

Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel, wood

See page 145 for Drums



Size	Grit	Max RPM	Part Nos.	Qty Per Box
	60	30,000	42001	100
1/2 x 1/2	80	30,000	42002	100
	120	30,000	42003	100
	60	15,000	42006	100
1/2 x 1	80	15,000	42007	100
	120	15,000	42008	100
	60	12,000	42011	100
1/2 x 1-1/2	80	12,000	42012	100
	120	12,000	42013	100
	36	19,000	42016	100
3/4 x 1	60	19,000	42017	100
	80	19,000	42018	100
	120	19.000	42019	100
	60	10,000	42022	100
3/4 x 1-1/2	80	10.000	42023	100
-,	120	10,000	42024	100
	36	18.000	42027	100
1 x 1	60	18,000	42028	100
	80	18.000	42029	100
	120	18,000	42030	100
	36	14,000	42033	100
1-1/2 x 1	60	14,000	42034	100
–	80	14.000	42035	100
	120	14.000	42036	100
	36	10,000	42039	100
1-1/2	60	10,000	42040	100
x 1-1/2	80	10,000	42041	100
	120	10,000	42042	100
	36	6.000	42045	50
2 x 2	60	6.000	42046	50
	80	6,000	42047	50
	120	6,000	42048	50
	36	3,000	42051	50
3 x 3	60	3.000	42052	50
0 7 0	80	3,000	42053	50
	120	3,000	42054	50
	3	0,000	00.	







- Single ply of coated abrasive, spirally wound and bonded to an inner liner
- Quick removal and installation
- Smooth running for ease of use and control



# TA-X - Straight

# Premium Aluminum Oxide Grain

- Excellent for sanding and polishing channels, fillets, recesses, side walls, and bottoms of dead-end holes
- Great for high speed deburring and flash removal

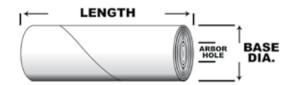
METAL

Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel

**Packaging** 100/box

See page 145 for Cartridge Roll mandrels





	Size B x L x A	Grit	Max RPM	Cartridge Roll Part Nos.	Mandrel Part Nos.
	3/16 x	80	26,000	38001	95108
	1 x 3/32	120	26,000	38003	95108
		60	26,000	38007	95105
	1/4 x	80	26,000	38008	95105
	1 x 1/8	120	26,000	38010	95105
		320	26,000	38013	95105
		60	26,000	38014	95104
	1/4 x	80	26,000	38015	95104
	1-1/2 x 1/8	120	26,000	38017	95104
		240	26,000	38019	95104
	1/4 x 2 x 1/8	120	26,000	38023	95103
		60	26,000	38027	95105
	5/16 x 1 x 1/8	80	26,000	38028	95105
		120	26,000	38029	95105
5/10	6 x 1-1/2 x 1/8	60	26,000	38033	95104
		60	26,000	38040	95105
	3/8 x 1 x 1/8	80	26,000	38041	95105
		120	26,000	38043	95105
		50	26,000	38047	95104
	3/8 x	60	26,000	38048	95104
	1-1/2 x 1/8	80	26,000	38049	95104
		120	26,000	38051	95104
		60	26,000	38055	95103
	3/8 x 2 x 1/8	80	26,000	38056	95103
		120	26,000	38058	95103
		50	26,000	38062	95105
	1/2 x	60	26,000	38063	95105
	1 x 1/8	80	26,000	38064	95105
		120	26,000	38066	95105

Size B x L x A	Grit	Max RPM	Cartridge Roll Part Nos.	Mandrel Part Nos.
	36	26,000	38070	95104
	40	26,000	38071	95104
1/2 x	50	26,000	38072	95104
1-1/2 x 1/8	60	26,000	38073	95104
	80	26,000	38074	95104
	120	26,000	38076	95104
	60	26,000	38080	95103
1/2 x 2 x 1/8	80	26,000	38081	95103
	120	26,000	38083	95103
	60	26,000	38087	95106
1/2 x 2 x 3/16	80	26,000	38088	95106
	120	26,000	38089	95106
5/8 x	60	18,000	38093	95104
1-1/2 x 1/8	80	18,000	38094	95104
	120	18,000	38095	95104
	40	18,000	38112	95107
3/4 x	60	18,000	38113	95107
1-1/2 x 3/16	80	18,000	38114	95107
	120	18,000	38115	95107
	40	18,000	38119	95106
3/4 x	60	18,000	38120	95106
2 x 3/16	80	18,000	38121	95106
	120	18,000	38122	95106
	60	18,000	38126	95102
1 x 1-1/2 x 1/4	80	18,000	38127	95102
	120	18,000	38128	95102
	60	18,000	38132	95101
1 x 2 x 1/4	80	18,000	38133	95101
	120	18.000	38134	95101



- Multi-layer, self dressing construction exposes sharp, new cutting abrasive as each layer wears away
- Available in straight and full taper designs long lasting performance
- Quick removal and installation less downtime

# SPECIALTIES



# TA-X - Full Taper

# Premium Aluminum Oxide Grain

- Excellent for sanding and polishing channels, fillets, recesses, side walls, and bottoms of dead-end holes
- Great for high speed deburring and flash removal

STAINI ESS

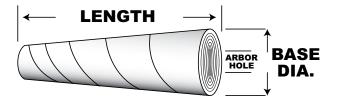
Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel

### **Packaging**

100/box

See page 145 for Cartridge Roll mandrels





	Size				Cartridge	
Base		Arbor		Max	Roll	Mandrel
Dia.	Length	Hole	Grit	RPM	Part Nos.	Part Nos.
3/8	1	1/8	60	26,000	38300	95105
3/8	1	1/8	80	26,000	38301	95105
3/8	1	1/8	120	26,000	38302	95105
3/8	1-1/2	1/8	60	26,000	38306	95104
3/8	1-1/2	1/8	80	26,000	38307	95104
3/8	1-1/2	1/8	120	26,000	38308	95104
1/2	1	1/8	60	26,000	38312	95105
1/2	1	1/8	80	26,000	38313	95105
1/2	1	1/8	120	26,000	38314	95105
1/2	1-1/2	1/8	50	26,000	38318	95104
1/2	1-1/2	1/8	60	26,000	38319	95104
1/2	1-1/2	1/8	80	26,000	38320	95104
1/2	1-1/2	1/8	120	26,000	38322	95104
1/2	2	1/8	60	26,000	38326	95103
1/2	2	1/8	80	26,000	38327	95103
1/2	2	1/8	120	26,000	38328	95103
5/8	2	1/8	60	18,000	38332	95103
5/8	2	1/8	80	18,000	38333	95103
5/8	2	1/8	120	18,000	38334	95103
3/4	1-1/2	1/8	60	18,000	38338	95104
3/4	1-1/2	1/8	80	18,000	38339	95104
3/4	1-1/2	1/8	120	18,000	38340	95104
3/4	2	3/16	60	18,000	38344	95106
3/4	2	3/16	80	18,000	38345	95106
3/4	2	3/16	120	18,000	38346	95106



- Multi-layer, self dressing construction exposes sharp, new cutting abrasive as each layer wears away
- Available in straight and full taper designs long lasting performance
- Quick removal and installation less downtime

# **Cross Pads**

Size	Mandrel Size	Grit	Recommended RPM Range	Max RPM	Part No.	Qty Per Box
	3-48	60	20,000-23,000	25,000	48036	50
1 x 3/8	3-48	80	20,000-23,000	25,000	48037	50
	3-48	120	20,000-23,000	25,000	48038	50
	8-32	60	19,000-20,000	23,000	48041	50
1-1/2	8-32	80	19,000-20,000	23,000	48042	50
x 1/2	8-32	120	19,000-20,000	23,000	48043	50
	8-32	60	19,000-20,000	23,000	48046	50
2 x 1/2	8-32	80	19,000-20,000	23,000	48047	50
	8-32	120	19,000-20,000	23,000	48048	50
	1/4-20	60	19,000-20,000	23,000	48051	50
2 x 1	1/4-20	80	19,000-20,000	23,000	48052	50
	1/4-20	120	19,000-20,000	23,000	48053	50
	1/4-20	60	10,000-12,000	14,000	48056	50
3 x 1	1/4-20	80	10,000-12,000	14,000	48057	50
	1/4-20	120	10,000-12,000	14,000	48058	50
	1/4-20	60	9,000-10,000	14,000	48061	50
4 x 1	1/4-20	80	9,000-10,000	14,000	48062	50
	1/4-20	120	9,000-10,000	14,000	48063	50

# TA-X

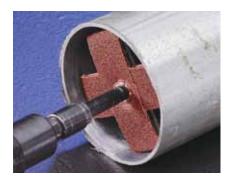
### Premium Aluminum Oxide Grain

• Excellent for deburring tubing, blending radii, polishing inside contours, and polishing and finishing bell-mouth configurations, drop forge and Kirksite dies

METAL

Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel



See page 145 for mandrels

# **Square Pads**

Size	Mandrel Size	Grit	Recommended RPM Range	Max RPM	Part No.	Qty Per Box
	8-32	60	19,000-20,000	23,000	48001	50
1-1/2	8-32	80	19,000-20,000	23,000	48002	50
x 1/4	8-32	120	19,000-20,000	23,000	48003	50
	1/4-20	60	19,000-20,000	23,000	48006	50
1-1/2	1/4-20	80	19,000-20,000	23,000	48007	50
x 1/2	1/4-20	120	19,000-20,000	23,000	48008	50
	8-32	60	19,000-20,000	23,000	48011	50
2 x 1/4	8-32	80	19,000-20,000	23,000	48012	50
	8-32	120	19,000-20,000	23,000	48013	50
	1/4-20	60	19,000-20,000	23,000	48016	50
2 x 1/2	1/4-20	80	19,000-20,000	23,000	48017	50
	1/4-20	120	19,000-20,000	23,000	48018	50
	1/4-20	60	19,000-20,000	23,000	48021	50
2 x 3/4	1/4-20	80	19,000-20,000	23,000	48022	50
	1/4-20	120	19,000-20,000	23,000	48023	50
	1/4-20	60	10,000-12,000	14,000	48026	50
3 x 1/4	1/4-20	80	10,000-12,000	14,000	48027	50
	1/4-20	120	10,000-12,000	14,000	48028	50
	1/4-20	60	10,000-12,000	14,000	48031	50
3 x 1/2	1/4-20	80	10,000-12,000	14,000	48032	50
	1/4-20	120	10,000-12,000	14,000	48033	50

# TA-X

### Premium Aluminum Oxide Grain

• Excellent for grinding and blending on channels, fillets and corners, spotting on flat surfaces, and blending welds inside of pipes

METAL

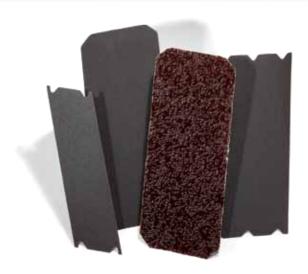
Ferrous and/or non-ferrous metals

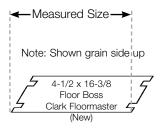
STAINLESS Stainless steel, high tensile steel, wood

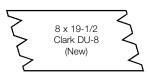


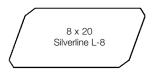


- Multi-ply abrasive pad exposes new cutting surface as each layer wears
- Cushioned, chatter free grinding and polishing for long lasting performance











Size	Grit Av New Grit	/ailable Old Grit	Part Nos.	Qty Per Box
	12	4-1/2	85049	50
	16	4	85050	50
4-1/2	20	3-1/2	85051	50
×	36	2	85052	50
16-3/8	40	1-1/2	85053	50
	60	1/2	85054	50
	80	0	85055	50
	100	2/0	85056	50
	12	4-1/2	85021	50
	16	4	85000	50
8	20	3-1/2	85001	50
X	36	2	85002	50
19-1/2	40	1-1/2	85003	50
	60	1/2	85004	50
	80	0	85005	50
	100	2/0	85006	50
	12	4-1/2	85022	50
	16	4	85007	50
	20	3-1/2	85008	50
8 x 20	36	2	85009	50
	40	1-1/2	85010	50
	60	1/2	85011	50
	80	0	85012	50
	100	2/0	85013	50
	12	4-1/2	85023	50
8	16	4	85014	50
X	20	3-1/2	85015	50
20-1/4	60	1/2	85018	50
	100	2/0	85020	50

# **Sheets**

#### Grits 12-20

- Silicon carbide grain
- · Combination backing paper and cloth
- · Open coat structure prevents loading
- · Excellent for removing heavy finishes

**WOOD** Wood

## **Grits 36-100**

- Silicon carbide grain
- Closed coat for more material removal
- Excellent for general refinishing

**WOOD** Wood

There are 2 grit grading systems for abrasive floor paper.

Both systems appear in the table at left.



# **Belts - Cloth** Grits 36-120

- Premium Zirconium grain for high stock removal and long life
- · Belt design allows for quick changing of abrasive materials

**WOOD** Wood floors

Size	Grit Available	Part Nos.	Qty Per Box
	36	85285	10
8 x 19	50	85286	10
AZ-X	60	85287	10
Zirconium	80	85288	10
	120	85289	10



- Professional quality for use in tough industrial jobs
- Shrink wrapped for easy handling and long life
- Box label UPC bar coded for easy identification and inventory maintenance

# FLOOR SANDING

Grit Available

Old

Grit

4-1/2

3-1/2

1-1/2

1/2

2/0 4-1/2

0

4-1/2

3-1/2

1/2

4-1/2

Part Nos

85230

85231

85232 85233

85234

85235

85236

85237 85207 85205

85209

85211 85212

85214

85215

85219

New

Grit

20 36

40

60

100

80

100

20 36

60

80

Per Box

20

20 20

20

25

25

20

20 20

25

25



## **Grits 12-20**

• Silicon carbide grain

Combination backing paper and cloth

• Open coat structure prevents loading

· Excellent for removing heavy finishes

**WOOD** Wood

#### **Grits 36-100**

• Silicon carbide grain

• Closed coat for more material removal

· Excellent for general refinishing

WOOD

Wood

There are 2 grit grading systems for abrasive floor paper. Both systems appear in the table.



	Size
ge 	5 x 1/4
	5 x 7/8
	6 x 7/8
	7 × 7/8

Lg. Dia.



		10	4	85220	20
		20	3-1/2	85221	20
7 x 7/8	36	2	85222	20	
		40	1-1/2	85223	20
		60	1/2	85224	25
		80	0	85225	25
		100	2/0	85226	25
		12	4-1/2	85121	20
		16	4	85100	20
•		20	3-1/2	85101	20
	15 x 2	36	2	85102	20
		40	1-1/2	85103	20
		60	1/2	85104	25
		80	0	85105	25
		100	2/0	85106	25
		12	4-1/2	85122	20
		16	4	85107	20
		20	3-1/2	85108	20
	16 x 2	36	2	85109	20
		40	1-1/2	85110	20
		60	1/2	85111	25
		80	0	85112	25
		100	2/0	85113	25
		12	4-1/2	85123	20
		16	4	85114	20
		20	3-1/2	85115	20
	17 x 2	36	2	85116	20
		40	1-1/2	85117	20
		60	1/2	85118	25
		80	0	85119	25
		100	2/0	85120	25
		12	4-1/2	85130	20
		16	4	85131	20
		20	3-1/2	85132	20
	18 x 2	36	2	85133	20
		40	1-1/2	85134	20
		60	1/2	85135	25
		80	0	85136	25
		100	2/0	85137	25
		12	4-1/2	85140	20
		16	4	85141	20
		20	3-1/2	85142	20
	20 x 2	36	2	85143	20
		40	1-1/2	85144	20
		60	1/2	85145	25
		80	0	85146	25
		100	2/0	85147	25

FLOOR SANDING



- Professional quality for use in tough industrial jobs
- Shrink wrapped for easy handling and long life





## **Grits 12-20**

- Silicon carbide grain
- Combination backing paper and cloth
- Open coat structure prevents loading
- Excellent for removing heavy finishes

**WOOD** Wood floors

## **Grits 36-100**

- Silicon carbide grain
- Closed coat for more material removal
- Excellent for general refinishing

**WOOD** Wood floors

There are 2 grit grading systems for abrasive floor paper. Both systems appear in the table below.

Size	Grit Available New Old Grit Grit		Part Nos.	Pack
	12	4-1/2	85307	1
	16	4	85300	1
	20	3-1/2	85301	1
8"	36	2	85302	1
X	40	1-1/2	85303	1
50 yards	60	1/2	85304	1
	80	0	85305	1
	100	2/0	85306	1
	12	4-1/2	85407	1
	16	4	85400	1
12"	20	3-1/2	85401	1
X	36	2	85402	1
50 yards	40	1-1/2	85403	1
•	60	1/2	85404	1
	80	0	85405	1
	100	2/0	85406	1



- Professional quality for use in tough industrial jobs
- Box label UPC bar coded for easy identification and inventory maintenance



# **Nylon Floor Pads**

WOOD

Maintaining wood and tile floors

**CONCRETE** Ceramic tile, cement

Available in 1" thick and 1/4" thin

#### Black

- Heavy aggressiveness
- For stripping heavy finishes

#### Green

- Medium aggressiveness
- · For scrubbing and cleaning

#### Tan

- Light applications
- For buffing and polishing
- Also used between sander and Saitscreen™

# **White**

- High gloss finish
- For buffing



		Grades Part N	Qty Per	Lbs Per		
Size	Black	Green	Tan	White	Box	Box
13" thin	86134	86133	-	-	10	3
13" thick	87134	-	87132	87131	5	3
15" thin	86154	86153	86152	-	10	3
15" thick	87154	87153	87152	87151	5	3
16" thin	-	-	86162	-	10	4
17" thin	86174	-	-	-	10	5
18" thin	86184	86183	86182	-	10	6
18" thick	-	87183	87182	-	5	6
20" thin	-	86203	86202	-	10	6



# Saitscreen<sup>™</sup> Discs

- · Cloth screen impregnated with silicon carbide grain
- Long life
- Non-loading
- Double sided
- Excellent for removing paint and varnish from floors

WOOD

Wood

**CONCRETE** Ceramic tile, cement

Size	Grit	Part No.	Qty Per Box
	60	88506	10
15"	80	88508	10
	100	88510	10
	120	88512	10
	60	88606	10
16"	80	88608	10
	100	88610	10
	120	88612	10
	60	88706	10
17"	80	88708	10
	100	88710	10
	120	88712	10
	60	88806	10
18"	80	88888	10
	100	88810	10
	120	88812	10
	60	88006	10
20"	80	88008	10
	100	88010	10
	120	88012	10



#### **Nylon Floor Pads**

- · Available in an assortment of grits for excellent coverage of a wide range of applications
- · Cloth screen impregnated with silicon carbide grain for non-loading sanding
- Double sided for long life

# Floor Sander



• For orbital sanding machines

### **Saitscreen**™

- Silicon carbide grain
- Long life
- Non-loading
- Double sided
- · Excellent for removing paint and varnish

**WOOD** Wood

**CONCRETE** Concrete

# **Nylon Floor Pads**

• See applications page 112

WOOD

Wood

**CONCRETE** Concrete

Grit	Part No.	Qty Per Box
80	88002	10
100	88003	10
120	88004	10
Tan/Thin	86122	10
Green/Thin	86123	10
Black/Thin	86124	10
	80 100 120 Tan/Thin Green/Thin	80 88002 100 88003 120 88004 Tan/Thin 86122 Green/Thin 86123



- Non-gouging for safe use on all floor surfaces
- Popular with DIY homeowners for ease of use



# Non-Woven Introduction

- Extensive line of non-woven abrasives for use in a variety of applications especially in the metal working industry.
- Constructed of nylon fibers with a resin binder to hold the nylon and grains together.
- Use as a final finishing step.
- Change the surface of the material without removing or damaging the base materials.
- Reduce the risk of under-cutting or gouging the workpiece.
- Open weave has non-loading characteristics.



## Sand-Light™ Abrasive Hand Pads (pg. 115):

• 6 x 9 hand pads for hand use



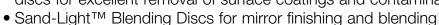
#### SAIT-LOK™ and SAIT-LOK-R™ (pg. 117):

• Surface conditioning discs 1-1/2", 2", 3", 4" discs for mechanical use



# Surface Conditioning, Sand-Light<sup>™</sup> & Buffing Discs (pg. 118, 125 & 126):

 Surface Conditioning Discs available 4", 4-1/2", 5", 6", 7", 8" hook and loop discs for excellent removal of surface coatings and contaminants



• Buffing Discs designed for cosmetic finishing



# Surface Conditioning Belts (pg. 116):

- High speed removal of surface coatings and contaminants
- Available in coarse, medium and very fine



# SAIT-Strip™ (pg. 119):

 High speed stripping tool used for removing paint, rust or other contaminants from surfaces



## Flap Brushes (pg. 120):

• Provide a linear finish on a variety of materials



# Interleaf Flap Wheels (pg. 121):

• Constructed with alternating flaps of surface conditioning material and coated abrasive material for a high cut rate and a uniform scratch pattern



# Unitized Wheels and Type 27 (pg. 122-123):

- Constructed by bonding and compressing layers of non-woven materials
- Excellent for light deburring to fine finishing



# Sand-Light™ Flap Discs (pg. 122):

- For general surface preparation and finishing
- Layered flaps provide long life
- Ideal for cleaning, grinding, deburring, blending, finishing, and polishing



# Convolute Wheels (pg. 124):

• Dense, non-woven wheels for use in aggressive deburring, weld blending and polishing

114

**Pads** 

Per

Box

20

20

20

20

20

20

Part

Nos.

77440

77447

77446

77496

77448

77486

Color

Brown

Maroon

Black

Green

Gray

White



#### Brown

- Heavy duty
- Excellent for removing heavy rust and cleaning welds

METAL

Ferrous and/or non-ferrous metals

#### Maroon

- General purpose
- For removing light rust
- Excellent for cleaning and brightening

METAL

Ferrous and/or non-ferrous metals

#### **Black**

- For blending and finishing
- Excellent for paint removal

**STAINLESS** Stainless steel

**METAL** 

Ferrous and/or non-ferrous metals

#### Green

- · General cleaning
- · Excellent for stripping paint and varnish

Ferrous and/or non-ferrous metals

WOOD

Paint, varnish

# Gray

- Ultra fine
- For light finishing
- Excellent for sanding before/between finish coats

Non-ferrous metals

WOOD

Wood

#### White

- Light duty
- · For light cleaning and polishing

WOOD

Fiberglass, vinyl, plastic

**CONCRETE** Ceramic

Handle available for uniform finishing on page 143

Trainer available for t	a
Took	
lech	
INFO	)
	/

Non-woven synthetic fiber impregnated with abrasive grain for surface conditioning without damage to or removal of base material. Resists loading and heat build-up

Size

6 x 9

Grade

Heavy Duty

Stainless

Stripper

Ultra Fine

Light Duty

General Purpose

- Wet/dry construction for use in a wide range of applications
- Available in a variety of grades from heavy duty to polishing applications
- Reusable and long lasting design for economical use
- Box label UPC bar coded for easy identification and inventory maintenance

	GAND-LIGHT .
SAND-LIGHT	SAIT ME
SAIT	SAND-LIGHT
	SAIT MARRIED



#### **Brown**

- Coarse
- Excellent for deburring, blending

· For use on mill marks, tool marks, to create a smooth transition on surface profiles

**STAINLESS** Stainless steel

METAL Ferrous and/or non-ferrous materials

WOOD Fiberglass and rubber

#### Maroon

- General purpose
- Excellent for blending and cleaning
- Reduce uneven edges on adjoining surfaces
- · Remove coatings, gaskets, and surface discolorations

**STAINLESS** Stainless steel

**METAL** Ferrous and/or non-ferrous materials

WOOD Fiberglass and rubber

## **Blue**

- · Very fine
- Excellent for cleaning and finishing
- Reduce surface roughness
- Polish welds
- Use to apply cosmetic grain or scratch patterns

**STAINLESS** Stainless steel

**METAL** Ferrous and/or non-ferrous materials

WOOD Fiberglass and rubber

Size	Coarse Brown	Medium Maroon	Very fine Blue	Qty Per Box
1/2 x 18	77510	77511	77512	10
1/2 x 24	77515	77516	77517	10
3/4 x 18	77520	77521	77522	10
3/4 x 20-1/2	77575	77576	77577	10
3-1/2 x 15-1/2	77500	77501	77502	10
1 x 42	77525	77526	-	10
2 x 48	77530	77531	-	10
2 x 60	77535	77536	-	10
2 x 132	77550	-	-	5
3 x 21	77570	77571	77572	10
3 x 24	77560	77561	77562	10
4 x 24	77565	77566	77567	10
6 x 48	77540	77541	-	5







- Non-woven synthetic fiber impregnated with abrasive grain for surface conditioning without damage to or removal of base material. Resists loading and heat build-up
- Offered in very narrow widths for use on tight radii and hard to reach applications
- Flexible yet extra durable splice method for resistance to breaking or cracking under severe stress



#### **Brown**

- Heavy duty
- Excellent for deburring, blending, cleaning, polishing

**STAINLESS** Stainless steel

**METAL** Ferrous and/or non-ferrous materials

**WOOD** Fiberglass, gaskets

#### Maroon

- · General purpose
- Excellent for deburring, blending, cleaning, polishing

**STAINLESS** Stainless steel

METAL Ferrous and/or non-ferrous materials

**WOOD** Fiberglass, gaskets

#### Blue

- Very fine
- Excellent for cleaning and finishing

**STAINLESS** Stainless steel

METAL Ferrous and/or non-ferrous materials

**WOOD** Fiberglass, gaskets



See page 143 for backing pads

Hook & Loop style discs in 4" - 8" available on page 118

See page 126 for Buffing Discs





SAIT-LOK™



All-metal attachment on disc ensures a secure fit to the backing pad

#### SAIT-LOK-R™



Nylon screw threaded hub for easy mounting to the backing pad

Size	Grade	Color	SAIT-LOK™ Part No.	SAIT-LOK-R™ Part No.	Qty Per Box
	Coarse	Brown	77200	77300	50
1-1/2"	Medium	Maroon	77202	77302	50
	Very Fine	Blue	77203	77303	50
	Coarse	Brown	77206	77306	50
2"	Medium	Maroon	77208	77308	50
	Very Fine	Blue	77209	77309	50
	Coarse	Brown	77212	77312	25
3"	Medium	Maroon	77214	77314	25
	Very Fine	Blue	77215	77315	25
	Coarse	Brown	-	77318	25
4"	Medium	Maroon	-	77320	25
	Very Fine	Blue	-	77321	25
	•				



- For finer finishing prior to buffing, use Sand-Light™ blending discs on page 125
- Non-woven synthetic fiber coated with aluminum oxide grain resists loading for long life
- Flexible construction for use on contoured surfaces
- Non-woven disc can be switched to laminated disc using same backing pads for less downtime
- Box label UPC bar coded for easy identification and inventory maintenance









See page 126 for Buffing Discs

#### **Brown**

- · Heavy duty
- Excellent for removing surface coatings and contaminants, including rust

STAINLESS Stainless steel, high tensile steelMETAL Ferrous and/or non-ferrous materialsWOOD Fiberglass

Size	Grade	Color	Part No.	Qty Per Box
	Coarse	Brown	77116	10
4"	Medium	Maroon	77117	10
	Very Fine	Blue	77115	10
	Coarse	Brown	77118	10
4-1/2"	Medium	Maroon	77120	10
	Very Fine	Blue	77122	10
	Coarse	Brown	77124	10
5"	Medium	Maroon	77126	10
	Very Fine	Blue	77128	10
	Coarse	Brown	77130	10
6"	Medium	Maroon	77132	10
	Very Fine	Blue	77134	10
	Coarse	Brown	77136	10
7"	Medium	Maroon	77138	10
	Very Fine	Blue	77140	10
	Coarse	Brown	77142	10
8"	Medium	Maroon	77144	10
	Very Fine	Blue	77146	10

## Maroon

- · General purpose
- Excellent for removing surface coatings and light rust

STAINLESS Stainless steel, high tensile steel

METAL Ferrous and/or non-ferrous materials

**WOOD** Fiberglass

# Blue

- Very fine
- Excellent for blending and finishing

STAINLESS Stainless steel, high tensile steel

METAL Ferrous and/or non-ferrous materials

**WOOD** Fiberglass

A variety of 1/4" shank, 5/16-24 and 5/8-11 backing pads are available for use on drills, dual action/random orbital sanders, and right angle grinders/sanders. See page 143

SAIT-LOK™ & SAIT-LOK-R™ discs available in 1-1/2" - 3" on page 117



- Hook and loop fastening system allows for quick changes and less downtime
- Non-woven synthetic fiber impregnated with abrasive grain for surface conditioning without damage to or removal of base material. Resists loading and heat build-up
- Used in a wide variety of applications including cleaning, polishing, blending, and deburring
- Resilient shape and performance characteristics for contour and radius applications
- Box label UPC bar coded for easy identification and inventory maintenance

# NON-WOVEN Sait-Strip Angle Grinder Die Grinder Pedestal Grinder Portable Grinder



# **SAIT-Strip™ Discs**

Size	Max RPM	SAIT-LOK™ Part No.	SAIT-LOK-R™ Part No.	Qty Per Box
2"	12,000	77250	77350	25
3"	8,500	77255	77355	10



## SAIT-Strip<sup>™</sup> Type 27

Size		Max	Part	Qty Per	
Dia.	Width	Bore	RPM	Number	Box
4-1/2	1/2	7/8	10,000	77230	4

# **SAIT-Strip™ Arbor Hole Discs**

- Fast, safe removal of surface contaminants
- Available in 4" x 1/4", 6" x 1/2", 8" x 1/2"

METAL Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel

	Size		Max	Part	Qty Per
Dia.	Width	Bore	RPM	Number	Box
4	1/2	1/4	6,000	77270	10
6	1/2	1/2	4,000	77275	5
8	1/2	1/2	3,000	77280	5



- Fast, safe removal of surface contaminants
- Available in SAIT-LOK<sup>™</sup>, SAIT-LOK-R<sup>™</sup>, Type 27, and spindle mounted wheels
- Excellent for cleaning welds, removing corrosion, rust, scaling, and blending
- Great for removing paints, varnishes and sealants from difficult to reach surfaces

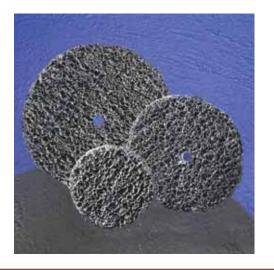
METAL Ferrous and/or non-ferrous metals

STAINLESS Stainless steel, high tensile steel



# SAIT-Strip<sup>™</sup> Spindle Mounted Wheel

	Size		Max	Part	Qty Per
Dia.	Width	Mandrel	RPM	Number	Box
3	1-Ply	1/4	10,000	77235	5
3	2-Ply	1/4	10,000	77240	5





- Constructed of large nylon filament, providing an open, non-loading surface
- Utilizes coarse silicon carbide grain for rapid removal of surface contaminants, while producing fine finishes

# Flap Brushes NON-WOVEN Pedestal Grinder

# Flap Brushes

- Capable of conforming to concave, flat, and irregular surfaces
- Creates matte and satin finishes without lines on work piece
- Excellent for blending, cleaning welds, and removing corrosion, rust, or scaling
- Excellent for grain, antique, and satin finishes, finishing aluminum extrusions, and applying an inline brushed finish on aluminum and stainless steel

**ALUMINUM** Aluminum, brass

**STAINLESS** Stainless steel





Size	Grade	Max RPM	Part No.	Qty Per Box
6 x 1 x 2	Medium	3,400	77325	3
	Very Fine	3,400	77327	3
8 x 1 x 3	Medium	3,200	77330	3
	Very Fine	3,200	77332	3



See page 146 for mounting flanges and reducing bushings



- Flexible, consistent face for ease of use
- Cool, smooth running for less operator fatigue
- Non-woven synthetic fiber impregnated with abrasive grain for surface conditioning without damage to or removal of base material. Resists loading and heat build-up



#### Medium Grade

- Medium surface conditioning material with either 60 or 80 grit coated abrasive material
- Excellent for removing heavy oxidation, blending, cleaning, and deburring

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel

METAL

Ferrous and non-ferrous materials

WOOD

Fiberglass

# **Very Fine Grade**

• Very fine surface conditioning material with either 120 or 180 grit coated abrasive material

· Excellent for grain finishing, satin finishing, and linear scratch patterns

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel

**METAL** 

Ferrous and non-ferrous materials

WOOD

Fiberglass



Size	Grit	Grade	Max RPM	Part No.	Qty Per Box
	60	Medium	15,000	77710	10
2 x 1 x 1/4	80	Medium	15,000	77712	10
	120	Very Fine	15,000	77714	10
	180	Very Fine	15,000	77716	10
	60	Medium	12,000	77730	10
3 x 1 x 1/4	80	Medium	12,000	77732	10
	120	Very Fine	12,000	77734	10
	180	Very Fine	12,000	77736	10
	60	Medium	12,000	77750	5
3 x 2 x 1/4	80	Medium	12,000	77752	5
	120	Very Fine	12,000	77754	5
	180	Very Fine	12,000	77756	5



- Interleaf flap wheels are constructed with alternating flaps of surface conditioning material and coated abrasive material for a high cut rate and a uniform scratch pattern. Provides blending action while leaving final finish on work piece
- Smear-resistant non-woven material for clean, smear-proof work surfaces
- Interleaf design makes product more aggressive than SAIT non-woven flap brushes and less aggressive than SAIT coated abrasive flap wheels



# **Unitized Type 27 Wheels**



Series 524-Soft Density, Medium Grade, Silicon Carbide Grain

• General purpose cleaning, finishing and polishing

#### Series 732-Medium Density, Fine Grade, Silicon Carbide Grain

- Light pressure for blending and finishing
- High edge durability
- High degree of stock removal, while maintaining bright finish

#### Series 811-Hard Density, Coarse Grade, Aluminum Oxide Grain

- Highest stock removal and edge breaking capability
- Most aggressive for deburring

#### Series 821-Hard Density, Medium Grade, Aluminum Oxide Grain

- Provides high stock removal, long life and productivity
- Very durable on edge

STAINLESS Stainless steel, high tensile steel

ALUMINUM Non-ferrous metals

METAL Ferrous metals

## **Unitized Type 27**

Size	Series	Grain	Density	Grade	Max RPM	Part No.	Qty Per Box
4-1/2 x 7/8	524	S/C	Soft	Medium	10,000	77875	4
4-1/2 x 7/8	732	S/C	Medium	Fine	10,000	77880	4
4-1/2 x 7/8	811	A/O	Hard	Coarse	10,000	77885	4
4-1/2 x 7/8	821	A/O	Hard	Medium	10,000	77890	4



# Sand-Light™ Flap Discs

- Durable material is suitable for surface preparation, cleaning, and finishing applications
- Contains more usable material yielding a longer disc life than conventional Sand-Light™ discs
- Layered flaps create a thicker, cushioned design which provides a better finish

METAL Ferrous metals

STAINLESS Stainless steel, high tensile steel

ALUMINUM Non-ferrous metals

Size	Grade	Color	Part No.	Qty Per Box
	Coarse	Brown	71980	5
4-1/2"	Medium	Maroon	71982	5
	Very Fine	Blue	71984	5
	Coarse	Brown	71990	5
5"	Medium	Maroon	71992	5
	Man Fina	Dluc	71001	



- Unitized Type 27 Wheels are constructed by bonding and compressing layers of non-woven material
- Unitized Type 27 Wheels are hot pressed to form a solid block from which wheels are cut
- Operate Sand-Light™ Flap Discs at a lower speed for optimum performance!



#### **Unitized Wheels**

#### Series 524 - Soft Density, Medium Grade, Silicon Carbide Grain

• General purpose cleaning, finishing and polishing

#### Series 532 - Soft Density, Fine Grade, Silicon Carbide Grain

- Requires light pressure for fine finishing and polishing
- Highly conformable material
- Provides clean, bright surface on stainless steel
- Finer finish than the 524 series

#### Series 632 - Medium Density, Fine Grade, Silicon Carbide Grain

- Requires light pressure for fine finishing and polishing
- Highly conformable material
- Provides clean bright stainless steel finishes, blends tool marks, and removes slight surface imperfections

#### Series 731- Medium Density, Fine Grade, Aluminum Oxide Grain

- · Light pressure for blending and finishing
- High edge durability
- High degree of stock removal, while maintaining bright finish
- Smaller contact area than the 632 series

#### Series 811- Hard Density, Coarse Grade, Aluminum Oxide Grain

- Highest stock removal and edge breaking capability
- Most aggressive for deburring

#### Series 821- Hard Density, Medium Grade, Aluminum Oxide Grain

- Provides high stock removal, long life and productivity
- Very durable on edge

STAINLESS Stainless steel, high tensile steel

**ALUMINUM** Aluminum

METAL Ferrous and/or non-ferrous metals



#### **Unitized Wheels**

Size	Series	Grain	Density	Grade	Max RPM	Part No.	Qty Per Box	Mandrel Part No.
1 x 1 x 3/16	821	A/O	Hard	Medium	30,000	77830	10	95240
3 x 1/2 x 1/4	821	A/O	Hard	Medium	18,000	77835	10	95002
3 x 1/4 x 1/4	524	S/C	Soft	Medium	18,000	77840	10	95002
3 x 1/4 x 1/4	532	S/C	Soft	Fine	18,000	77845	10	95002
3 x 1/4 x 1/4	632	S/C	Medium	Fine	18,000	77850	10	95002
3 x 1/4 x 1/4	731	A/O	Medium	Fine	18,000	77855	10	95002
3 x 1/4 x 1/4	811	A/O	Hard	Coarse	18,000	77860	10	95002
3 x 1/4 x 1/4	821	A/O	Hard	Medium	18,000	77865	10	95002



- Constructed by bonding and compressing layers of non-woven material
- Hot pressed to form a solid block from which wheels are cut



# **Deburring 8SF-Medium Density**

- Excellent starting point for general purpose deburring, blending, and weld polishing
- Silicon carbide grain for fast cut rate and finest finish
- Comparable to competitive 8SF products

Ferrous and non-ferrous materials

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel, high tensile materials

# **Deburring 9SF-Hard Density**

- Excellent for aggressive deburring, blending
- Silicon carbide grain for fast cut rate and finest finish
- Comparable to competitive 9SF products

Ferrous and non-ferrous materials METAL

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel, high tensile materials



#### NOTE: Wheels must be run in the direction of the arrow as indicated on the wheel.

Size	Spec.	Density	Grain	Grade	Max RPM	Part No.	Qty Per Box
6 x 1/2 x 1	9SF	Hard	Silicon Carbide	Fine	6,000	77810	4
6 x 1 x 1	8SF	Medium	Silicon Carbide	Fine	6,000	77815	3
6 x 1 x 1	9SF	Hard	Silicon Carbide	Fine	6,000	77820	3
8 x 1 x 3	9SF	Hard	Silicon Carbide	Fine	4,500	77825	3



See page 146 for mounting flanges and reducing bushings





- Convolute wheels are constructed by wrapping non-woven nylon, impregnated with abrasive grains, around a hard core to form a homogenous wheel
- Dense, non-woven construction for long lasting wear and high edge durability
- Smooth running for less operator fatigue
- Non-metallic for no workpiece contamination
- Smear-resistant formulation to greatly reduce the possibility of smearing
- · Provides best durability, stock removal, and finest finish for increased productivity

# NON-WOVEN



# Sand-Light™ Blending Discs

- · For minor finishing and blending applications
- Less aggressive cutting than traditional surface conditioning discs (pg 117-118)
- Great for final finishing prior to buffing with compounds

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel

**METAL** Ferrous and non-ferrous materials

Available in SAIT-LOK™, Hook and Loop, and arbor hole discs

#### **Packaging**

SAIT-LOK<sup>™</sup> 2" 50/box 3" 25/box Hook and Loop 10/box Arbor Hole 10/box



Size	Grade	Arbor Hole Part No.	Qty Per Box	
6 x 1/2	Medium	77162	10	
	Very Fine	77165	10	
8 x 1/2	Medium	77182	10	
	Veny Fine	77185	10	

## Medium

- General purpose
- Excellent for light deburring, cleaning and polishing

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel

**METAL** Ferrous and non-ferrous materials

# **Very Fine**

• Excellent for blending and final finishing

**ALUMINUM** Aluminum

**STAINLESS** Stainless steel

METAL Ferrous and non-ferrous materials



Size	Grade	SAIT-LOK™ Part No.	Qty Per Box
2" Thick	Medium	77672	50
	Very Fine	77675	50
3" Thick	Medium	77682	25
	Very Fine	77685	25

Size	Grade	Hook & Loop Part No.	Qty Per Box
5" Thick	Medium	77382	10
	Very Fine	77385	10
6" Thick	Medium	77392	10
	Very Fine	77395	10

See page 143 for backing pads



- Use the Medium grade for light finishing after using surface conditioning discs
- Use the Very Fine grade followed by the SAIT Buffing Discs and compounds for a near mirror finish
- Use the slowest speed possible for optimum results

# Buiting Dises Dise Sander Angle Orinder Portable Orinder

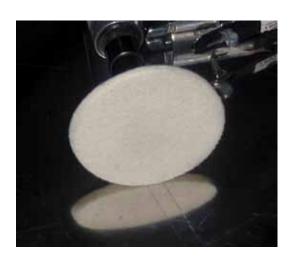
# NON-WOVE

# **Buffing Discs**

- Premium quality buffing material
- · Designed for final cosmetic finishing
- Available in hook and loop and SAIT-LOK-R™

STAINLESS Stainless steel and other high tensile alloys

**ALUMINUM** Aluminum, brass and other non-ferrous metals





Size	SAIT-LOK-R™ Part No.	Hook & Loop Part No.	Qty Per Box
2"	41012	-	50
3"	41013	-	25
5"	-	41055	10
7"	-	41057	10

See page 143 and 146 for backing pads

# **Compound Kit**

The compound kit contains the following:

Brown Bar: Used for buffing aluminum, brass, copper, wood,

plastics, hard rubber, and painted surfaces.

Also called tripoli rouge.

White Bar: Used for buffing stainless steel, carbon steel, nickel,

aluminum, and chromium to a high luster shine.

Red Bar: For buffing precious metals like gold, silver, platinum,

> sterling, and other high-end metals. Can also be used to further enhance materials that have already been buffed

with other compounds. The finest grade.

Black Bar: Used to buff contaminants out prior to finishing. Will

remove rust, stains, scale, and other contaminants. An

extremely fast cutting material. Also called emery cake.

Individual bars are also available.



Description	Part No.	Qty Per Box
Buffing Compound Kit	41000	1
Brown Bar	41024	1
White Bar	41022	1
Red Bar	41020	1
Black Bar	41026	1



- To achieve the best finish possible, use with the soft backing pads (part numbers 95255 & 95257) and the compound kit (part number 41000)
- In general, a slower speed achieves a better finish and reduces heat
- For use on right angle grinder, D/A (dual action) sanders, and right angle air grinders

# WIRE BRUSHES INTRODUCTION



United Abrasives' brushes consist of only the highest grade industrial tempered wire and state-of-the-art construction, designed for off-hand equipment. The various styles cover a multitude of applications.



#### **Features and Benefits**

Brushes are available in a variety of wire types. The proper brush for the application should be selected based on the characteristics of the brush, including wire type. All BlueLine™ packaging is one piece per package.

Knot wire brushes provide high impact action and offer low to medium flexibility through the use of twisted wire tufts for heavy duty applications, such as weld cleaning. Knot wire brushes are available in 2 knot configurations.

**Crimped wire brushes** are general purpose brushes that provide higher flexibility and cleaning action through the use of flexible wire points. They offer a wider work face than knot style and are ideal for light applications such as rust or paint removal.



Flag at end of wire tuft provides additional brush flexibility for irregular surface preparation.



Extremely narrow tufted face is ideal for bead weld preparation.



Flexible wire points provide cleaning action for light applications.

#### Wire Size Specifications

The thickness of brush wire will impact the end result of the workpiece. Fine wire such as .008 will produce a finer finish and will yield a longer brush life. Thicker wires, such as .014 and .020 or higher, will be more aggressive and will decrease production times.

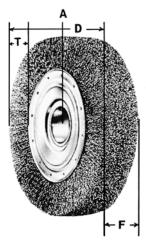
#### **Brush Fill Materials**

**Carbon** is a soft steel wire that can be used for lighter, general purpose brushing jobs. This is the most common wire brush material used.

**Type 302 Stainless Steel Wire** offers a long brush life and is resistant to corrosion. Type 302 stainless should be used when "after rust" or contamination is a problem such as on aluminum, stainless steel, or other high tensile alloys. "After rust" occurs when these alloys are brushed with other types of wire.



# WIRE BRUSHES INTRODUCTION



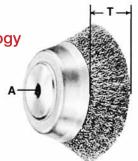
### Common Brush Terminology

A = Arbor Hole

D = Brush Diameter

F = Face Width

T = Trim Length



#### **Application Information**

- Always check warning labels for safety information
- Always follow safety guidelines included with each brush package
- Proper application of wire brushes is for the removal of various surface contaminants, not the removal of the base stock material
- The power tool determines the size and speed of the brush to be used
- Check the R.P.M. rating of the tool to verify that it does not exceed the Maximum Safe Free Speed (M.S.F.S.) of the brush
- The slowest speed that will do the job is the most efficient use of the brush. Running at the M.S.F.S. is not necessarily the most efficient speed
- The tool shaft must match the arbor hole of the brush
- The tips of wire at the end of the brush do the work. Excessive pressure will cause premature wire breakage, reduced brush life, increased heat build-up and rapid dulling

#### **Power Brush Safety Requirements**

- **1. Safety Goggles:** Safety goggles, or full face shields worn over safety glasses with side shields, MUST BE WORN by all OPERATORS and OTHERS IN THE AREA OF POWER BRUSH OPERATIONS. Comply with the requirements of ANSI Z87.1 ("Occupational Eye and Face Protection").
- 2. Guards: Keep all machine guards in place.
- **3. Speeds:** Observe all speed restrictions indicated on the brushes, containers, labels, or printed in pertinent literature. "MSFS" or "MAX.SFS" means Maximum Safe Free Speed (R.P.M.) spinning free with no work applied. For reasons of safety, the "MSFS/MAX.SFS" should not be exceeded under any circumstances.
- **4. Safety Standard:** Comply with the safety standards of the American National Standards Institute, ANSI B165.1 and ANSI B165.2 "Safety Requirements Power Brushes."
- **5. Protective Equipment:** Appropriate protective clothing and equipment (such as full face shield, gloves, respirator, etc.) must be used where a possibility of injury exists that can be prevented by such equipment.
- 6. Before starting brush: Use eye protection and safety equipment. Inspect brush for rust, damage, speed limit, etc. If no-load speed marked on the power tool is higher than the brush speed limit, <u>do not</u> mount brush. Inspect and jog machine to assure the brush is mounted properly and securely, machine guards are in place, no vibration, etc. Run machine at operating speed for at least one minute before applying work. DO NOT STAND IN FRONT OF OR IN LINE WITH BRUSH.

All United Abrasives brushes comply with the standards of the American Brush Manufacturers' Association, the American National Standards Institute, and the Canadian Standard Association Safety Code.



#### **Bench Wire Wheels**

- Dense, compact crimped steel wire brush face
- May be stacked to achieve wider work face
- Primary application: For general scale removal, cleaning and surface preparation
- Standard 2" arbor, with adaptor to listed arbor
- Includes bushing pairs to adapt to variety of arbors

#### Additional arbors available

Part No.	Size
95201	2 x 1/2
95203	2 x 5/8
95204	2 x 3/4
95206	2 x 1
95207	2 x 1-1/4

<sup>\*\*\*\*</sup> not available for part number 09558 and 09555



#### Packaging

Standard industrial packaging or Blue Line<sup>™</sup> point of sale display packaging

					INDUSTI	RIAL	BLUE LINE™	
	Size		Face	Trim	Max	Part	Std	Part
Dia.	Wire	Arbor	Width	Length	RPM	No.	Pkg	No.
6	.014	5/8, 1/2	Wide	1-1/16"	6,000	09557	1	06557
6	.014	5/8, 1/2	Narrow	1-3/16"	6,000	09558*	*** 1	06558
6	.008	5/8, 1/2	Narrow	1-1/16"	6,000	09555*	*** 1	06555
7	.014	5/8	Wide	1-9/16"	6,000	09559	1	06559
8	.014	5/8	Wide	1-1/2"	4,000	01411	1	06556
10	.014	3/4	Wide	2"	3,600	09560	1	-

Note: Wide 1" Narrow 1/2

# **Large Cup Brushes**

- Available in the following wire types:
  - Knot wire for low to medium flexibility and aggressive cutting action
  - Crimped wire which has higher flexibility for light cleaning and removal, especially on irregular surfaces
- Primary application: For fast cleaning of large surfaces

#### Knot Wire - nut inside

						INDUSTRIAL		BLUE LINE™
	Size			Trim	Max	Part	Std	Part
Dia.	Wire	Arbor	Rows	Length	RPM	No.	Pkg	No.
4	.020	5/8-11	1	1-3/8"	9,000	03407**	· 1	06407
4	.020	5/8-11	1	Stainless*	9,000	03406**	* 1	06406
6	.020	5/8-11	1	1-3/4"	6,600	03409**	* 1	06409
6	.035	5/8-11	1	1-3/4"	6,600	03410**	* 1	06410
6	.020	5/8-11	2	1-3/4"	6,000	03411**	* 1	06411
6	.035	5/8-11	2	1-3/4"	6,000	03412**	* 1	06412
6	020	5/8-11	1	Stainless*	6 600	03413**	* 1	_

#### **Crimped Wire - nut inside**

Ī	4	.020	5/8-11	-	1-1/8"	9,000	09551	1	06551
	5	.020	5/8-11	-	1-1/2"	8,000	09552	1	-
	5	.020	5/8-11	Stainless*	1-1/2"	8,000	09554	1	06554
	6	020	5/8-11	_	1-1/2"	6 600	09553	1	06553



#### Packaging

Standard industrial packaging or Blue Line™ point of sale display packaging

- \* 302 stainless steel wire used
- \*\* nut on outside
- \*\*\*nut on outside in Canada only



# **Small Cup Brushes**

- For use on small grinders
- Available in the following wire types:
  - Knot wire for low to medium flexibility and aggressive cutting action
  - Crimped carbon steel wire for light cleaning and where greater flexibility is required
  - Stainless steel knot wire for use on stainless, aluminum, and high strength alloys
- Variety of threaded arbors available

#### Packaging

Standard industrial packaging or Blue Line™ point of sale display packaging

\*302 stainless steel wire used



Size         Wire         Matl         Max         Part         Std         Part           Dia.         Wire         Arbor         Style         Type         RPM         No.         Pkg         No.           2-3/4         .014         5/8-11         Knot         Carbon         14,000         03414         6         06414           2-3/4         .014         M10 x 1.25         Knot         Carbon         14,000         03416         6         06416           2-3/4         .014         M10 x 1.5         Knot         Carbon         14,000         03418         6         06417           2-3/4         .014         1/2-13         Knot         Carbon         14,000         03418         6         06418           2-3/4         .020         5/8-11         Knot         Carbon         14,000         03501         6         06501           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06502           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         M10 x 1.25							INDUST	BIVI	BLUE LINE™
Dia.         Wire         Arbor         Style         Type         RPM         No.         Pkg         No.           2-3/4         .014         5/8-11         Knot         Carbon         14,000         03414         6         06414           2-3/4         .014         M10 x 1.25         Knot         Carbon         14,000         03416         6         06415           2-3/4         .014         M10 x 1.5         Knot         Carbon         14,000         03416         6         06416           2-3/4         .014         M10 x 1.5         Knot         Carbon         14,000         03418         6         06418           2-3/4         .020         5/8-11         Knot         Carbon         14,000         03501         6         06501           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06502           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03423         6         06429           2-		0:		\A/*				_	_
2-3/4				_					
2-3/4         .014         M14 x 2.0         Knot         Carbon         14,000         03415         6         06415           2-3/4         .014         M10 x 1.25         Knot         Carbon         14,000         03416         6         06416           2-3/4         .014         M10 x 1.5         Knot         Carbon         14,000         03417         6         06417           2-3/4         .014         1/2-13         Knot         Carbon         14,000         03418         6         06418           2-3/4         .020         5/8-11         Knot         Carbon         14,000         03501         6         06501           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03502         6         06503           2-3/4         .020         M10 x 1.5         Knot         Carbon         14,000         03503         6         06504           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03422         6         -	Dia.	Wire	Arbor	Style	Type	RPM	No.	Pkg	No.
2-3/4         .014         M10 x 1.25         Knot         Carbon         14,000         03416         6         06416           2-3/4         .014         M10 x 1.5         Knot         Carbon         14,000         03417         6         06417           2-3/4         .014         1/2-13         Knot         Carbon         14,000         03418         6         06418           2-3/4         .020         5/8-11         Knot         Carbon         14,000         03501         6         06501           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         M10 x 1.5         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         1/2-13         Knot         Carbon         14,000         03503         6         06504           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03422         6         -	2-3/4	.014	5/8-11	Knot	Carbon	14,000	03414	6	06414
2-3/4         .014         M10 x 1.5         Knot         Carbon         14,000         03417         6         06417           2-3/4         .014         1/2-13         Knot         Carbon         14,000         03418         6         06418           2-3/4         .020         5/8-11         Knot         Carbon         14,000         03501         6         06501           2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         M10 x 1.5         Knot         Carbon         14,000         03504         6         06504           2-3/4         .020         1/2-13         Knot         Carbon         14,000         03505         6         06505           2-3/4         .014         5/8-11         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M14 x 2.0         Knot         Stainless*         14,000         03423         6         06423           2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03420         6         06421	2-3/4	.014	M14 x 2.0	Knot	Carbon	14,000	03415	6	06415
2-3/4         .014         1/2-13         Knot         Carbon         14,000         03418         6         06418           2-3/4         .020         5/8-11         Knot         Carbon         14,000         03501         6         06501           2-3/4         .020         M14 x 2.0         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         M10 x 1.5         Knot         Carbon         14,000         03504         6         06504           2-3/4         .020         1/2-13         Knot         Carbon         14,000         03505         6         06505           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M14 x 2.0         Knot         Stainless*         14,000         03423         6         06423           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03421         6         -           2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03506         6         06421			M10 x 1.25	Knot	Carbon	14,000	03416		06416
2-3/4 .020 5/8-11 Knot Carbon 14,000 03501 6 06501 2-3/4 .020 M14 x 2.0 Knot Carbon 14,000 03502 6 06502 2-3/4 .020 M10 x 1.25 Knot Carbon 14,000 03503 6 06503 2-3/4 .020 M10 x 1.5 Knot Carbon 14,000 03504 6 06504 2-3/4 .020 1/2-13 Knot Carbon 14,000 03504 6 06505 2-3/4 .014 5/8-11 Knot Stainless* 14,000 03419 6 06419 2-3/4 .014 M14 x 2.0 Knot Stainless* 14,000 03423 6 06423 2-3/4 .014 M10 x 1.25 Knot Stainless* 14,000 03422 6 - 2-3/4 .014 M10 x 1.5 Knot Stainless* 14,000 03422 6 - 2-3/4 .014 M10 x 1.5 Knot Stainless* 14,000 03421 6 06421 2-3/4 .014 M10 x 1.5 Knot Stainless* 14,000 03420 6 06420 2-3/4 .014 1/2-13 Knot Stainless* 14,000 03506 6 06506 2-3/4 .020 5/8-11 Knot Stainless* 14,000 03506 6 06506 2-3/4 .020 M14 x 2.0 Knot Stainless* 14,000 03508 6 - 2-3/4 .020 M10 x 1.25 Knot Stainless* 14,000 03508 6 - 2-3/4 .020 M10 x 1.5 Knot Stainless* 14,000 03508 6 - 2-3/4 .020 M10 x 1.5 Knot Stainless* 14,000 03508 6 - 2-3/4 .020 M10 x 1.5 Knot Stainless* 14,000 03508 6 - 2-3/4 .020 M10 x 1.5 Knot Stainless* 14,000 03508 6 - 2-3/4 .020 M10 x 1.5 Knot Stainless* 14,000 03509 6 06509 2-3/4 .020 M10 x 1.5 Knot Stainless* 14,000 03509 6 06509 2-3/4 .014 M14 x 2.0 Crimped Carbon 14,000 01401 6 06401 2-3/4 .014 M10 x 1.5 Crimped Carbon 14,000 01401 6 06401 2-3/4 .014 M10 x 1.5 Crimped Carbon 14,000 01404 6 06402 2-3/4 .014 M10 x 1.5 Crimped Carbon 14,000 01402 6 06402 2-3/4 .014 M10 x 1.5 Crimped Carbon 14,000 01408 6 06408 3-1/2 .020 5/8-11 Knot Carbon 12,500 03511 1 06511 3-1/2 .020 5/8-11 Knot Stainless* 12,500 03513 1 06513	2-3/4	.014	M10 x 1.5	Knot	Carbon	14,000	03417	6	06417
2-3/4					Carbon	14,000			
2-3/4         .020         M10 x 1.25         Knot         Carbon         14,000         03503         6         06503           2-3/4         .020         M10 x 1.5         Knot         Carbon         14,000         03504         6         06504           2-3/4         .020         1/2-13         Knot         Carbon         14,000         03505         6         06505           2-3/4         .014         5/8-11         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03423         6         06423           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03421         6         06421           2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03420         6         06420           2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         - <td>2-3/4</td> <td>.020</td> <td>5/8-11</td> <td>Knot</td> <td>Carbon</td> <td>14,000</td> <td>03501</td> <td>6</td> <td>06501</td>	2-3/4	.020	5/8-11	Knot	Carbon	14,000	03501	6	06501
2-3/4         .020         M10 x 1.5         Knot         Carbon         14,000         03504         6         06504           2-3/4         .020         1/2-13         Knot         Carbon         14,000         03505         6         06505           2-3/4         .014         5/8-11         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03423         6         06423           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03422         6         -           2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03421         6         06421           2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509	2-3/4	.020	M14 x 2.0	Knot	Carbon	14,000	03502	6	06502
2-3/4         .020         1/2-13         Knot         Carbon         14,000         03505         6         06505           2-3/4         .014         5/8-11         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M14 x 2.0         Knot         Stainless*         14,000         03423         6         06423           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03422         6         -           2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03421         6         06421           2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03420         6         06420           2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509 </td <td>2-3/4</td> <td>.020</td> <td>M10 x 1.25</td> <td>Knot</td> <td>Carbon</td> <td>14,000</td> <td>03503</td> <td>6</td> <td>06503</td>	2-3/4	.020	M10 x 1.25	Knot	Carbon	14,000	03503	6	06503
2-3/4         .014         5/8-11         Knot         Stainless*         14,000         03419         6         06419           2-3/4         .014         M14 x 2.0         Knot         Stainless*         14,000         03423         6         06423           2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03422         6         -           2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03421         6         06421           2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03420         6         06420           2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509	2-3/4	.020	M10 x 1.5	Knot	Carbon	14,000	03504	6	06504
2-3/4	2-3/4	.020	1/2-13	Knot	Carbon	14,000	03505	6	06505
2-3/4         .014         M10 x 1.25         Knot         Stainless*         14,000         03422         6         -           2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03421         6         06421           2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03420         6         06420           2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401	2-3/4		5/8-11	Knot	Stainless*	14,000	03419	6	06419
2-3/4         .014         M10 x 1.5         Knot         Stainless*         14,000         03421         6         06421           2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03420         6         06420           2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M14 x 2.0         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06402	2-3/4	.014	M14 x 2.0	Knot	Stainless*	14,000	03423	6	06423
2-3/4         .014         1/2-13         Knot         Stainless*         14,000         03420         6         06420           2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M14 x 2.0         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403	2-3/4	.014	M10 x 1.25	Knot	Stainless*	14,000	03422	6	-
2-3/4         .020         5/8-11         Knot         Stainless*         14,000         03506         6         06506           2-3/4         .020         M14 x 2.0         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06405           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01404         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402	2-3/4	.014	M10 x 1.5	Knot	Stainless*	14,000	03421	6	06421
2-3/4         .020         M14 x 2.0         Knot         Stainless*         14,000         03507         6         06507           2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06405           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01404         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01403         6         06402           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01402         6         06402	2-3/4	.014	1/2-13	Knot	Stainless*	14,000	03420	6	06420
2-3/4         .020         M10 x 1.25         Knot         Stainless*         14,000         03508         6         -           2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01404         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01403         6         06402           2-3/4         .014         5/8-11         Crimped         Stainless*         14,000         01402         6         06402           2-3/4         .014         5/8-11         Knot         Carbon         12,500         03511         1         06511 </td <td>2-3/4</td> <td>.020</td> <td>5/8-11</td> <td>Knot</td> <td>Stainless*</td> <td>14,000</td> <td>03506</td> <td>6</td> <td>06506</td>	2-3/4	.020	5/8-11	Knot	Stainless*	14,000	03506	6	06506
2-3/4         .020         M10 x 1.5         Knot         Stainless*         14,000         03509         6         06509           2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Knot         Carbon         12,500         03511         1         06511           3-1/2         .020         5/8-11         Knot         Stainless*         12,500         03512         1         06512	2-3/4	.020	M14 x 2.0	Knot	Stainless*	14,000	03507	6	06507
2-3/4         .020         1/2-13         Knot         Stainless*         14,000         03510         6         06510           2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M14 x 2.0         Crimped         Carbon         14,000         01405         6         06405           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped         Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot         Carbon         12,500         03511         1         06512           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03513         1         06513 <td>2-3/4</td> <td>.020</td> <td>M10 x 1.25</td> <td>Knot</td> <td>Stainless*</td> <td>14,000</td> <td>03508</td> <td>6</td> <td>-</td>	2-3/4	.020	M10 x 1.25	Knot	Stainless*	14,000	03508	6	-
2-3/4         .014         5/8-11         Crimped         Carbon         14,000         01401         6         06401           2-3/4         .014         M14 x 2.0         Crimped         Carbon         14,000         01405         6         06405           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped         Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot         Carbon         12,500         03511         1         06512           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03513         1         06513	2-3/4	.020	M10 x 1.5	Knot	Stainless*	14,000	03509	6	06509
2-3/4         .014         M14 x 2.0         Crimped         Carbon         14,000         01405         6         06405           2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped         Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot         Carbon         12,500         03511         1         06511           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03512         1         06512           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03513         1         06513	2-3/4	.020	1/2-13	Knot	Stainless*	14,000	03510	6	06510
2-3/4         .014         M10 x 1.25         Crimped         Carbon         14,000         01404         6         06404           2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped         Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot         Carbon         12,500         03511         1         06512           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03513         1         06513	2-3/4	.014	5/8-11	Crimped	Carbon	14,000	01401	6	06401
2-3/4         .014         M10 x 1.5         Crimped         Carbon         14,000         01403         6         06403           2-3/4         .014         1/2-13         Crimped         Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped         Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot         Carbon         12,500         03511         1         06511           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03512         1         06513	2-3/4	.014	M14 x 2.0	Crimped	Carbon	14,000	01405	6	06405
2-3/4         .014         1/2-13         Crimped Carbon         14,000         01402         6         06402           2-3/4         .014         5/8-11         Crimped Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot Carbon         12,500         03511         1         06511           3-1/2         .020         5/8-11         Knot Stainless*         12,500         03512         1         06512           3-1/2         .014         5/8-11         Crimped Carbon         12,500         03513         1         06513	2-3/4	.014	M10 x 1.25	Crimped	Carbon	14,000	01404	6	06404
2-3/4         .014         5/8-11         Crimped Stainless*         14,000         01408         6         06408           3-1/2         .020         5/8-11         Knot         Carbon         12,500         03511         1         06511           3-1/2         .020         5/8-11         Knot         Stainless*         12,500         03512         1         06512           3-1/2         .014         5/8-11         Crimped         Carbon         12,500         03513         1         06513	2-3/4	.014	M10 x 1.5	Crimped	Carbon	14,000	01403	6	06403
3-1/2 .020 5/8-11 Knot Carbon 12,500 03511 1 06511 3-1/2 .020 5/8-11 Knot Stainless* 12,500 03512 1 06512 3-1/2 .014 5/8-11 Crimped Carbon 12,500 03513 1 06513	2-3/4	.014	1/2-13	Crimped	Carbon	14,000	01402	6	06402
3-1/2 .020 5/8-11 Knot Stainless* 12,500 03512 1 06512 3-1/2 .014 5/8-11 Crimped Carbon 12,500 03513 1 06513	2-3/4	.014	5/8-11	Crimped	Stainless*	14,000	01408	6	06408
3-1/2 .014 5/8-11 Crimped Carbon 12,500 03513 1 06513	3-1/2	.020	5/8-11	Knot	Carbon	12,500	03511	1	06511
	3-1/2	.020	5/8-11	Knot	Stainless*	12,500	03512	1	06512
3-1/2 .014 5/8-11 Crimped Stainless* 12,500 03514 1 06514	3-1/2	.014	5/8-11	Crimped	Carbon	12,500	03513	1	06513
	3-1/2	.014	5/8-11	Crimped	Stainless*	12,500	03514	1	06514





**Regular Twist** 

# **Knot & Crimped Wire Wheels**

- For use on small grinders
- Available in the following wire types:
  - Regular twist covers more surface area in a single pass
  - Stringer bead twist excellent for welds, flux removal and where a narrow work face is required
  - Crimped carbon steel wire provides flexibility and a wider work face than knot style
  - Stainless steel wire for use on stainless, aluminum, and high strength alloys
- Variety of threaded arbors available

#### Packaging

Standard industrial packaging or Blue Line™ point of sale display packaging

\*302 stainless steel wire used

				INDUST	RIAL	BLUE LINE™	
	Size		Matl	Max	Part	Std	Part
Dia.	Wire	Arbor	Туре	RPM	No.	Pkg	No.
4	.014	5/8-11	Carbon	20,000	03426	6	06426
4	.014	M14 x 2.0	Carbon	20,000	03427	6	06427
4	.014	M10 x 1.25	Carbon	20,000	03428	6	06428
4	.014	M10 x 1.5	Carbon	20,000	03429	6	06429
4	.014	1/2-13	Carbon	20,000	03430	6	06430
4	.020	5/8-11	Carbon	20,000	03460	6	06460
4	.014	5/8-11	Stainless*	20,000	03431	6	06431
4	.014	M14 x 2.0	Stainless*	20,000	03435	6	06435
4	.014	M10 x 1.25	Stainless*	20,000	03434	6	06434
4	.014	M10 x 1.5	Stainless*	20,000	03433	6	06433
4	.014	1/2-13	Stainless*	20,000	03432	6	06432
4	.020	5/8-11	Stainless*	20,000	03461	6	06461
6	.025	5/8-11	Carbon	9,000	03385	3	06385
tring	er Be	ad / Pipe	eline				
4	.020	5/8-11	Carbon	20,000	03440	6	06440
4	.020	M14 x 2.0	Carbon	20,000	03441	6	06441
4	.020	M10 x 1.25	Carbon	20,000	03442	6	-
4	.020	M10 x 1.5	Carbon	20,000	03443	6	06443
4	.020	1/2-13	Carbon	20,000	03444	6	06444
4	.020	5/8-11	Stainless*	20,000	03445	6	06445
4	.020	M14 x 2.0	Stainless*	20,000	03446	6	06446
4	.020	M10 x 1.25	Stainless*	20,000	03447	6	-
4	.020	M10 x 1.5	Stainless*	20,000	03448	6	-
4	.020	1/2-13	Stainless*	20,000	03449	6	-
5	.020	5/8-11	SB-Carbon	12,000	03380	6	06380
5	.020	M14 x 2.0	Carbon	12,000	03381	6	06381
5	.020		SB-Stainless*	12,000	03382	6	06382
6	.020	5/8-11	SB-Stainless*	12,000	03383	6	06383
6	.020	5/8-11	SB-Carbon	12,000	03384	6	06384
6-1/2	020		SB-Stainless*	· ·	03389	6	06389
6-1/2	020	5/8-11	SB-Carbon	9,000	03391	6	06391
rimp	ed						
4	.014	5/8-11	Carbon	12,500	03450	6	06450
4	.014	M14 x 2.0	Carbon	12,500	03451	6	06451
4	.014	M10 x 1.25	Carbon	12,500	03452	6	06452
4	.014	M10 x 1.5	Carbon	12,500	03453	6	06453
4	.014	1/2-13	Carbon	12,500	03454	6	06454
7	.017	1/2 10	Jarbon	12,000	30707	U	00707





#### **Packaging**

Standard industrial packaging or Blue Line™ point of sale display packaging

\*302 stainless steel wire used

#### **Knot Wire Wheels**

- Can be used on portable power tools
- Available in the following wire types:
  - Knot wire for low to medium flexibility and aggressive cutting action
  - Stainless steel wire for use on stainless, aluminum, and high strength alloys
- Primary application: Cleaning, deburring, and scale removal

					INDUST	RIAL	BLUE LINE™
	Size		Matl	Max	Part	Std	Part
Dia.	Wire	Arbor	Туре	RPM	No.	Pkg	No.
3	.014	3/8	Carbon	25,000	03377	4	06377
3	.014	1/2, 3/8	Stainless*	25,000	03376	4	06376
4	.014	1/2	Carbon	20,000	03378	4	06378
5	.020	5/8-11	Carbon	12,000	03373	1	06373
5	.020	5/8-11	Stainless*	12,000	03374	1	06374
6	.020	5/8, 1/2	Carbon	9,000	03386	1	06386
6	.020	5/8-11	Carbon	9,000	03388	1	06388
6	.016	5/8, 1/2	Stainless*	9,000	03387	1	06387



#### **Packaging**

Standard industrial packaging or Blue Line™ point of sale display packaging

\*302 stainless steel wire used

# **Pipeline Brushes**

- Excellent for use in the pipeline industry
- Available in the following wire types:
  - Knot wire provides aggressive action in the removal of bead scale, weld flash, or splatter
  - Regular twist and stringer bead twist for higher impact action
  - Stainless steel wire available in stringer bead twist for use on stainless, aluminum, and high strength alloys
- Primary application: Cleaning, deburring, and scale removal

					INDUST	RIAL	BLUE LINE™
	Size		Matl	Max	Part	Std	Part
Dia.	Wire	Arbor	Type	RPM	No.	Pkg	No.
4	.020	5/8-11	Carbon	20,000	03440	6	06440
4	.020	M14 x 2.0	Carbon	20,000	03441	6	06441
4	.020	M10 x 1.25	Carbon	20,000	03442	6	-
4	.020	M10 x 1.5	Carbon	20,000	03443	6	06443
4	.020	1/2-13	Carbon	20,000	03444	6	06444
4	.020	5/8-11	Stainless*	20,000	03445	6	06445
4	.020	M14 x 2.0	Stainless*	20,000	03446	6	06446
4	.020	M10 x 1.25	Stainless*	20,000	03447	6	=
4	.020	M10 x 1.5	Stainless*	20,000	03448	6	-
4	.020	1/2-13	Stainless*	20,000	03449	6	-
5	.020	5/8-11	SB-Carbon	12,000	03380	6	06380
5	.020	M14 x 2.0	Carbon	12,000	03381	6	06381
5	.020	5/8-11	SB-Stainless*	12,000	03382	6	06382
6	.020	5/8-11	SB-Stainless*	12,000	03383	6	06383
6	.020	5/8-11	SB-Carbon	12,000	03384	6	06384
6	.025	5/8-11	Carbon	9,000	03385	6	06385
6-1/2	020	5/8-11	SB-Stainless*	9,000	03389	6	06389
6-1/2	020	5/8-11	SB-Carbon	9,000	03391	6	06391





## **Joint Brushes**

- For use on street saws
- Primary application: Cleaning concrete expansion joints

#### **Packaging**

1 brush per package

	Dia.	Wire Size	Description	Max RPM	Part No.	Std Pkg
•	12"	.035	Joint Brush 1" Arbor, 7/16 Pinhole	6.000	09570	1

#### **End Brushes**

- For use on portable power tools
- Excellent for use in cleaning and finishing recessed areas or pipes
- Available in the following wire types:
  - Knot wire provides aggressive cutting action
  - Circular flared end brush excellent for side cleaning action
  - Crimped wire for high flexibility
- 1/4" shank diameter

#### **Packaging**

Standard industrial packaging or Blue Line™ point of sale display packaging

\*302 stainless steel wire used



						INDUSTRIAL		BLUE LINE™
Siz	ze	Wire	Trim	Overall	Max	Part	Std	Part
Dia.	Wire	Style	Length	Length	RPM	No.	Pkg	No.
1	.020	Knot Type	1	2-5/8	22,000	02701	12	06701
1	.020	Crimped Wire	1	2-5/8	22,000	02709	12	06709
1	.020	SS-Knot*	1	2-5/8	22,000	02704	12	06704
3/4	.014	Crimped Wire	1	2-5/8	22,000	02702	12	06702
3/4	.014	Knot Type	1-1/8	2-5/8	22,000	02703	12	06703
1-1/2	.012	Circ. Flared Crimped	5/16	1-3/4	20,000	02710	12	06710
2-1/2	.014	Circ. Flared	11/16	1-3/4	20,000	02705	12	06705
2	.014	Crimped Wire Wheel	7/16	1-1/4	25,000	02712	12	06712
3	.014	Circ. Flared Crimped*	7/8	1-3/4	20,000	02711	12	06711
3	.014	Crimped Wire Wheel	15/16	1-1/4	25,000	02713	12	06713
3	.014	Crimped Wire Wheel*	15/16	1-1/4	25,000	02714	12	06714



#### **Scratch Brushes**

- Excellent for light scale removal
- Available in the following wire types:
  - Carbon steel wire for general purpose cleaning
  - Stainless steel wire is carbon free
  - Brass wire for general purpose cleaning
- Primary application: Maintenance cleaning

<sup>\*</sup>Stainless steel wire used

Size	Wire	_	Part	Std
Rows	Size	Туре	No.	Pkg
3 x 19	.014	Curved Handle	05751	12
3 x 19	.014	Curved Handle w/Scraper	05760	12
3 x 19	.012	Curved-Stainless*	05755	12
3 x 14	.014	V-Groove Scratch	05764	12
3 x 14	.012	V-Groove Scratch-Stainless*	05765	12
4 x 16	.014	Shoe Handle	05753	12
4 x 16	.014	Shoe Handle w/Scraper	05761	12
4 x 16	.012	Shoe Handle-Stainless*	05763	12
4 x 19	.014	Curved Handle	05752	12
3 x 7	.006	Small Cleaning Brush-Stainless*	05759	12
3 x 7	.006	Small Cleaning Brush w/Plastic Handle-Stainless*	05766	12
3 x 7	.006	Small Cleaning Brush-Brass	05762	12
3 x 7	.006	Small Cleaning Brush w/Plastic Handle-Brass	05768	12
3 x 15	-	Chipping Hammer Brush	05757	12

# Miscellaneous Brushes Metal Chip Brush

- Durable, long lasting
- For cleaning metal chips from work surfaces

#### **Acid Brushes**

- Quality horsehair bristles
- Machine trimmed and crimped to specification

#### **Paint Brushes**

- Quality horsehair bristles/Wood handle
- Use for solvents and chemicals

Brush		Trim	Overall	Part	Std
Type	Width	Length	Length	No.	Pkg
Metal Chip	1-1/2"	1-1/2"	5-5/16"	00510	12 pcs
	3/8"	3/4"	6"	00501	1 gross
Acid Brush	7/16"	7/8"	6-1/2"	00502	1 gross
	9/16"	7/8"	6-1/8"	00503	1 gross
	1/2"	1-1/2"	7"	00511	72 pcs
	1"	1-1/2"	7-1/2"	00512	72 pcs
Paint Brush	1-1/2"	1-1/2"	7-1/2"	00513	72 pcs
	2"	1-1/2"	7-1/2"	00514	72 pcs
	3"	1-1/2"	8"	00515	48 pcs
	4"	2-1/4"	9-1/2"	00516	12 pcs





# **Nylon Abrasive Brushes**

- Available in silicon carbide
- Use on steel, aluminum, copper, brass, stainless steel, super alloys, plastics, composites, ceramics, wood, leather



### Large Diameter Wheels

							Qty
Size			Face	Trim	Max	Part	Per
Dia.	Arbor	Grit	Width	Length	RPM	No.	Box
3	5/8	80	1/2	5/8	18,000	04110	1
3	5/8	320	1/2	5/8	18,000	04120	1
4	5/8	120	5/8	3/4	12,000	04130	1
4	5/8	180	5/8	3/4	12,000	04140	1
6	2	120	7/8	1-1/16	6,000	04150	1
6	2	180	7/8	1-1/16	6,000	04160	1

#### **Small Diameter Wheels**

s	ize		Face	Trim	Max	Part	Qty Per
Dia.	Arbor	Grit	Width	Length	RPM	No.	Box
1-1/2	1/2	320	1/4	1/4	20,000	04210	4
2	5/8	120	3/8	7/16	15,000	04220	4
2-1/2	5/8	120	3/8	11/16	15,000	04230	4
2-1/2	5/8	320	3/8	11/16	15,000	04240	4

#### **Tube Brushes**

					Qty
		Trim	Overall	Part	Per
Dia.	Grit	Length	Length	No.	Box
1/2	80	2	5	04270	12
1	80	2-1/2	5-1/2	04275	12
1-1/4	80	2-1/2	5-1/2	04280	12
5/8	120	2	5	04285	12
1	120	2-1/2	5-1/2	04290	12

## **Cup Brushes**

8	Size		Trim	Max	Part	Qty Per
Dia.	Arbor	Grit	Length	RPM	No.	Box
4	5/8-11	80	1-1/2	6,000	04310	1
6	5/8-11	80	1-1/2	6,000	04340	1

#### **End Brushes**

Dia.	Grit	Trim Length	Overall Length	Max RPM	Part No.	Qty Per Box
	400		0.0/1		0.4000	10
1	120	1	2-3/4	19,000	04380	12





# Tungsten Carbide Burs

United Abrasives offers a complete line of tungsten carbide burs in the most popular shapes and sizes to meet your needs. Choosing the right bur depends on the material to be ground, grinding speed, desired shape and finish requirements. United Abrasives' burs are precision ground with diamond wheels resulting in a concentric tool with very sharp, uniform teeth. This manufacturing method produces the highest quality bur, properly balanced for vibration-free operation and long tool life. Tungsten burs are best suited for efficient material removal at high RPMs. United Abrasives' burs are made in the U.S.A.

## Double Cut (Alternate Cut)



Double cut or Alternate cut is the most popular bur in ferrous applications. Manufactured with cuts made on the left and right spirals, this design produces a finer finish on material producing smaller chips and slivers. The double cut offers much smoother operation and greater tool control.

# Non-Ferrous (Aluminum Cut)



Non-ferrous or aluminum cut burs have a more open, aggressive cut to avoid loading on softer materials. This design provides outstanding stock removal on aluminum, magnesium, copper, soft steel, brass, zinc alloys, hard rubber, most plastics, and nonferrous metals. These burs provide easy chip flow with little or no clogging.



#### **Features**

- Tungsten Carbide construction for long life and precision cutting
- Highest quality construction for proper balance which delivers vibration-free operation
- Double cut provides smooth operation and maximum tool control
- Non-ferrous burs have an open design for nonloading on softer materials

#### **Applications**

- Excellent for confined or hard-to-reach areas
- Use for deburring and finishing on ferrous and nonferrous metals
- Shaping and enlarging holes in steel
- Removing welds
- Smoothing castings

# MAXIMUM RECOMMENDED RPMs FOR CARBIDE BURS

FILE DIA.	RPM(1)	RPM(2)
1/4"	22,000	33,000
3/8"	18,000	27,000
1/2"	16,000	24,000

Use RPM(1) for iron, steel welds, cast iron, tool steels, die steels, bronze, brass and aluminum.

Use RPM(2) for stainless steel.

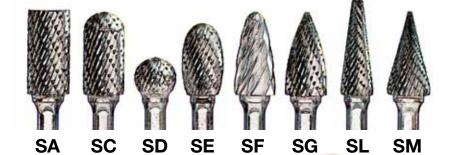
# BURS

# Tungsten Carbide Burs









## **Double Cut** (Alternate Cut)

	Size		Shank	Part	Qty
Туре	Dia.	Length	Dia.	Numbers	Per Box
SA1	1/4	5/8	1/4	45000	1
SA3	3/8	3/4	1/4	45001	1
SA5	1/2	1	1/4	45002	1
SB1	1/4	5/8	1/4	45111	1
SB3	3/8	3/4	1/4	45004	1
SB5	1/2	1	1/4	45113	1
SC1	1/4	5/8	1/4	45005	1
SC3	3/8	3/4	1/4	45006	1
SC5	1/2	1	1/4	45007	1
SD1	1/4	7/32	1/4	45010	1
SD3	3/8	5/16	1/4	45011	1
SD5	1/2	7/16	1/4	45012	1
SE1	1/4	3/8	1/4	45015	1
SE5	1/2	7/8	1/4	45016	1
SF1	1/4	5/8	1/4	45020	1
SF3	3/8	3/4	1/4	45021	1
SF5	1/2	1	1/4	45022	1
SH1	1/4	5/8	1/4	45115	1
SH2	5/16	3/4	1/4	45116	1
SH5	1/2	1-1/4	1/4	45117	1
SL1	1/4	5/8	1/4	45025	1
SL3	3/8	1-3/16	1/4	45026	1
SL4	1/2	1-1/4	1/4	45027	1
SG1	1/4	5/8	1/4	45030	1
SG3	3/8	3/4	1/4	45031	1
SG5	1/2	1	1/4	45032	1
SM1	1/4	1/2	1/4	45035	1
SM2	1/4	3/4	1/4	45036	1
SM4	3/8	3/4	1/4	45037	1
SM5	1/2	1	1/4	45038	1
SA3NF	3/8	3/4	1/4	45050	1
SA5NF	1/2	1	1/4	45051	1
SC3NF	3/8	3/4	1/4	45052	1
SF3NF	3/8	3/4	1/4	45053	1
SF5NF	1/2	1	1/4	45054	1

Non-ferrous	;
(Aluminum)	

	Oili	17 -	0/0	17 -	70110		
	SH2	5/16	3/4	1/4	45116	1	
	SH5	1/2	1-1/4	1/4	45117	1	
	SL1	1/4	5/8	1/4	45025	1	
	SL3	3/8	1-3/16	1/4	45026	1	
	SL4	1/2	1-1/4	1/4	45027	1	
	SG1	1/4	5/8	1/4	45030	1	
	SG3	3/8	3/4	1/4	45031	1	
	SG5	1/2	1	1/4	45032	1	
	SM1	1/4	1/2	1/4	45035	1	
	SM2	1/4	3/4	1/4	45036	1	
	SM4	3/8	3/4	1/4	45037	1	
	SM5	1/2	1	1/4	45038	1	
	SA3NF	3/8	3/4	1/4	45050	1	
	SA5NF	1/2	1	1/4	45051	1	
	SC3NF	3/8	3/4	1/4	45052	1	
	SF3NF	3/8	3/4	1/4	45053	1	
	SF5NF	1/2	1	1/4	45054	1	
	SL4NF	1/2	1-1/8	1/4	45055	1	
١							
		Tungst	ten carbid	de cons	struction for lo	ong life	a



Wooden Display Case Holds up to 8 burs P/N 99046

	Size		Shank	Part	Qty/
Type	Dia.	Length	Dia.	Numbers	Box
SA5	1/2	1	1/4	45125	1
SC5	1/2	1	1/4	45130	1
SE5	1/2	7/8	1/4	45135	1
SF3	3/8	3/4	1/4	45140	1
SF5	1/2	1	1/4	45145	1
SG5	1/2	1	1/4	45150	1
SL3	3/8	1-3/16	1/4	45155	1
SL4	1/2	1-1/4	1/4	45160	1

## 6" Length Shank

	Size		Shank	Shank Part	
Туре	Dia.	Length	Dia.	Numbers	Box
SA3L6	3/8	3/4	1/4 6L	45603	1
SA5L6	1/2	1	6L	45605	1
SB1L6	1/4	5/8	6L	45611	1
SB3L6	3/8	3/4	6L	45613	1
SC3L6	3/8	3/4	6L	45623	1
SD1L6	1/4	7/32	6L	45631	1
SD3L6	3/8	5/16	6L	45633	1
SE5L6	1/2	7/8	6L	45645	1
SF3L6	3/8	3/4	6L	45653	1
SF5L6	1/2	1	6L	45655	1
SG3L6	3/8	3/4	6L	45663	1
SG5L6	1/2	1	6L	45665	1
SH2L6	5/16	3/4	6L	45672	1
SL3L6	3/8	1-1/16	6L	45683	1
SM3L6	1/4	1	6L	45693	1
SC3NFL6	3/8	3/4	6L	45063	1
SF3NFL6	3/8	3/4	6L	45073	1
SD3NFL6	3/8	5/16	6L	45083	1



- and durability
- High quality manufacturing method delivers vibration-free operation
- Precision ground with diamond wheels to produce a very sharp uniform cutting edge
- Each enclosed in individual plastic capsules for storage and protection

# **SAIT-PAK™**



# Packaged for industrial, hardware, and do-it-yourself markets

We are pleased to include our line of packaged abrasives called SAIT-PAK. This offers our same industrial quality abrasives, packaged in smaller, easy-to-sell quantities. It complements our existing product line by providing a "line" specifically geared to those customers desiring more consumer-oriented packaging. Skilled craftsmen, professional tradesmen, MRO engineers, fabricators, and the knowledgeable do-it-yourselfer will benefit by this addition to our product line.



# United Abrasives makes selecting the correct products and quantities easy

Choosing the correct product for your application is made simple. The packaging contains the same easy-to-use color coded application boxes as our catalog. To meet all of your application needs, SAIT-PAK™ offers products in multi or single packs. Your local distributor has access to United Abrasives' entire SAIT-PAK™ line, offering you the products you want in the quantities you need.





# Our foundation is the mid-size independent distributor

United Abrasives has always relied on the small to mid-size independent distributor as our foundation, not the large national chains. As a result, this means that you will continue to receive the attention you deserve with United Abrasives' SAIT-PAK<sup>™</sup> program.



# We manufacture only a single line of the highest quality

United Abrasives manufactures only a single line of the highest quality industrial abrasives, not a two-tier system of industrial versus retail quality. The SAIT-PAK™ program represents our same high quality products packaged specifically for retail trade.



#### We're a "one stop shopping" source for all your abrasive product needs

It's easy to buy from United Abrasives. Quality and safety are of utmost importance, minimizing your product performance worries. UA is truly a "one stop shopping" source! Your account will be serviced by the best trained customer service reps and sales force in the industry.



# For more information call us at (860) 456-7131

This SAIT-PAK™ program allows you to move up to a level of industrial quality abrasive products at the retail packaged level. You'll get a full spectrum abrasives program with minimal inventory investments. The result is increased inventory turns, expanded market share, and excellent profit margins. For more information about how United Abrasives can help get you to the next level, contact us at (860) 456-7131.

# SAIT-PAK™ 9" x 11" Sheets

#### **All Purpose Aluminum Oxide Sheets**

		Sheets	Pkgs
Part No	Grade/Grit	Per Pkg	Per Unit
10012	Very Fine - 220	5	5
10010	Fine - 150	5	5
10008	Medium - 100	5	5
10006	Coarse - 60	3	5
10015	Assorted: 2 Very Fine, 2 Fine, 1 Medium	5	5

#### Waterproof Silicon Carbide Sheets

10034	Ultra Fine - 600	5	5	
10032	Super Fine - 400	5	5	
10031	Extra Fine - 320	5	5	
10028	Very Fine - 220	5	5	
10036	Assorted: 2 Super Fine,	5	5	
	2 Extra Fine 1 Very Fine			

# **SAIT-PAK™** Accessories

**Hand Sanding Block** 

Part No	Description	Parts Per Pkg
16000	Hand Sanding Block	1

# **Accessory Items**

The convenience of "one stop shopping" is provided through the selection of accessories offered by United Abrasives to complement and match our product offering.

All of the accessories carried in our line have been specifically engineered for use with our products, providing the greatest possible safety and performance. You will find that our SAIT-PAK™ product line of packaging geared for the Do-It-Yourself market includes accessory items specific to those products available in the line. However, should you need additional products that may not be available as part of the SAIT-PAK™ program, refer to our standard line of accessories in this section. Many of our accessory items are skin packaged, providing better labeling capabilities and appearance.

Throughout the catalog, references are made to the various accessories in this section. As part of the product selection, it is important to ascertain if a specific accessory is necessary to operate the abrasive safely. In most cases, where a nut or backing pad is required, one is supplied with the box of product. However, if additional accessory items are needed, they are available in this section. Thus, whether you are ordering in large quantities or individually, sufficient accessories are available for your needs.



# Backing Pads for Resin Fiber Discs



- Spiralcool™ backing pads' exclusive rubber, fabric, and fiber board construction provide extra strength and reliability
- Spiral ribs provide contact points and form channels for air flow extending disc life 30% to 50%
- Each pad is supplied with a nut as indicated
- For the 10mm arbor pad specify nut: #95044 for 1.5 nut or #95043 for 1.25 nut

NOTES: Pad nut must be purchased separately.
This backing pad is not to be used with SAIT-LOK™ quick change fiber discs

		Gra	Grade Available		
			Part No		Max
Size	Arbor	Soft	Med	Hard	RPM
4	5/8-11 Thread	-	95010	-	12,000
4-1/2	5/8	-	95011	-	11,000
4-1/2	1/2	-	95012	-	11,000
5	5/8	-	95016	-	10,000
7	5/8-11 Thread	95017	-	-	7,000
7	5/8-11 Thread	-	95018	95019	8,500
9	5/8-11 Thread	-	95021	95022	6,500

# **Spanner Wrench**



- Adjustable wrench for tightening and loosening center nuts
- Fits all center nuts

Description	Part No
Spanner Wrench	95008

# SAIT-LOK<sup>™</sup> Backing Pads for Resin Fiber Discs



- Smooth face backing pad for SAIT-LOK™ fiber disc
- Minimizes change-over downtime
- No additional mounting hardware required
- Each pad is supplied with nut and washers

NOTE: SAIT-LOK™ disc must be used with threaded backing pad

Size	Part No	Max RPM
*4-1/2 x 5/8-11	95023	18,000
4-1/2 x 5/8-11	95025	18,000
*5 x 5/8-11	95024	18,000
5 x 5/8-11	95026	18,000
7 x 5/8-11	95027	8,600
9 x 5/8-11	95028	7,000

\* Low profile for short spindles

# Challenger II<sup>™</sup> Backing Pad



- For use with Challenger II flexible grinding/blending wheels (pg. 18)
- Set includes 5/8-11 nut and pad

Description	Part No	Max RPM
Pad for 4-1/2 & 5" Challenger II™	95245	13,300/12,200
Pad for 7" Challenger II™	95247	8,500

#### **Center Nuts**



- For attaching fiber discs to backing pad and tool
- Use small\* for 4", 4-1/2", 5" diameter pads
- Use large\* for 7", 9" diameter pads

Size	Part No
5/8-11 Small*	95040
5/8-11 Large*	95041
1/2-13	95042
M10 x 1.25	95043
M10 x 1.5	95044
M14 x 2.0	95045

Type 1 Cut-Off Adaptors



• For use with Type 1 Thin High Speed Cut-Off wheels up to 3" diameter only (pg. 39)

Size	Part No
1/4 x 1/4-20	95002
1/4 x 3/8-24	95003
1/4 x 1/2-20	95004

# Type 27 Reusable Adaptor Kit



- For use with Type 27 wheels on 7" and 9" 5/8-11 spindle grinders
- Alternative to a throwaway hub

Description	Part No
Reusable Adaptor Kit	95000

# Type 1 & Type 27 Reusable 5/8-11 Adaptor



 Reusable 5/8-11 adaptor for use on Type 1 and Type 27 reinforced wheels with a 7/8 arbor, a max. diameter of 5" and a wheel thickness of .045 to 1/8"

Description	Part No
5/8-11 Reusable Adaptor	95055

# Type 1 Cut-Off Wheel Reducing Bushings



- For use with Type 1 Cut-Off wheels
- Reduces wheel arbor size

Size	Part No
1-5/8	95030
1-20mm	95031
1-7/8	95032
1-3/4	95033

Size	Part No
7/8-5/8	95034
Dia5/8	95035
Dia1/2	95036
1/2-3/8	95037

## **PSA Backing Pads**



- For use with PSA adhesive backed sanding discs (pg. 79-81, 84-85)
- 1/4" Shank pads for die grinders
- Threaded pads for dual action/random orbital sanders and right angle grinders/sanders

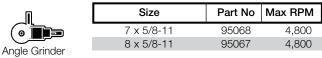


Size	Part No	Max RPM
1 x 1/4	95059	30,000
1-1/2 x 1/4	95060	30,000
2 x 1/4	95061	28,000
3 x 1/4	95062	20,000
4 x 1/4	95063	16,000
5 x 1/4	95064	12,000



Disc Sander

Size	Part No	Max RPM
5 x 5/16-24	95065	10,000
5 x 5/16-24 5 holes	95085	10,000
6 x 5/16-24	95066	10,000
6 x 5/16-24 6 holes	95086	10,000
8" w/mounting holes	95180	1,500



# Hook & Loop Backing Pads for Paper Discs



- For use with Hook & Loop backed paper discs (pg. 82-83)
- Available in 5/16-24 thread

Description	Part No	Max RPM
5 x 5/16-24	95047	10,000
5 x 5/16-24 5 holes	95057	10,000
5 x 5/16-24 8 holes	95058	10,000
6 x 5/16-24	95046	10,000
6 x 5/16-24 6 holes	95056	10,000
8" w/ 5 mounting holes	95185	1,500
8 x 5/8-11	95187	1,500

#### Palm Hand Sander



- For manual use with PSA (pp. 79-81) or Sand-Light™ /Hook & Loop discs (pg. 118, 125)
- For more uniform finish when hand sanding

Size	PSA	Sand-Light <sup>™</sup>
5"	95091	95081
6"	95092	95082

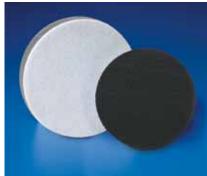
## **Contour Hand Pads**



- For manual use with PSA or Hook & Loop discs (pg. 79-83)
- For more uniform finish when hand sanding

Size	PSA	Hook & Loop
6"	95260	95250

# **Hook & Loop Soft Interface Pads**



- For use with 5" and 6" Hook & Loop Backing Pads
- Excellent for final finishing as the soft foam backing makes the grain cut less and finish finer
- The perfect compliment for the 4S/4V Hook & Loop products (pg. 82-83)

Description	Part No
5" Soft Interface Hook & Loop Pad	95175
6" Soft Interface Hook & Loop Pad	95176

# Sand-Light™ Surface Conditioning **Backing Pads**



- For use with Hook & Loop style Sand-Light™ Discs (pg. 118, 125)
- 1/4" shank pads
- Threaded pads for dual action random orbital sanders
- Threaded pads for right angle grinders/sanders



Portable Grinder

Size	Part No	Max RPM
4 x 1/4	95154	6,000
5 x 1/4	95153	6,000



Disc Sander

Size	Part No	Max RPM
4 x 5/16-24	95157	10,000
5 x 5/16-24	95155	10,000
6 x 5/16-24	95156	10,000

Max RPM

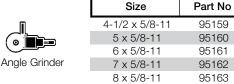
4,800

4,800

4,800

4,800

4,800



# Sand-Light<sup>™</sup> Handle



- For manual use with Sand-Light<sup>™</sup> 6 x 9 hand pads (pg. 115)
- For more uniform finish when hand sanding

Description	Part No
Sand-Light™ Handle	95080

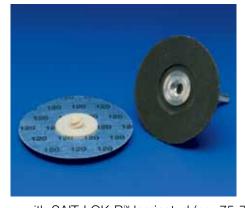
## SAIT-LOK™ Backing Pads for Laminated & Surface Conditioning Discs



- For use with SAIT-LOK™ laminated (pg. 75-77) and surface conditioning discs (pg. 117)
- · Disc twists into metal threaded center of backing pad for fast and easy disc changes
- Now available in hard density for aggressive cutting action
- 1/4" shank

Size	Part No	Max RPM	Size	Part No	Max RPM
1" Medium	95165	40,000	1-1/2" Hard	95266	30,000
1-1/2" Medium	95166	25,000	2" Hard	95267	30,000
2" Medium	95167	25,000	3" Hard	95268*	20,000
3" Medium	95168	20,000	0	* 3" Hard B New Look	0

## SAIT-LOK-R™ Backing Pads for Laminated, Surface Conditioning, & Cotton Fiber Discs



- For use with SAIT-LOK-R<sup>™</sup> laminated (pg. 75-77), surface conditioning discs (pg. 117), Cotton fiber discs (pg. 57), Encore Mini Flap Discs (pg. 87)
- Nylon threaded hub of disc twists into backing pad for secure fit
- Now available in hard density for aggressive cutting action
- Minimizes change-over time
- 1/4" shank

Size	Part No	Max RPM	Size	Part No	Max RPM
1-1/2" Medium	95171	25,000	1-1/2" Hard	95271	30,000
2" Medium	95172	25,000	2" Hard	95272	30,000
3" Medium	95173	20,000	3" Hard	95273	20,000
4" Medium	95280	12,000			_

# Saitlam™ Flap Disc Backing Pad & Nut



#### 6-1/2" Backing Pad Assembly

- Must be used with 6-1/2" Saitlam™ (pg. 92)
- Includes backing pad, nut (5/8-11), and washer

Description	Part No	Max RPM
6-1/2" Saitlam™ Backing Pad	95070	6,000

#### Saitlam™ Nuts

Size	Uses Nut	Part No
4-1/2" Saitlam™	5/8-11	95071
4-1/2" Saitlam™	M14 x 2.0	95072
4" Saitlam™	M10 x 1.25	95074

## **Wood Wedges**



- For use with Vitrified Bonded Floor Rubs (pg. 58)
- Skin packaged in quantities of 2 per package

Description	Part No
Wood Wedges	95100

# Flap Wheel Adaptor 1-5/8" Metal Bushing



- For use on 6" Flap wheels
- Skin packaged in quantities of 2

Description	Part No
1-5/8 Metal Bushing	95109

## **Abrasive Cleaning Stick**



- For removing loaded material from sanding belts
- Increases abrasive life
- 100% natural rubber; environmentally safe
- Lasts twice as long as conventional (crepe) belt cleaners and will not cause gummy residue
- Size: 1-5/8" x 1-5/8" x 8"

Description	Part No
Abrasive Cleaning Stick	95083

# 1/4" Shank Threaded Adaptor for Flap Wheels



- For use on United Abrasives 1/4-20 threaded flap wheels
- Facilitates a quick change, thus less downtime

Description	Part No
1/4" Threaded Adaptor	95050

# 1/4" Shank Adaptor Kit for Flap Wheels



- For converting 1" or 5/8" arbors to a 1/4" shank
- 1/4" Shank adaptor kit

Description	Part No
Adaptor Kit	95009

## ACCESSORIES

#### Cartridge Roll Mandrels



• For use with straight and full taper cartridge rolls on pages 106-107

Size	Part No
1/4 x 1-1/2 x 1/4	95101
1/4 x 1 x 1/4	95102
1/8 x 1-1/2 x 1/4	95103
1/8 x 1 x 1/4	95104
1/8 x 3/4 x 1/4	95105
3/16 x 1-1/2 x 1/4	95106
3/16 x 1 x 1/4	95107
3/32 x 3/4 x 1/8	95108

#### **Spiral Band Drums**



• For use with spiral bands on page 105

Size	Max RPM	Part No
1/2 x 1/2 x 1/4	30,000	95121
1/2 x 1 x 1/4	15,000	95122
1/2 x 1-1/2 x 1/4	12,000	95123
3/4 x 1 x 1/4	19,000	95126
3/4 x 1-1/2 x 1/4	10,000	95127
1 x 1 x 1/4	18,000	95130
1-1/2 x 1 x 1/4	14,000	95133
1-1/2 x 1-1/2 x 1/4	10,000	95134
2 x 2 x 1/4	6,000	95137
3 x 3 x 1/4	3,000	95140

#### **Unitized Wheel Mandrels**



- Re-usable mandrels for use with Unitized Wheels
- Packaged each

Description	Part No	For Use With:
Steel Unitized Wheel Mandrel "threaded screw-type"	95240	77830
Type 1 Wheel Adaptor	95002	All 3" diameter,
		1/4" hole unitized wheels

#### Cross Pad & Square Pad Mandrels



- For use with cross and square pads on page 108
- 1/4" shank

Size	Part No
3-48	95095
8-32	95096
1/4-20	95097

#### Fileboard Backing Plates



Size	PSA	Hook & Loop
2-3/4 x 16-1/2"	95190	95195

## Super Soft Buffing Disc Backing Pads



- For use with buffing discs (pg. 126)
- Available in 5" & 7" with 5/8-11 thread

Description	Max RPM	Part No
5" Super Soft Foam Pad	3,200	95255
7" Super Soft Foam Pad	3,200	95257

#### **Buffing Disc Compounds and Kits**

Brown Bar: Used for buffing aluminum, brass, copper, wood,

plastics, hard rubber, and painted surfaces. Also called

tripoli rouge.

White Bar: Used for buffing stainless steel, carbon steel, nickel,

aluminum, and chromium to a high luster shine.

**Red Bar:** For buffing precious metals like gold, silver, platinum,

sterling, and other high end metals. Can also be used to further enhance materials that have already been buffed

with other compounds. The finest grade.

Black Bar: Used to buff contaminants out prior to finishing. Will

remove rust, stains, scale, and other contaminants.

An extremely fast cutting material.

Also called emery cake.



Description	Part No
Buffing Compound Kit	41000
1 lb Buffing Compound Bar Brown	41024
1 lb Buffing Compound Bar White	41022
1 lb Buffing Compound Bar Red	41020
1 lb Buffing Compound Bar Black	41026

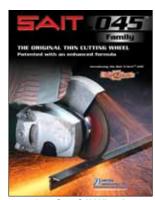
## Convolute Wheel and Non-Woven Flap Brush Reducing Bushings



- Re-usable reducing bushings for use with Convolute Wheels and Flap Brushes
- Packaged per pair

Description	Part No	For Use With:
1" OD to 3/8" ID	95210	6" Diameter Convolute Wheels
1" OD to 1/2" ID	95212	6" Diameter Convolute Wheels
1" OD to 5/8" ID	95214	6" Diameter Convolute Wheels
1" OD to 3/4" ID	95216	6" Diameter Convolute Wheels
2" OD to 1" ID	95220	6" Diameter Non-woven Flap Brushes
3" OD to 1" ID	95230	8" Diameter Convolute Wheels and Non-woven Flap Brushes
3" OD to 1-1/4" ID	95232	8" Diameter Convolute Wheels and Non-woven Flap Brushes

### PROMOTIONAL LITERATURE



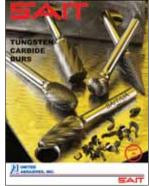
.045 Cut-Off Wheels Part #99045



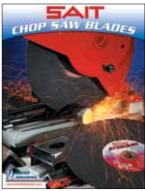
Abrasive Steps Tri-Fold Part #99031



Company Overview Part #99981



Carbide Burs Part #99220



Chop Saw Wheels Part #99014



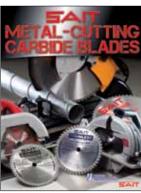
.090 Cutting/Notching Part #99990



Encore Flap Disc Part #99978



Fiber Discs Part #99028



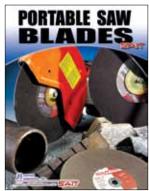
Metal-Cutting Carbide Blades Part #99982



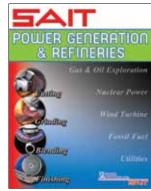
MRO (Maintenance, Repair & Operations) • Part #99048



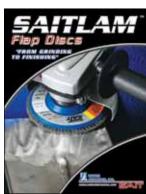
Ovation® Family Part #99980



Portable Saw Blades Part #99040



Power Generation & Refineries Part #99087



Saitlam™ Flap Discs Part #99007



The Ultimate Cut™ Part #99979

## POINT OF PURCHASE (P.O.P.) DISPLAY

#### 99084 - Red Pegboard Display Panel

 Also included in the box are 4 tan hangers / spacers







2 – 4" tags to use with Application Labels

\* The 4" tags have an insert that slides into the track on the back in order to be hung on the pegboard display.

99157 – Plastic Display Tag Holders (1 Package)

4 – 3" tags to use with Material Labels



\* 2 of the Hangers/Spacers are to be inserted into the current pegboard or slatwall behind and near the bottom of the new red pegboard display panel to keep it parallel with the wall.



99095 Application Display Tag Labels (1 Sheet)



99156 – 6" Pegboard Hooks (8 Pack)



99094 – Material Display Tag Labels (1 Sheet)

## Order Reference for 1 Complete Red Pegboard Setup

		•
Part No.	Qty.	Order
99084	1	<u> </u>
99157	1	
99156	1	
99095	1	





97037 – Wire Basket Qty. \_\_\_\_





97036 – 14" Wire Wheel Holder Qty.



97039 – POP Label Card Qty. \_\_\_\_\_ 1 per wheel holder & wire basket



99080 – Reorder Hang Tag Qty. \_\_\_\_ Order in multiples of 50

## P.O.P. DISPLAY contd

### COUNTIER RACK DISPLAY UNIT

99115 – 4" Hooks (6 pack) Qty.

Hooks do not come with racks



### Rectangle Header Cards - 1 per counter rack (Used ONLY for Counter Racks)

Part#	Description	Qty.
99098	United Abrasives/SAIT Header	
99104	Concrete cutting	
99105	Concrete grinding	
99106	Flap discs	
99107	Metal cutting	
99108	Metal grinding	
99109	Metal grinding/blending	
99110	Stainless Steel cutting	
99111	Stainless Steel grinding	
99112	Wire Brushes	
99113	Accessories	
99114	Aluminum	
99117	Metal/Stainless Steel cutting	
99118	Metal/Stainless Steel grinding	
99122	Stainless Steel/Aluminum	
	blending/finishing	
99123	Belts	
99155	US Flap Disc	
99158	.045" Family	

99155



99158



### LARGE PRINTED ADVERTISING



97018 – Header and Holder

Qty.

Approximately h12" x w36"
Footers clip onto top of display backer and are used to support the header



99043 – Banner

Qty.

h2'x w4' with grommets

# TECHNICAL & REFERENCE MATERIAL





#### What is a Coated Abrasive?

A coated abrasive is a product that consists of a thin layer of abrasive grain attached to a substrate such as paper, cloth, etc. Coated abrasives come in a variety of forms such as sheets, discs, rolls, specialties, or belts.

#### **Components of Coated Abrasives**

#### **Abrasive Grains**

Coated abrasives are manufactured using abrasive grains, the most common being aluminum oxide, zirconium, ceramic, silicon carbide and garnet. The crude grains are crushed and separated into sizes, called grit sizes, using calibrated screens. Grits range from 12 (very coarse) to 1200 (very fine). Once the grains are separated into sizes, they are attached to a backing material using various bond techniques. Below are descriptions of the most common abrasive grains:

#### Ceramic:

A high performance, man-made abrasive material. Very uniform, high density grain structure is extremely durable and self sharpening for longer life and cooler cut. Excels on tough to grind materials.

#### **Aluminum Oxide:**

A tough, blocky shaped, man-made grain used for high speed grinding and finishing of metals, wood, and other high tensile strength materials without excessive fracturing or shedding. Wherever the ability to resist fracturing is the main consideration, aluminum oxide will outperform all other coated abrasive grains.

#### Zirconium:

A very fine, dense, man-made crystalline grain which can be used for aggressive stock removal. Zirconium is a very dense material with a unique self-sharpening characteristic which gives it long life on heavy stock removal operations.

#### Silicon Carbide:

A very hard, very sharp, man-made abrasive suited for non-ferrous materials and non-metallic materials such as concrete, marble and glass. A very friable grain, silicon carbide cuts faster under light pressure than any other grain used in coated abrasives.

#### Garnet:

Garnet is made of natural aluminum oxide which is a relatively sharp, but very weak bonding structure. Very inconsistent when compared to synthetics. It is used primarily in woodworking as garnet dulls too quickly to be used in metalworking.

#### **Backing Materials (Substrates)**

Below are the four major types of backing materials:

#### **Paper**

Specialized technical papers are used as substrates for coated abrasives. They are identified by letters representing weight and flexibility:

"A" and "B" weights are light weight and highly flexible. "C", "D", "E", "F" weights are medium to heavy weight for more strength and less flexibility.

#### Cloth

Cloth backings are more durable than paper backings. There are two common types of cloth backing, cotton (ie: Egyptian) and polyester. Cloth backings are identified by weight and flexibility:

- "F" weight (J-Flex) is light and highly flexible. This lighter weight is suitable for cleaning, finishing, and polishing.
- "J" weight (Jeans) is highly flexible and suitable for cleaning, finishing, and polishing of contour surfaces.
- "X" weight (Drills) is medium to heavy weight for more strength and durability. It has low flexibility suitable for grinding, deburring and finishing.
- "H" (Heavy Duty) is a heavier weight than "X" weight. It has low flexibility and is suitable for heavy duty grinding and deburring applications. Excellent edge stability.

#### **Fiber**

Fiber backing is a tough vulcanized material made from rag stock. This backing is usually used for abrasive fiber discs.

#### Combination

Combination backing is laminated paper and cloth, and is very sturdy and shock resistant. Combination backings typically are used for a wide range of grits and mounting techniques.

#### Other Backing Materials

There are also a variety of other substrates such as nylon fiber or screens that can be coated for special applications. Non-woven nylon impregnated with abrasive grain is another substrate that can be used for cleaning, polishing, or blending.



#### **Bond Techniques**

The grains are locked to the backing material using a bond technique that involves a two layer process. There are three major types of bond techniques used in coated abrasives:

#### Resin over Resin

A very strong bond resistant to heat and moisture. Resin over resin bonds are durable for heavy stock removal and is by far, the most popular bonding method.

#### Resin over Glue

A bond that is resistant to heat. It is more aggressive than glue over glue bonds and leaves a finer finish than resin over resin bonds.

#### Glue over Glue

A bond that is less durable than resin bonds, but glue over glue bonds produce a more uniform finish. Glue over glue bonds soften under heat, thereby reducing the life of the product.

All coated abrasives are stiff and rigid after the drying and curing of the bond. To achieve the flexibility required for the application, a mechanical flexing process is required. This process is actually a controlled cracking of the bond in one or more directions to achieve the desired flexibility.

#### Open Coat vs. Closed Coat

These terms refer to the spacing between the abrasive grains bonded to the backing.

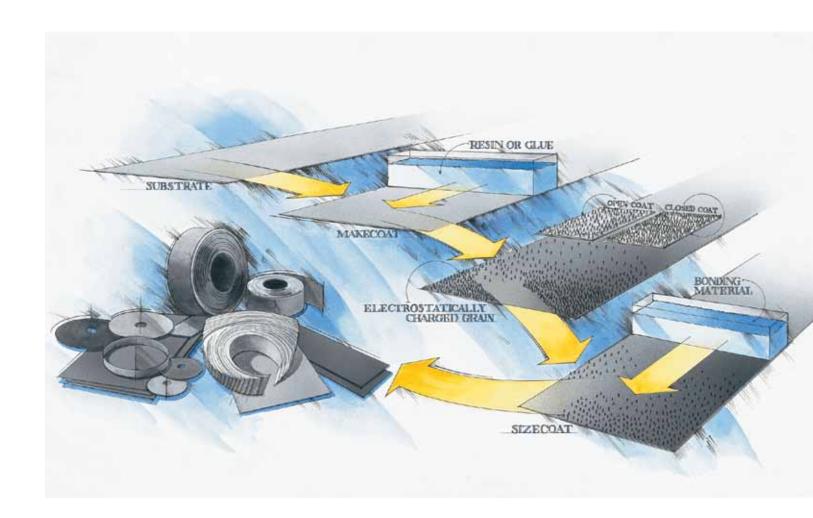
#### **Closed Coat**

Closed coat means the abrasive grains are adjacent to each other with no space between. The majority of applications will benefit from closed coat material because it allows for more material removal.

#### **Open Coat**

Open coat means the grains are set apart from each other, achieving a surface coverage of about 60% or more. In situations where loading is likely (soft, non-ferrous materials, painted surface, wood, etc.) open coat will resist loading and clogging and extend the useful life of the abrasive.

### **Making Coated Abrasives**



#### Storage and Handling

Incorrect storage of coated abrasives will significantly affect performance. All types of backings are susceptible to variations in temperature and humidity during storage:

- Keep stockroom at constant levels of humidity (35-50%) and temperature (60-80° F)
- Keep cartons away from damp or cold walls and floors where they may absorb moisture
- Store coated abrasives away from any heat source
- Keep products in original packages for easy handling and stacking
- Flap wheels removed from the original packaging should be spread out on a clean shelf, always placed face down, never resting on edge
- Fiber discs removed from the original packaging should be stored in a suitable disc holder and kept under pressure
- Store bulk rolls flat on shelves or pallets, not on edge
- Belts removed from packing case should be rolled up and stood on edge on a clean shelf. They may be draped over a large cylinder but never hang a belt from a nail or peg (the backing will crease and the abrasive coat will crack)
- Precondition the coated abrasive products in a humidity and temperature controlled environment before use for maximum efficiency

## **Coated Application Chart**

Product	Structure	Adhesive	Backing/Weights		Form							
	21. 3. 313.1 3	,	= 5.5				T .		Ī			$\neg$
								ι o				
						₩.	0	Blue Line Belts	# #		ဟ	o l
						ave	Shir	in e	n B		)isc	i <u>H</u>
				Sheets	Rolls	SAIT-Saver	Quick Ship	l e	Custom Belt	Discs	Fiber Discs	Specialities
				က်	8	SA	g	夁	ਹ	ij	얦	Sp
Cloth- Belts												_
LA-X	Closed	Resin over Resin	X-Weight Cloth	Т			I	Г	I	Ι		
1A-X	Closed	Resin over Resin	X-Weight Cloth				•	•				
2A-X	Closed	Resin over Resin	X-Weight Cloth				•	•	•			
3A-X	Closed	Resin over Resin	X-Weight Cloth					•				
AO-X	Open	Resin over Resin	X-Weight Cloth				•	•	•			
2A-H	Closed	Resin over Resin	H-Weight Polyester					•				
C-W	Closed	Resin over Resin	X-Weight Cloth				•	•	•			
Z-H	Closed	Resin over Resin	H-Weight Polyester				•	•	•			
3Z-H AZ-X	Closed Closed	Resin over Resin Resin over Resin	H-Weight Polyester X Weight Poly/Cotton					•	•			
74-A	Ciosed	nesiii üvei Resiii	A Weight Foly/Cotton									
Cloth- Other												
Aluminum Oxide (AOX)	Open/Closed	Resin over Resin	J-Flex, J, X cloth	•	•	•	•	1		•		•
DA-F	Open Open	Resin over Resin	J-Flex Cloth		•		Ĺ					
EA-F	Open	Resin over Resin	J-Flex Cloth	•	•							
TA-X	Closed	Resin over Resin	X Weight Cloth									•
2A-X	Closed	Resin over Resin	X Weight Cloth									•
3A-X	Closed	Resin over Resin	X Weight Cloth									•
Zirconium	Closed	Resin over Resin	X Cloth, H Polyester									•
3Z-H	Closed	Resin over Resin	H Polyester									•
AZ-X	Closed	Resin over Resin	X Weight Poly/Cotton				•					
Paper- Other												
Zirconium (Z-F)	Closed	Resin over Resin	F							•		
Aluminum Oxide (A-E)	Open	Resin over Resin	E							•		
Aluminum Oxide (AW-D & AW-C)	Open/Closed	Resin over Resin	C, D	•						•		
Stearate Aluminum Oxide (3S)	Open	Resin over Resin	С	•						•		
Stearate Aluminum Oxide (4S/4V)		Resin over Resin	C	•						•		
Silicon Carbide (CW-C)	Open/Closed	Resin over Resin	C	•						•		
Silicon Carbide (C-E/C-F) Garnet	Closed	Resin over Resin Glue over Glue	E, F							•		
Garnet	Open	Glue over Glue										
Fiber												
8S (Ceramic)	Closed	Resin over Resin									•	
9S (Ceramic)	Closed w/ Coolants	Resin over Resin									•	
AO (Aluminum Oxide)	Open	Resin over Resin									•	
2A (Aluminum Oxide)	Closed	Resin over Resin									•	
3A (Aluminum Oxide)	Closed w/ Coolants	Resin over Resin									•	
Z (Zirconium)	Closed W/ Coolents	Resin over Resin									•	
3Z (Zirconium) C (Silicon Carbide)	Closed w/ Coolants Closed	Resin over Resin Resin over Resin									•	
	310300	1 10011 0 101 1 10311									_	
Screens												
Silicon Carbide	N/A	Resin over Resin	Cloth screen impregnated with Silicon Carbide	•	•	•	•			•		
Non-Woven												_
Aluminum Oxide/Silicon Carbide	N/A	N/A	Non woven nylon	•						•		
Silicate Compounds	N/A	N/A	Non woven nylon	•								
Buffing Discs	N/A	N/A	Buffing Cloth							•		
Combination												
Silicon Carbide	Open/Closed	Resin over Glue	Paper/Cloth		•	•	•			•		
L	1		1						1			

### **Coated Application Chart**

Wet	Dny	Application		
vvet	DI У	Application		
	•	General purpose, metalworking and woodworking		
	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron, wood		
	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron, wood		
	•	Stainless steel and other heat sensitive materials, aluminum		
	•	Ferrous, non-ferrous metals (steel, iron, aluminum, copper), wood, plastic, fiberglass	Description	on of Backing I
•	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron	-	_
	•	Hard cast iron, aluminum, glass, ceramics, marble and stone		
	•	Ordinary and alloyed steel, cast iron, aluminum, stainless steel Stainless steel and other heat sensitive materials, aluminum	Backing	Flexibility
•	•	Ordinary and alloyed steel, cast iron, aluminum, stainless steel, wood	Dacking	i lexibility
	-	Orumaly and anoyed steel, cast non, adminium, stanness steel, wood	<b>0</b> 1 11	
			Cloth	
	•	Ferrous, non-ferrous metals (steel, iron, aluminum, copper), wood, plastic, fiberglass	_	Lightest and mag
	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron, wood	F	Lightest and mos
	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron, wood		
	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron, wood	J	Very flexible
	•	Ordinary and alloyed steel, ferrous and non-ferrous metals, cast iron, wood		,
	•	Stainless steel and other heat sensitive materials, aluminum	v	N.A. 12
	•	Ordinary and alloyed steel, cast iron, aluminum, stainless steel	Х	Medium to heavy
	•	Stainless steel and other heat sensitive materials, aluminum		Low flexibility
	•	Wood floors		
			н	Heavier weight th
	•	Formula non-formula metals wood plastic fiberaless coolers fillers point body filler		Low flexibility
		Ferrous, non-ferrous metals, wood, plastic, fiberglass, sealers, fillers, paint, body filler		
•		Ferrous, non-ferrous metals, wood, plastic, fiberglass, sealers, fillers, paint, body filler Ferrous, non-ferrous metals, wood, plastic, fiberglass, sealers, fillers, paint	<b>D</b>	
_	•	Automotive-Sealers, body filler, paint, fiberglass, aluminum	Paper	
	•	Automotive-Sealers, body filler, paint, fiberglass, aluminum		
•	•	Body filler, paint, fiberglass, glass, wood, varnish, plastic, ceramics, marble, ferrous and non-ferrous metals	Α	Lightest and mos
	•	Marble, granite, solid surface, ceramics, glass, fiberglass		2.9. 1.001 010.
	•	Soft woods		
			В	Heavier weight ar
				flexible than "A" v
	•	High tensile steels, titanium, aluminum, ferrous, non-ferrous metals		
	•	Stainless steel, high tensile steels, titanium, aluminum, ferrous, non-ferrous metals	С	Medium weight a
	•	Ferrous, non-ferrous metals, wood, fiberglass	O	Medium weignt a
	•	Ferrous, non-ferrous metals, wood, fiberglass		
	•	Stainless steel, high tensile steels, titanium, aluminum, ferrous, non-ferrous metals	D	Heavier weight ar
	•	Ferrous and non-ferrous metals, stainless steel, high tensile steels		flexible than "C" \
	•	Stainless steel, high tensile steels, titanium, aluminum, ferrous, non-ferrous metals		
	•	Glass, marble, ceramic, ferrous and non-ferrous metals	_	
			E	Heavy Duty, low
_	1 . 1		F	Heavy Duty, extre
•	•	Fiberglass, body filler, paint, cement, ceramic, marble, wood, varnish, ferrous, non-ferrous metals	Г	
				low flexibility
	, ,			
•	•	Ferrous and non-ferrous metals, stainless steel, aluminum, wood, tile, rust and paint removal, cleaning welds		
•	•	Ferrous and non-ferrous metals, paint, varnish, ceramic, fiberglass, plastic, formica		
	•	Buffing stainless steel, carbon steel, aluminum, non-ferrous metals		

Wood floors

#### **Backing Materials**

F	Lightest and most flexible
J	Very flexible
X	Medium to heavy weight Low flexibility
н	Heavier weight than "X" Low flexibility
Paper	
Α	Lightest and most flexible
В	Heavier weight and less flexible than "A" weight
С	Medium weight and flexibilit
D	Heavier weight and less flexible than "C" weight
Е	Heavy Duty, low flexibility
F	Heavy Duty, extremely low flexibility

#### Anatomy of a Wheel

#### What is a Bonded Abrasive?

A resin bonded abrasive is a grinding or cutting tool composed of abrasive grains which are held tightly together by a bonding agent and typically reinforced with a woven material. Within the bonded abrasives category are grinding and cutting wheels, as well as "stones" in a variety of shapes and sizes.

#### 3 Main Components of Resinoid Bonded Abrasives

#### 1 Abrasive Grains

Abrasive grains are particles of man-made abrasive compounds. While some manufacturers use recycled grains, United Abrasives uses only high quality, virgin grains that are made to our specifications. The chemical structure of the grains determines the physical properties of the grains (i.e. shape, sharpness, hardness, friability). Common grain types used in making bonded abrasives include:

#### A - Aluminum Oxide

A tough blocky shaped grain used for cutting metals and other high tensile strength materials without excessive fracturing

#### • C - Silicon Carbide

A very hard and very sharp abrasive suited for non-metallic materials such as concrete

#### • Z - Alumina Zirconium (also referred to as Zirconium)

A very fine, dense crystalline grain which can be used for rugged stock removal

#### • SG - 3M Ceramic Abrasive Grain

An exclusive patented ceramic aluminum oxide, two or three times tougher than standard aluminum oxide

#### ② Bonding Agent

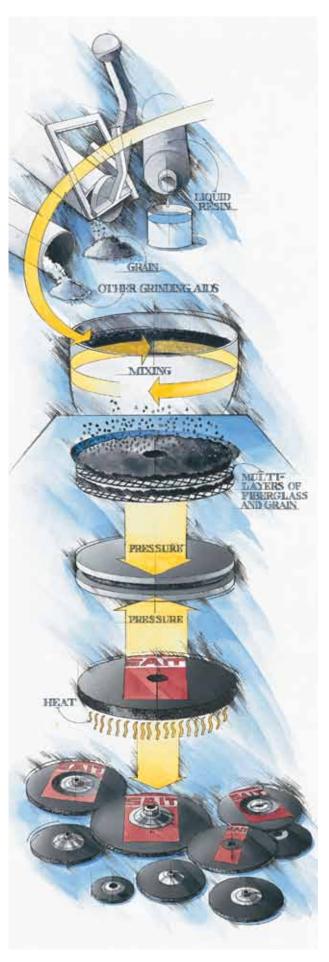
The bonding agent that holds the grains together determines the resistance of the wheel. United Abrasives uses a resinoid bond that is formulated to meet the unique specifications of each product.

#### 3 Reinforcement

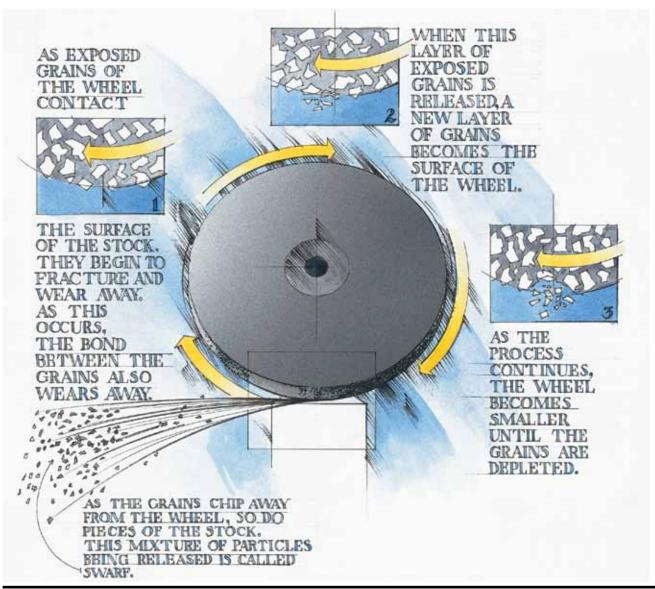
The reinforcement material provides extra strength to use the wheel at maximum RPMs and withstand lateral pressure that is applied during use. United Abrasives uses multiple layers of long stranded fiberglass which are woven to form an exceptionally strong reinforcement layer specific to the application.

#### Combining the 3 Components

During the manufacturing process, these three components are combined to form a grinding wheel. The grains and bonding agents are measured, combined, and pressed in an automated hydraulic press. United Abrasives' labels are also incorporated into the manufacturing process and therefore remain intact throughout the life of the wheel.



#### How a Wheel Works



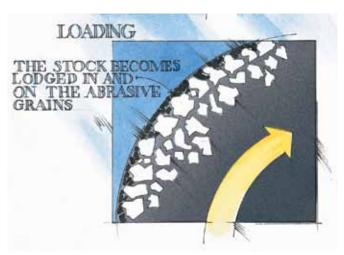
#### **Common Occurrences With Grinding/Cutting Applications**

As a wheel is grinding and/or cutting, some situations may occur with the application such as glazing or loading. Here is a description of each of these occurrences and some possible solutions.



#### Solutions to Glazing

- Dress the wheel for a temporary solution
- Use a softer bond and/or coarser grit wheel



#### Solutions to Loading

- Dress the wheel for a temporary solution
- Use the correct wheel for the application

#### **Resin Bonded Abrasives**

#### **ANSI Standard Marking System**

The following chart is an example of the ANSI standard marking system for identifying grinding wheels and other bonded abrasives

Α		2			R	BF				
Primary grain used to make the wheel	Siz Coarse	ze of the al	F Soft	lardn	ess of t	Type of bond used  B Resinoid				
A = Aluminum Oxide C = Silicon Carbide Z = Alumina Zirconium SG = Seeded Gel	8 10 12 14 16 20 24	30 36 46 54 60	Fine 70 80 90 100 120 150 180	Very Fine 220 240 280 320 400 500 600	A	N	R	T	Hard  ➤ Z	BF Resinoid Reinforced E Shellac O Oxychloride R Rubber RF Rubber Reinforced S Silicate V Vitrified

#### Wheel Configurations

Bonded abrasive wheels have different configurations depending upon the tool the wheel is used on and the desired end result. Below are the configurations that a wheel can have:

Type 1 Straight Wheel

Each wheel configuration is shown on the pages throughout this catalog. The A, B, and C connotations represent the size of the wheel.

A = The diameter of the wheel

B = The width or thickness of the wheel

C = The bore of the wheel



Type 16



Rounded Cone



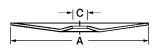
Saucer-shaped Wheel

Type 17



Straight Sided Cone

Type 29



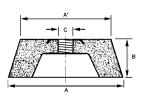
Flexible Wheel

Type 18



Plug

Type 11



Flaring Cup Wheel

Type 18R



Round Plug

#### **Resin Bonded Abrasives**

#### Sample of Wheel Label

Below is an example of a label that can be found on United Abrasives' wheels. We feel it is important to include as much information as possible on our labels so the end user has the pertinent information he needs to operate the wheel. All of our labels are baked on the wheels during the manufacturing process, so the label remains intact throughout the life of the wheel.



#### Wheel Label Color Coding:



**STAINLESS** 

ALUMINUM



#### Storage and Handling

All abrasive wheels are breakable and therefore care shall be exercised in handling and storage to prevent damage. The following rules, which are based on experience, should be observed:

- Handle wheel carefully to prevent dropping or bumping
- Do not roll wheels (hoop fashion)
- Use trucks or other suitable conveyances to provide support and protection in transporting all wheels which cannot be carried by hand
- Suitable racks, bins, drawers or boxes shall be provided to store the various types of wheels used
- Abrasive wheels should be stored in a dry area not subject to extreme temperature changes since some bonds may be affected by excessive humidity and temperature differentials
- Racks should be located as near as practical to the grinding location, but never where there is danger of damage from passing trucks, crane handling equipment or excessive vibration

#### **Exclusive Super-Lock™ Hub**

Super-Lock™ combines a mechanically interlocked transversed key lock system and uses a unique two-part bonding system to give it superior performance capabilities. Other manufacturers use hubs that depend upon two part epoxy, which can fail in many instances due to poor surface preparation, improper curing conditions, incorrect ratio of catalyst and epoxy, or the quantity of epoxy material applied.

#### Unique in the industry

The United Abrasives Super-Lock™ system is our exclusive, fail-safe throw away hub assembly. This is a unique hubbing system that is used on Type 27 and Type 28 grinding and cutting wheels where hub mounting is preferred.

#### **Unsurpassed Performance**

The rotational torque placed upon wheels can vary based on material being removed and pressure that is applied. While the chemical bonds that other manufacturers use can fail, the Super-Lock™ Hub ensures the stability of the hub to wheel connection.

#### Millions sold - Not one Failure

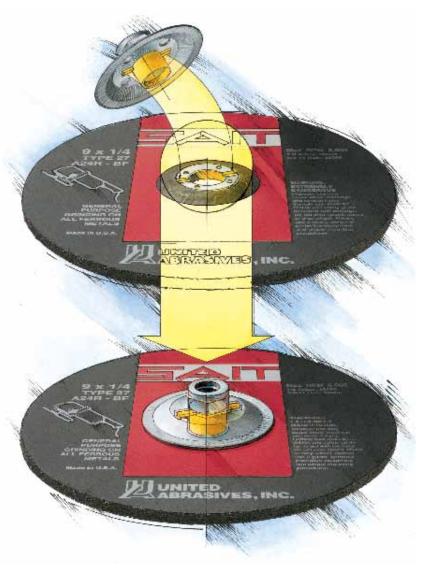
Since 1983, United Abrasives has manufactured and sold millions of depressed center wheels with Super-Lock™ Hubs. Not a single one has ever been reported as a failure.

#### **Patented**

The Super-Lock™ Hub system is so safe that it was originally protected by United States patent #4,541,205. United Abrasives is the only manufacturer to utilize this outstanding hub system.

#### Use on Type 27 and Type 28 Wheels

The Super-Lock™ Hub System is available on all 4-1/2", 5", 7" and 9" Type 27 and Type 28 depressed center grinding and cutting wheels. Turbo 4-1/2" and 5"x1/8" and .090 wheels do not have Super-Lock™ Hub.



Look for this drawing throughout the catalog indicating the wheels that are available with the Super-Lock™ Hub



#### Safety Guide

#### Important:

The following information about safety should be used only as a guide. All products listed in this catalog shall be used in accordance with safety regulations set by OSHA and by the directive described by the American National Safety Institute B7.1, the Canadian Standard Association Safety Code B-173-5 and by the American Brush Manufacturers Association covering: Speed, Safety Guards, Flanges, Mounting Procedures, General Operating Rules, Handling, Storage, and Inspection of General Machine Conditions.

The information to the right is designed as a guide for the individual user of abrasive wheels, whether he be in the employ of a large corporation or in the confines of his home work shop. It is based on the premise that grinding/cutting is a safe operation when a few basic rules are followed. These rules are based on material contained in the American National Standards Institute Safety Requirements B7.1 - "Use, Care & Protection of Abrasive Wheels." Follow Them.



#### Warning:

Avoid inhalation of dust generated by grinding and cutting operations. Exposure to dust may cause respiratory ailments as well as irritation to eyes and skin. In most cases, a greater hazard is the exposure to the dust/fumes from the base material being ground or paint or coatings applied to it. Use approved NIOSH or MSHA respirators, safety glasses or face shields, gloves and protective clothing. Provide adequate ventilation to eliminate dust or to maintain dust levels below the permissible exposure level for nuisance dust as classified by OSHA. Refer to Material Safety Data Sheet for further information.

All operators must read and understand safety information thoroughly.

#### **Follow Safety Instructions:**

You must follow all operator and safety instructions, as well as all common safety practices which reduce the likelihood of physical injury.

#### **Operate Wheels at Recommended Speeds:**

It is imperative that abrasive wheels be operated at recommended safe speeds. For safety reasons no abrasive wheel shall be operated at a speed greater than that indicated on the blotter or wheel.

- Do always handle and store wheels in a careful manner.
- Do visually inspect all wheels before mounting for possible damage.
- Do make sure operating speed of machine does not exceed speed marked on wheel, its blotter or container.
- Do check mounting flanges for equal size, relieved as required & correct diameter.
- Do use mounting blotters as required by ANSI standards.
- Do be sure work rest is properly adjusted on bench, pedestal and floor stand grinders.
- Do always use safety guard that covers a minimum of one-half (1/2) the abrasive wheel.
- Do allow newly mounted wheels to run at operating speed, with guard in place, for at least one minute before grinding.
- Do always wear safety glasses or some type of approved eye protection while grinding or cutting.
- Do turn off coolant before stopping wheel to avoid creating an out-of-balance condition.
- Do follow common sense safety considerations.
- Do follow federal, state and local laws and regulations.
- Don't use a wheel that has been dropped or appears to have been abused.
- Don't force a wheel onto the machine or alter the size of the mounting hole. If wheel won't fit the machine, get one that will.
- Don't ever exceed maximum operating speed established for the wheel.
- Don't use mounting flanges on which the bearing surfaces are not clean, flat and smooth.
- Don't tighten the mounting nut excessively.
- Don't grind on the side of conventional, straight or Type 1 wheels.
- Don't use a wheel on any machine that is not properly designed for the specific application of the wheel.
- Don't start the machine until the safety guard is properly and securely in place.
- Don't jam work into the wheel.
- Don't stand directly in front of a grinding/cutting wheel whenever a machine is in operation.
- Don't grind or cut material for which the wheel is not designed.

A pamphlet including these Do's and Don'ts and other safety information is included in each box of wheels.

### **Bonded Application Chart**

								Ferro	us M	etals *							
	Angle Iron	Bar Stock	Cast Iron / Ductile Pipe	Carbon Steel	Channel Iron	Decking	Heaw Rebar	High Tensile Steel	Iron Pipe	I-Beams / Rail Steel	Light Gauge Metals	Metal Studding	Metal Tubing	Stainless Steel	Steel	Thin Rebar	Welds
Type 27 Grinding Wheels A24N	1.		.	.	.										.		.
A24R	•	•		•	•	•	•		•	•					•		•
A24T C24N	1.	•	•		•				•		•	٠			•		
Type 27 Specialty Grinding Wheels																	
A46N A24 Turbo	1.																
Sait Z-tech™	•	•		•	•	•	•	•	•	•				•	•		•
Saitech Ultimate Performance™								•						•			•
Saitech Attacker® Stainless Contaminant Free			•					<b>ا</b>									•
Type 28 Grinding Wheels																	
A24N A24R			•		:			•	•	•				•	:		•
C24N	Ť	ľ		Ľ	Ľ	Ľ			Ľ						Ľ	Ů	
Saitech Ultimate Performance™			•					٠						٠			•
Type 29 Flexible Grinding/Blending Wheels																	
Challenger II <sup>™</sup> / Challenger 3  Type 27 Specialty Cutting & Light Grinding Wheels	+-	•	$\vdash$	<del>                                     </del>	·	•		•	·	•	·		•	•	<u> </u>		-
Pipeline/Turbo					١.	•	•			•					٠ ا	•	
Sait Z-tech™ Pipeline	•	•			•	•	•	•	•	•	•	•	•	•	•	•	
Saitech™ Pipeline (S Pipe)  Type 27 Cutting Wheels	+	•	⊢	<u>  •                                   </u>	_		•	·	•	•		-	_	•	·		$\vdash$
A24R		•		•	•	•	•		•	•					•	•	
.090		•		•	•	٠	•	•	٠	•	٠	•	•	٠	•	•	
C24R Type 27 Specialty Cutting Wheels	-		•														
Sait Z-tech™	١.			١.	١.			١.							١.		
.045 Aluminum																	
Saitech UP™ / Saitech™ .045, Z-tech™ .045 / The Ultimate Cut™ .045				•	•			•	٠	٠				•	•		
Stainless Contaminant Free Type 1 Chop Saw Wheels	+																
EZ-Chop Attacker® /Z-tech™	•	•			٠ ا		•		•		•	•			٠ ا	•	
EZ-Chop® / Stud King®											•	•			•	•	
Saitech Steel Worker® Iron Worker™		•		•	•		•	•	•				•	•		•	
Non-ferrous Metals (Alum)																	
Type 1 High Speed Cut-off Wheels for Portable Saws																	
A24R SAIT-Pro				١.	•		•		•							•	
A60S				•				•			•		•	•			
Saitech™ .045 / Z-tech™ .045 / The Ultimate Cut™ .045				•	•			•	•	•				•	•		
C24R / XFC Type 1 Specialty High Speed Cut-off Wheels	+		•														
Brute™												١.					
Hobo®	•	•			•		•		•	•							
Ductile™ Big M.A.C.™			•						٠								
Type 1 Cut-off Wheels for Street Saws	_																
C16																	
C24R Street Walker™																	
Street Runner™																	
Type 1 Wheels for Stationary Cut-off Saws	1																
A24N	•	•	•	•	•		•	٠	•	•				٠	•		
A24R A36R	•	•		•	•	•	•		•	•					:	•	
C24R																	
Metal-Cutting Carbide Blades	·	•		·	·	•	·	•			•	•	•	•	·	•	•
Type 1 Thin High Speed Cut-off Wheels A24R	١.	١.		1	1	١.		1	١.		١.	١.	١.		1	١.	
A36T	1:	•				•					•		Ť		•	•	
A60T						٠					٠	٠					
Saitech Ultimate Performance™  Type 11 Cup Wheels	+			•				•						•			$\blacksquare$
A16					1			1					1		١.		
Z16						•			•					•	•		
C16			•			•											
CA16 Type 16,17,18 Cones & Plugs	+			۰		ŀ			•				•		•		$\vdash$
Resin Bonded Mounted Points	$\top$	t	<u> </u>					•	•	$\vdash$			•	•	•		М
						_						-					-

### **Bonded Application Chart**

Non-	Ferrou	ıs Me	tals *				Sto	ne *					Other	* I I	
Aluminum	Brass	Bronze	Copper	Asphalt	Brick	Ceramic	Concrete	Granite	Green Concrete	Marble	Masonry	Fiberglass	Plastic	Wood	Page in Catalog
					•	•	•	•	•	•	•				8 8 8 14
•	•	•	•												11 9 10 13 13
					•	•	•	•	•	•	•				15 15 17 16
•	•	•	•									•	•	•	18 24 25 25
•	•	•	•		•	•	•	•	•	•	•				35 32-33 37
•			٠												35 28 29, 36 37
•	•	•	•												42-43 42-43 43 43 43
•	•	•	•		•		•				•		•		44 44 30 31 46
				•	•	•	•	•	•	•	•		•		45 45 45 46
				•	•	•	•	•	•	٠	•				47 47 47 47
•	•	•	•		•	•	•			•	٠				48 48 48 49 51, 52
												•	٠		38-39 38-39 38-39 38-39
							•	•		•	•				20 20 21 21 19
										sage					22

#### \* Indicates most common usages

#### How To Use This Chart

This chart should be used as a reference to match wheel to application. Following these steps will help you utilize this chart to choose the wheel that will best suit your needs.

#### STEPS IN SELECTING A WHEEL

- 1. Select the material you will be using based upon the choices at the top of the chart.
- 2. Determine what you want to do to this material?
  - Are you cutting?
  - Are you grinding?
  - Are you cutting and grinding?
  - Are you finishing?
- 3. What tools do you have available?
- 4. Once you have followed these steps, select the wheel that will best suit your needs and turn to that page to see more specifications on that product.

### **Index By Product Description**

<b>Product Descripti</b>	on	Page
.045 & .090 Thin H	igh Speed Cut-Off Wheels	28-34
Acid Brushes		134
Belts	Backstand	64, 67
1	Benchstand	65-67
1	• Custom	68
	Floor Sanding	109
	Portable	64-66
	Surface Conditioning	116
Bench Grinding Wh	neels	59
Bonded Abrasives	Application Chart	160-161
Brushes for Bench	Grinders	129, 135
Brushes For Small	Grinders	133, 135
Buffing Discs/Comp	oounds	126, 146
Carbide Burs/Wood	d Storage Box	136-137
Cartridge Rolls		106-107
Challenger II™ & Ch	allenger 3 Wheels	18
Chop Saw Wheels		41-43
Coated Abrasives A	Application Chart	162-163
Cones & Plugs		19
Convolute Wheels .		124
Cotton Fiber Grindi	ng Wheels/Mounted Points	56-57
Cotton Fiber Lamin	ated Discs/Cutting Wheels	57
Cross Pads		108
Cup Brushes		129-130
Cup Stones		20-21
Cutting Wheels	• .045 Type 27/Type 1	28-31
	• .090 Type 27/Type 1	32-34
	• 1/8 inch Type 27	24-25, 37
	• 3/32 inch Type 27	35-36
	<ul><li>Type 1 Thin High Speed Cut-Off</li></ul>	30-31, 38-39
Diamond Wheels		54-55
End Brushes		133, 135
Fiber Discs		69-74
•	-woven	
Flap Discs	Encore & Encore Mini	87
,	<ul> <li>Ovation®/Ovation® Attacker®</li> </ul>	88-89
	<ul> <li>Saitlam™ Fiberglass Backing</li> </ul>	90-91
	<ul> <li>Sand-Light™ Flap Discs</li> </ul>	91
	<ul> <li>Saitlam™ Plastic Backing</li> </ul>	92
Flap Wheels	Coated	93-94
•	Interleaf	114, 121
Floor Sanding	Coated	109-111
	Non-woven	112-113
Grinding Wheels	• 1/4 inch Type 27	8-14
	■ 1/4 inch Tyne 28	15-17

### **Index By Product Description**

Product Description	Page
Hand & Floor Rubs	58
Hand Pad, 6x9	114-115
Hook & Loop Discs	82-83
How to Use This Catalog	4
Knot Wire Wheels	131-132
Laminated Discs	75-77
Metal Chip Brush	134
Metal-Cutting Carbide Blades	50-53
Mounted Points	22
Nylon Abrasive Brushes	135
Paint Brushes	134
Pipeline Brushes	131-132
Pipeline Wheels - 1/8 inch Type 27	23-25
Plumber Rolls	104
Portable Saw Cut-Off Wheels	40, 44-46
Products by Tool Index	6
Promotional Items/Point of Purchase Display	147-149
PSA Cloth Discs	78, 84-85
PSA Paper Discs	78-81
Safety Guide	151
SAIT-PAK™	138
Saitscreen™ Rolls	104
SAIT-Strip™	114, 119
Sanding Sponges	101
Scratch Brushes	134
Sheets • Cloth	95-96
• Drywall	100
Fileboard	98-99
• Paper	95-97
Saitscreen™	100
Shop Rolls	102-103
Spiral Bands	105
Square Pads	108
Stationary Saw Cut-Off Wheels	48-49
Super-Lock Hub™	152
Surface Conditioning Belts	114, 116
Surface Conditioning Discs	114, 117-118
Technical Info (Resin Bonded & Coated)	153-159
Thin High Speed Cut-Off Wheels	30-31, 38-39
Unitized Wheels/Type 27	114, 122-123
Vitrified Mounted Points	22
Wire Brush - Concrete Expansion Joints	133

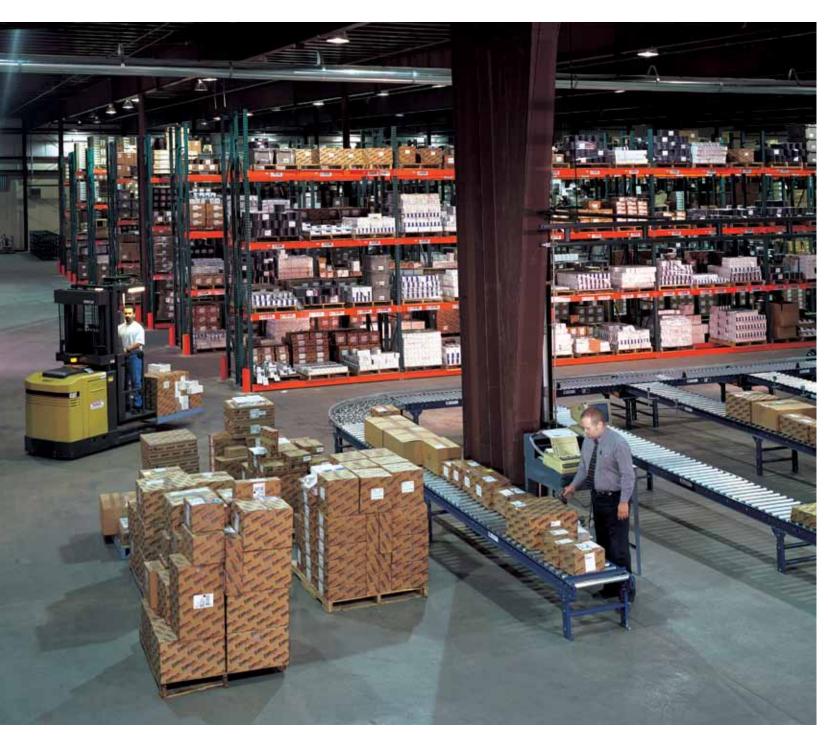
### **Index By Product Number**

0501 00516	Product No		Product No	Page	Product No	Page
01411					23427	46
02701 (02714   133   21002   17   23452 23453   5.5   03373 (02718   132   21004 21005   15   23465   5.4   03393 (02398   131   132   2101   11   17   23452   23458   5.4   03393 (02398   131   132   2101   11   17   23458   5.4   03406 (03413   129   2101   10   11   17   23458   5.4   03406 (03413   129   2101   2101   15   15   23460 (23466   6.4   03406 (03413   132   2101   2101   10   10   10   03426 (03425   131   131   11020 21025   13   13   2200   13   2300   2300   2300   2300   03426 (03426   131   13   21020 21025   13   2300   2300   2300   2300   03501 (03514   130   22005   22007   24   24001   24000   8.4   03501 (03514   130   22005   22007   24   24001   24000   8.4   0471 (03439   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131   131						
03378						
033B0 033B5						
19386-03388						
03389-03391   131,132   21012   17   23459   44						
03406-03413						
G9414-0423						
09426-00495 131 21020-21026 15 23004-22077 24 0340-00491 131 132 21004-21009 16 2370-22777 24 0340-00491 131 22000-2007 25 24007-22002 26 24004-2002 27 24004-20029 28 24004-20029 28 24004-2401 28 24004-2401 28 24004-2401 28 24004-2401 28 24004-2401 28 24004-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 24006-38 240						
03440-03449					23478-23502	45
0346-03461						
03601-03614					23/03-23/1/	24
04110-04390						
65751-05768						
6837-66358						
6689-06855						
6686-6686 132 22020. 35 24020. 48 6688-6639] 131, 132 22021. 28 4093-2403. 49 6640-66405 130 22025. 37 24030-24033 43 6640-66407 129 22030-22040. 24 6408. 130 22041. 37 24035. 43 6408. 130 22041. 37 24035. 43 6408. 130 22041. 37 24035. 43 6410-6423. 131 22042. 24 24 6408. 35 24040-24022. 49 6641-66423. 131 22046. 35 24040-24022. 49 6641-66423. 131 32 22047. 28 6641-66423. 131 32 22047. 28 6641-66423. 131 32 22047. 28 6641-66423. 131 32 22047. 28 6641-66423. 39 6641-66438. 131 131 22067. 28 6641-66438. 131 132 22067. 28 6650-66614. 130 22052. 29 6650-66659. 129 22053. 28 6650-66659. 129 22053. 28 66701-66714. 133 22055. 24 66701-66714. 133 22055. 24 66701-06714. 133 22060-22061. 37 6650-09560. 129 22056. 22057. 35 24080-2402. 48 69570-09570. 132 22060-22061. 37 66950-09560. 129 22056. 22057. 35 24080-2402. 48 69070-10714. 132 22060-22061. 37 69570-10714. 132 22060-22061. 37 69570-10714. 132 22060-22061. 37 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-10714. 32 69570-1						
6838-96391 131, 132 22021. 28 24023. 49 6640-66407 129 22030-22040. 24 24030-24033. 43 66406-66407 129 22030-22040. 24 24034. 42 66406-66407 129 22030-22040. 24 24034. 42 66406-66407 129 22030-22041. 37 66408. 130 22041. 37 66408. 130 22041. 37 66408. 37 66410-66412. 129 22042. 24 24038. 42 66410-66412. 130 22045. 35 66410-66412. 131 32 22047. 28 66440-66408. 131 32 22047. 28 66440-66408. 131 32 22050-22051. 37 66450-6646. 131 31 32 22050-22051. 37 66551-6655. 139 22053. 24 66561-66514. 130 22050-22051. 37 66561-66514. 133 22050-22051. 37 66561-66514. 133 22050-22051. 37 66561-66516. 131 32 22056-22057. 36 66670-66714. 133 22056-22057. 36 6670-66714. 133 22056-22057. 36 6670-66714. 133 22056-22057. 36 6670-66714. 133 22056-22057. 36 6670-66714. 133 22056-22057. 35 6680-6609. 129 62056-22057. 35 64080-24082. 48 66701-66714. 133 22056-22057. 35 64080-24082. 48 6701-66714. 133 22056-22057. 35 64080-24082. 48 6701-66714. 133 22056-22057. 35 64080-24082. 48 6701-66714. 132 22056-22057. 35 64080-24082. 48 6701-66714. 132 22056-22057. 35 64080-24082. 48 6701-66714. 132 22056-22057. 35 64080-24082. 48 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-66714. 38 6701-						
66401-06405						
66406-66407						
6640B.						
66409-664123 150 22042 24 24036. 42 66414-66423 150 22045. 55 24040-22042 48 66426-06435 151 22046. 24 24043. 49 66426-06435 151 22046. 24 24043. 49 66426-06435 151 32 22047. 28 24045. 47 6645-06461 151 22052. 28 24045. 47 6650-06461 151 22052. 24 24061-24066 47 6650-06514 150 22055. 24 24061-24066 47 6650-06514 150 22055. 24 24061-24066 47 6650-06514 150 22055. 24 24061-24066 47 6650-06514 150 22055. 24 24072. 48 66701-66714 153 22056. 24 24073. 49 66701-66714 153 22056. 28 24070-24072 48 606701-66714 153 22056. 22057. 37 24050-24072 48 24061-24060. 152 22050. 22051 37 24050-24072 48 24061-24060. 152 22050. 25057. 37 24050-24072 48 25050-25057. 37 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-24072 49 24050-240						
6641-66425						
66440-66485						
66440-06448         131 32         22047         28         24045         47           66450-06641         130         22052         24         24072-24067         48           3 66501-06514         130         22053         28         24070-24077         48           66701-06714         133         22055         24         24073         49           99551-9560         129         22056-22057         35         24080-24082         48           89670         133         22060-22061         37         24083         49           20011-20013         8         22062         24         24092-24102         48           20014         13         22064         36         24120-24121         47           20015         8         22066         24         24122-24127         46           20017         14         22066-22067         35         24130-24131         47           20018         11         22068         36         24140-24121         44           20019         8         22069         36         24145         44           20019         8         22069         36         24145         47						
06450-06461 131 22050-22051 37 24050-24053 43 06501-06514 130 22052 24 24061-24066 47 7 06551-06559 129 22053 28 24070-24072 48 06701-06714 133 22056 22053 28 24070-24072 48 09551-06560 129 22056-22057 35 24080-24082 48 099551-09560 129 22056-22061 37 24083 49 20001-20013 8 22062 24 24 24090-24102 48 20014 13 22064 36 24102-24121 47 20015 8 22068 24 24 24090-24102 48 20014 13 22064 36 24102-24121 47 20015 8 22066 22067 35 24103-24121 47 20015 8 22066 22067 35 24103-24121 47 20018 11 22068 29 24135-24140 44 20019 8 22069 36 24145 24140 44 20019 8 22069 36 24145 24140 44 20019 8 22069 36 24145 24140 44 20019 8 22069 36 24145 24140 44 20060-20060 8 22071 28 24150-24160 44 20060-20060 8 22071 28 24102-24230 12 20061 14 22072-22073 29 24210-24230 12 20062 11 22064 36 24084 36 24102-24330 37 20063 8 22082 29 24141-24116 43 20062 20071 8 22088 29 24141-24116 43 20064 30 20064 31 22084 36 24500 42 20065 20070 8 22088 29 29 24141-24116 43 20067 20071 31 22120 35 25000-25008 39 20071 32 20064 30 20064 31 22084 36 24500 42 20065 20070 8 22088 29 24141-24116 43 20067 20071 31 22120 35 25000-25008 39 20072 31 22120 35 25000-25008 39 20072 31 22120 35 25000-25008 39 20075 20081 31 2200-22240 31 2200-25006 30 30 200064 31 22082 31 22209 36 25010-25000 30 39 200072 31 22120 35 25000-25006 39 200072 31 22120 35 25000-25006 39 200072 31 22120 35 25000-25006 39 200090 30 30 25000-25006 30 30 30 30 30 30 30 30 30 30 30 30 30						
06551-06514         130         22052         24         24061-24076         48           06701-06714         133         22055         28         24070.24072         48           06701-06714         133         22055         24         24073.         49           09570         133         22060-22061         37         24083.         49           20001-20013         8         22062         24         24090-24102         48           20014         13         22064         36         24120-24121         47           20015         8         22065         20         24         24090-24102         48           20017         14         22066         36         24120-24121         47           20017         14         22066-22067         35         24130-24131         47           20018         11         22066-22067         35         24150-24160         44           20019         8         22069         36         24145         47           20046         36         24145         47         42060-2409         13         22071         28         24210-24230         12         2061         42         22061						
66551-06559         129         22053         28         24070-24073         49           06701-06714         133         22055-52057         35         24080-24082         48           09570         133         22065-22057         35         24080-24082         48           20001-20013         8         22062         24         24090-24102         48           20014         13         22064         36         2412-24127         46           2015         8         22065         24         2412-24127         46           2016         8         22066         24         2412-24127         46           2017         14         22068-/1         32         24135-2413         47           2018         11         22068         29         24135-24140         44           2019         8         22069         36         24145-44         47           20018         11         22068         29         24135-24140         44           20019         8         22069         36         2414-244         47           20040-2004         13         22070         35         24100-24230         12						
133   22055   24   24073   49   49673   49   49670   48   49670   133   22060-22061   37   24083   49   48   24060   22061   37   24083   49   24001-22013   8   22060   22061   37   24083   49   24001-22013   8   22064   36   24120-24121   47   47   22015   8   22066   22067   36   24120-24121   47   24015   36   24120-24121   47   24015   36   24120-24121   47   24015   36   24130-24131   47   22016   22066   22067   35   24130-24131   47   22018   36   24135-24140   44   22019   8   22066   36   24135-24140   44   22019   8   22068   36   24135-24140   44   22019   8   22060   36   24145   47   22046-20049   13   22070   36   24145   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120   24120						
09551-09560						
99570. 133 22060-22061 37 24083 49 20001-20013 8 22060 2 24 24090-24102 48 20014 13 22064 36 24120-24121 47 20015 8 22065 24 24120-24121 47 20015 8 22066 35 24 24122-24127 46 20017 14 22066-22067 35 24130-24131 47 20018 11 22068 29 24135-24140 44 20019 8 22069 36 24 24145-24160 44 20019 8 22069 36 24145 47 20046-20049 13 22070 35 24150-24160 44 20050-20060 8 22071 28 24210-24230 12 20061 14 22072-22073 29 24251-24254 31 20062 11 22074-22079 36 24310-24330 37 20083 8 22088 29 24144-24416 43 20050-20060 13 22074 22079 36 24310-24330 37 20080 13 22084 36 24500 42 20065-20070 18 22088 29 2444-24416 43 20065-20070 18 22084 36 2500-2508 19 20072 11 22098-22099 36 2500-2508 19 20073 18 22125 37 2506-25062 58 20074 13 22100-22140 24 25101-25040 58 20074 13 22100-22140 24 25101-25060 19 20082 14 22170 35 26001-25040 58 20074 13 22204-22299 25 26003 20 20075-20081 8 22185 37 2506-25062 58 20074 13 22200-22240 31 25001-25040 58 20075-20081 8 22185 37 2506-25062 58 20076 18 22160 23 24 25001-25040 20 20085-20070 37 2506-25062 58 20074 38 22160 244 25101-25060 19 20082 14 22170 35 26001-25040 20 20083 11 22200-22240 31 26001-25040 20 20084 13 22200-22240 31 26001-25040 20 20085-20066 8 2244-22299 25 26003 20 20088 11 22200-22300 29 26010 20 20088 11 22200-22300 29 26010 20 20089 13 2264-22370 28 26004-26005 21 20087 14 22300-22300 29 26010 20 20089 13 22619-22636 25 26013 20 20099 14 2300-22370 39 26002 20 20099 14 2300-23072 39 26002 20 20099 14 2300-23072 39 26002-26063 20 20099 20149 13 23101-23107 30 38 26023 20 20099 20149 13 2330-23373 30 27500-27616 18 20160 14 2333-23337 39 2600-26063 20 20099 20149 13 2330-23373 39 26002-26063 20 20099 20149 13 23414 44 44 34495 84 20160 14 23418 44 44 34495 84 20172 11 23418 46 3470-34777 98 20161 14 23418 46 3470-34777 98 20175 20265 8 24422 45 3513-55612 86 20175-20265 8 24422 45 3513-55612 86						
20001-20013						
20014						
20015         8         22066-22067         35         24 24122-24127         46           20017         14         22068-22067         35         24130-24131         47           20018         11         22068         29         24135-24140         44           20019         8         22069         36         24145-24160         44           40050-20060         8         22070         35         24150-24160         44           20061         14         22072-22073         29         24210-24230         12           20062         11         22074-22079         36         24310-24330         37           20063         8         22082         29         24411-24416         43           20064         13         22084         36         24500         42           20065-20070         8         8         22088         29         25000-25008         19           20071         14         22089-22099         36         25010-2504         58           20072         11         22120         35         25043         59           20073         8         22155         37         25050-25082         58 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
20017         14         22068         35         24130-24131         47           2018         11         22068         36         24145-140         44           2019         8         22090         36         24145-160         44           20046-20049         13         22070         35         24150-24160         44           20061         14         22072-22073         29         24251-24254         31           20062         11         22074-22079         36         24310-24330         37           20083         8         22082         29         24411-24416         43           20064         13         22084         36         24500         42           20065-20070         8         22089         29         25000-25008         19           20071         14         22089-22099         36         25010-25040         58           20072         11         22120         35         25043         59           20073         8         22125         37         25060-25062         58           20074         13         22130-22140         24         25101-25366         19           2075-20						
20018         11         22068         29         24135-24140         44           20019         8         22069         36         24145         47           20046-20049         13         22070         35         24150-24160         44           20060         8         22071         28         24210-24230         12           20061         14         22072-22073         29         24251-24254         31           20062         11         22074-22079         36         24310-24330         37           20063         8         22082         29         24414-24416         43           20064         13         22084         36         24500         42           20075-2070         8         22088         29         2500-25008         19           2071         14         22089-2099         36         2510-25040         58           20072         11         2120         35         25043         59           20073         8         22125         37         2505-25062         58           20074         13         22120         24         25101-25306         19           20075-20081						
20019.         8         22069.         36         24145.         47           20046-20049.         13         22070.         35         24150-24160.         44           20050-20060.         8         22071.         28         24210-24230.         12           20061.         14         22072-22073.         29         24251-24254.         31           20063.         8         22082.         29         24414-24416.         43           20064.         13         22084.         36         24300-24330.         37           20065.         13         22084.         36         24500.         42           20065.         20070.         8         22088.         29         25000-25008.         19           20071.         14         22089-22099.         36         25010-25040.         58           20072.         11         22120.         35         25043.         59           20073.         8         22125.         37         25050-25062.         58           20074.         13         22130-22140.         24         25101-25306.         19           20075-20081.         8         22141.         37         25800-25062. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
20046-20049         13         22070.         35         24150-24160.         44           20050-20060         8         22071.         28         24210-24230.         12           20061         14         22072-22073.         29         24251-24254.         31           20062         11         22074-22079.         36         24310-24330.         37           20063         8         22082.         29         24414-24416.         43           20064         13         22084.         36         24500.         42           20065-20070         8         22088.         29         25000-25008.         19           20071         14         22089-22099.         36         2510-25040.         58           20073         8         22120.         35         25043.         59           20073         8         22125.         37         25050-25062.         58           20074         13         22120.         24         25101-25306.         19           20075-20081         8         22141.         37         25803-25819.         9           20075-20081         8         22141.         37         25803-25819.         9						
20050-20060         8         22071         28         24210-24230         12           20061         14         22072-22073         29         24251-24264         31           20062         11         22074-22079         36         24310-24330         37           20063         8         22082         29         24414-24416         43           20064-070         8         22088         29         25000-25008         19           20071         14         22089-22099         36         25010-25040         58           20072         11         22120         35         25043         59           20073         8         22125         37         25050-25062         58           20074         13         22125         37         25050-25062         58           20074         13         22130-22140         24         25101-25306         19           20075-20081         8         22141         37         25803-25819         9           20082         14         22170         35         26000         20           2033         11         2230-22240         31         26001-26002         21						
20061         14         22072-22073         29         24251-24254         31           20062         11         22074-22079         36         24310-24330         37           20063         8         22082         29         24414-24416         43           20064         13         22084         36         24500         42           200707         14         22089-22099         36         25010-25040         58           20071         14         22089-22099         36         25010-25040         58           20073         8         22125         37         25050-25062         58           20074         13         22139-22140         24         25101-25306         19           20075-2081         8         22141         37         25803-25819         9           20082         14         22170         35         26000         20           20083         11         22230-22240         31         26001-26002         21           20084         13         2264-22299         25         26003         20           20085-20086         8         22340-22370         28         26004-26005         21 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
20062.         11         22074-22079         36         24310-24330         37           20063.         8         22082         29         24414-24416         43           20064.         13         22084         36         24500         42           20065-20070.         8         22088         29         25000-25008         19           20071.         14         22089-22099         36         25010-25006         58           20072.         11         22120         35         25043         59           20073.         8         22125         37         25050-25062         58           20074.         13         22125         37         25050-25062         58           20074.         13         22125         37         25050-25062         58           20075-20081         8         22141         37         25803-25819         9           20083.         11         222170         35         26000         20           20083.         11         22264-22299         25         26003         20           20087.         14         2330-22300         29         26010         20           20087. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
20063         8         22082         29         24414-24416         43           20064         13         22084         36         24500         42           20065-20070         8         22088         29         25000-25008         19           20071         14         22089-22099         36         25010-25040         58           20072         11         22120         35         25043         59           20073         8         22125         37         25050-25062         58           20074         13         22130-22140         24         25101-25306         19           20075-20081         8         22141         37         25803-25819         19           20075-20081         8         22141         37         25803-25819         19           20082         14         22170         35         26000         20           20083         11         22230-22240         31         26001-26002         21           20084         13         22642-2299         25         26003         20           20087         14         22340-223						
20064.         13         22084         36         24500.         42           20065-20070         8         22088         29         25000-25008         19           20071.         14         22089-22099         36         25010-25040         58           20072.         11         22120         35         25043         59           20073.         8         22125         37         25600-25062         58           20074.         13         22130-22140         24         25101-25306         19           20075-20081         8         22141         37         25803-25819         9           20082.         14         22170         35         26000         20           20083.         11         22230-22240         31         2601-26002         21           20084.         13         2226-2299         25         26003         20           20085-20086         8         22340-22370         28         26004-26005         21           20087.         14         223899-22616         10         26011-26012         21           20088.         13         22619-22636         25         26013         20						
20065-20070         8         22088         29         25000-25008         19           20071         14         22089-22099         36         25010-25040         58           20072         11         22120         35         25043         59           20073         8         22125         37         25050-25062         58           20074         13         22130-22140         24         25101-25306         19           20075-20081         8         22141         37         25803-25819         9           20082         14         22170         35         26000         20           20083         11         22230-22240         31         2601-26002         21           20084         13         2264-22299         25         26003         20           20085-20086         8         22340-22370         28         26004-26005         21           20087         14         22380-22390         29         26010         20           20088         11         22580-22390         29         26010         20           20089         13         2261-2666         35         26014-26015         21						
20071.         14         22089-22099         36         25010-25040         58           20072.         11         22120.         35         25043.         59           20073.         8         22125.         37         25050-25062         58           20074.         13         22130-22140         24         25101-25306         19           20075.         8         22141.         37         25803-25819         9           20082.         14         22170.         35         26000.         20           20083.         11         22230-22240         31         26001-26002         21           20084.         13         22264-22299         25         26003         20           20085-20086         8         22340-22370         28         26004-26005         21           20087.         14         22380-22390         29         26010         20           20088.         11         2259-22616         10         26011-26012         21           20089.         13         22619-22636         25         26013         20           20090-20091         8         22640-2236         25         26013         20						
20072.         11         22120.         35         25043.         59           20073.         8         22125.         37         25050-25062         58           20074.         13         22130-22140         24         25101-25306         19           20075-20081         8         22141.         37         25803-25819         9           20082.         14         22170.         35         26000.         20           20083.         11         22230-22240.         31         26001-26002         21           20084.         13         22264-22299.         25         26003.         20           20085-20086         8         22340-22370.         28         26004-26005         21           20087.         14         22380-22390.         29         26010.         20           20088.         11         22599-22616.         10         26011-26012         21           20089.         13         22619-22636         25         26013.         20           20090-20091         8         22640-22656         35         26014-26015         21           20092.         14         23002-23072         39         26020.         20 </td <td></td> <td></td> <td></td> <td></td> <td>25010-25040</td> <td></td>					25010-25040	
20073.         8         22125.         37         25050-25062         58           20074.         13         22130-22140         24         25101-25306         19           20075-20081         8         22141         37         25803-25819         9           20082.         14         22170         35         26000         20           20083.         11         22230-22240         31         26001-26002         21           20084.         13         22264-22299         25         26003         20           20085-20086         8         22340-22370         28         26004-26005         21           20087.         14         22380-22390         29         26010         20           20088.         11         22599-22616         10         26011-26012         21           20089.         13         22619-22636         25         26013         20           20099-20091         8         22640-22656         35         26014-26015         21           20092.         14         23002-23072         39         26020         20           20093.         11         23099         30         39         26021-26022						
20074						
20075-20081         8         22141.         37         25803-25819         9           20082.         14         22170.         35         26000.         20           20083.         11         22230-22240.         31         26001-26002         21           20084.         13         22264-22299.         25         26003.         20           20085-20086         8         22340-22370.         28         26004-26005.         21           20087.         14         22380-22390.         29         26010.         20           20088.         11         22599-22616.         10         26011-26012.         21           20089.         13         22619-22636.         25         26013.         20           2009920091         8         22640-22656.         35         26014-26015.         21           20092.         14         23002-23072.         39         26020.         20           20093.         11         23099.         30         39         26021-26022.         21           20094.         13         23101-23107.         30         38         26023.         20           2095-20096.         8         23140-23171.					25101-25306	10
20082         14         22170.         35         26000.         20           20083         11         22230-22240         31         26001-26002.         21           20084         13         22264-22299         25         26003.         20           20085-20086         8         22340-22370         28         26004-26005         21           20087         14         22380-22390         29         26010.         20           20088         11         22599-22616         10         26011-26012         21           20089         13         22619-22636         25         26013         20           20090-20091         8         22640-22656         35         26014-26015         21           20092         14         23002-23072         39         26020         20           20093         11         23099         30, 39         26021-26022         21           20094         13         23101-23107         30, 38         26023         20           20095-20096         8         23140-23171         39         26024-26025         21           20097         14         23172-23184         31         26050-26063         20					25803-25819	۱۶
20083         11         22230-22240         31         26001-26002         21           20084         13         22264-22299         25         26003         20           20085-20086         8         22340-22370         28         26004-26005         21           20087         14         22380-22390         29         26010         20           20088         11         22599-22616         10         26011-26012         21           20099         13         22619-22636         25         26013         20           20090-20091         8         22640-22656         35         26014-26015         21           20092         14         23002-23072         39         26020         20           20093         11         23099         30, 39         26021-26022         21           20094         13         23101-23107         30, 38         26023         20           20095-20096         8         23140-23171         39         26024-26025         21           20097         14         23172-23184         31         26050-26063         20           2098         11         2300-23278         38         27010-27414         <						
20084.         13         22264-22299         25         26003.         20           20085-20086         8         22340-22370         28         26004-26005         21           20087.         14         22380-22390         29         26010.         20           20088.         11         22599-22616         10         26011-26012         21           20089.         13         22619-22636         25         26013.         20           20090-20091         8         22640-22656         35         26014-26015         21           20092.         14         23002-23072         39         26020.         20           20093.         11         23099.         30, 39         26021-26022         21           20094.         13         23101-23107         30, 38         26023.         20           20095.         8         23140-23171         39         26024-26025         21           20097.         14         23172-23184         31         26050-26063         20           20098.         11         2320-23278         38         27010-27414         22           20199.         13         23304-23317         30         27500-27616 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
20085-20086         8         22340-22370         28         26004-26005         21           20087         14         22380-22390         29         26010         20           20088         11         22599-22616         10         26011-26012         21           20089         13         22619-22636         25         26013         20           20090-20091         8         22640-22656         35         26014-26015         21           20092         14         23002-23072         39         26020         20           20093         11         23099         30,39         26021-26022         21           20094         13         23101-23107         30,38         26023         20           20095-20096         8         23140-23171         39         26024-26025         21           20097         14         23172-23184         31         26050-26063         20           20098         11         23200-23278         38         38         27010-27414         22           20099-20149         13         23304-23317         30         27500-27616         18           20150-20160         8         23323-23328         31						
20087.         14         22380-22390         29         26010.         20           20088.         11         22599-22616         10         26011-26012         21           20089.         13         22619-22636         25         26013.         20           20090-20091         8         22640-22656         35         26014-26015         21           20092.         14         23002-23072         39         26020.         20           20093.         11         23099.         30, 39         26021-26022         21           20094.         13         23101-23107         30, 38         26023.         20           20095-20096         8         23140-23171         39         26024-26025         21           20097.         14         23172-23184         31         26050-26063         20           20098.         11         23200-23278         38         27010-27616         18           20150-20160         8         23323-23328         31         28000-28172         59           20161.         14         23333-23337         29         29200-29214         56           20162.         11         23410.         44         29310-29						
20088.         11         22599-22616         10         26011-26012         21           20089.         13         22619-22636         25         26013         20           20090-20091         8         22640-22656         35         26014-26015         21           20092.         14         23002-23072         39         26020         20           20093.         11         23099.         30, 39         26021-26022         21           20094.         13         23101-23107         30, 38         26023         20           20095-2096.         8         23140-23171         39         26024-26025         21           20097.         14         23172-23184         31         26050-26063         20           20098.         11         23200-23278         38         27010-27414         22           20099-20149         13         23304-23317         30         27500-27616         18           20150-20160         8         23323-23328         31         2800-28172         59           20161.         14         23333-23337         29         29200-29214         56           20162.         11         23410         44         293						
20089.       13       22619-22636       25       26013.       20         20090-20091       8       22640-22656       35       26014-26015       21         20092.       14       23002-23072       39       26020.       20         20093.       11       23099.       30, 39       26021-26022       21         20094.       13       23101-23107       30       38       26023.       20         20095-20096.       8       23140-23171       39       26024-26025       21         20097.       14       23172-23184       31       26050-26063       20         20098.       11       23200-23278       38       27010-27414       22         2009-20149       13       23304-23317       30       27500-27616       18         20150-20160       8       23323-23328       31       28000-28172       59         20161.       14       23333-23337       29       29200-29214       56         20162.       11       23410       44       29310-29322       57         20163.       8       23412       45       34110-34175       81         20164.       13       23413       46						
20090-20091       8       22640-22656       35       26014-26015       21         20092       14       23002-23072       39       26020       20         20093       11       23099       30, 39       26021-26022       21         20094       13       23101-23107       30, 38       26024-26025       21         20095-20096       8       23140-23171       39       26024-26025       21         20097       14       23172-23184       31       26050-26063       20         20098       11       23200-23278       38       27010-27414       22         20099-20149       13       23304-23317       30       27500-27616       18         20150-20160       8       23323-23328       31       28000-28172       59         20161       14       23333-23337       29       29200-29214       56         20162       11       23410       44       29310-29322       57         20163       8       23412       45       34110-34175       81         20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       3495						
20092						
20093       11       23099       30, 39       26021-26022       21         20094       13       23101-23107       30, 38       26023       20         20095-20096       8       23140-23171       39       26024-26025       21         20097       14       23172-23184       31       26050-26063       20         20098       11       23200-23278       38       27010-27414       22         20099-20149       13       23304-23317       30       27500-27616       18         20150-20160       8       23323-23328       31       28000-28172       59         20161       14       23333-23337       29       29200-29214       56         20162       11       23410       44       29310-29322       57         20163       8       23412       45       34110-34175       81         20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       34495       84         20171       14       23418       46       34710-34777       98         20172       11       23418       46       34770-34777       98 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
20094					26021-26022	21
20095-20096       8       23140-23171       39       26024-26025       21         20097       14       23172-23184       31       26050-26063       20         20098       11       23200-23278       38       27010-27414       22         20099-20149       13       23304-23317       30       27500-27616       18         20150-20160       8       23323-23328       31       28000-28172       59         20161       14       23333-23337       29       29200-29214       56         20162       11       23410       44       29310-29322       57         20163       8       23412       45       34110-34175       81         20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       34495       84         20171       14       23418       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85						
20097						
20098						
20099-20149       13       23304-23317       30       27500-27616       18         20150-20160       8       23323-23328       31       28000-28172       59         20161       14       23333-23337       29       29200-29214       56         20162       11       23410       44       29310-29322       57         20163       8       23412       45       34110-34175       81         20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       34495       84         20171       14       23418       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85         20175-20295       8       23423       46       35515-36129       84					27010-27414	22
20150-20160       8       23323-23328       31       28000-28172       59         20161       14       23333-23337       29       29200-29214       56         20162       11       23410       44       29310-29322       57         20163       8       23412       45       34110-34175       81         20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       34495       84         20171       14       23415       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85         20175-20295       8       23423       46       35515-36129       84						
20161       14       23333-23337       29       29200-29214       56         20162       11       23410       44       29310-29322       57         20163       8       23412       45       34110-34175       81         20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       34495       84         20171       14       23415       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85         20175-20295       8       23423       46       35515-36129       84						
20162						
20163						
20164       13       23413       46       34210-34315       83         20165-20170       8       23414       44       34495       84         20171       14       23415       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85         20175-20295       8       23423       46       35515-36129       84						
20165-20170       8       23414       44       34495       84         20171       14       23415       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85         20175-20295       8       23423       46       35515-36129       84						
20171       14       23415       45       34510-34627       83         20172       11       23418       46       34770-34777       98         20173       8       23420-23421       44       34987-35135       84         20174       13       23422       45       35136-35241       85         20175-20295       8       23423       46       35515-36129       84	20165-20170	8				
20172						
20173						
20174						
20175-20295						
20902-20916					35515-36129	84
			23425	45	36500-36509	79

### **Index By Product Number**

Section	Product No	Page	Product No	Page	Product No	Page
3664-98668	36520	80, 82	58900-58906	67		
36800-96808	36521-36528	80	59113-59153	73	77962-77965	51
96620 66868 9			59224-59880	71		
\$6640-96668						
58800-58910						
37082-37127					78005-78151	89
\$7138.37289						
37505-37511						
17615-17663   82 60683-60688   66 80607   103						
37605-37611 80 60683-60688 67 90615-20000 102 37615-37651 82 60772-60890 6 6 90807 102 37615-37651 82 60772-60890 6 6 90807 102 37615-37651 82 60772-60890 6 6 90807 102 37615-37651 82 60772-60890 6 6 90807 102 37615-37651 82 60772-60890 102 38001-38134 106 61994-61107 67 80815-81200 102 38001-38134 106 61994-61107 67 80815-81200 102 410004-40068 146 61121-61139 64 81404-81480 103 410004-40068 105 61145-61151 6 6 81505-8150 102 45000-46693 137 62200-63229 64 81604-81890 103 48001-48068 106 6122-6129 6 8 81807 102 48501-48521 54 63220-63229 6 8 81807 102 48501-48521 55 6220-63229 6 8 81807 102 48501-48521 55 6220-63229 6 8 81807 102 48501-48521 55 6220-63229 7 8 8 81807 102 48501-48521 55 6220-63229 7 8 8 81807 102 48501-48521 55 6220-63232 7 8 8 81807 102 48501-48521 55 6200-6422 7 67 82230-82430 102 48731-48768 55 6420-6422 67 82230-82430 102 48731-48768 55 6420-6422 7 8 8220-82430 102 50000-50045 7 7 64692-64698 7 8 8 81807 102 50000-50045 7 7 64692-64698 7 8 8650-84390 102 50000-50050 7 4 64772-64776 6 8 83205-83430 102 50000-50050 7 7 7 64692-64698 7 7 8050-84797 100 50100-50118 7 4 66108-65112 6 8 84089-84097 100 50100-50118 7 7 65000 7 7 7 7 7 64902-64696 7 7 8050-84797 100 50100-50118 7 7 65000 7 7 7 7 7 64902-64696 7 7 8050-84797 100 50100-50118 7 7 7 64902-64698 7 7 8050-84797 100 50100-50118 7 7 7 64902-64698 7 7 8050-84797 100 50100-50118 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						
57615-37651   \$2 60772-60980   \$6 80807   \$103 57800-37909   \$79 80982-61057   \$7 80815-81206   \$102 28001-38134   \$106 61094-61100   \$64 81207   \$103 28001-38134   \$106 61094-61100   \$64 81207   \$103 28001-38134   \$106 61094-61100   \$64 81207   \$103 28001-38134   \$106 61094-61100   \$64 81207   \$103 28001-38134   \$100 61094-6114   \$66 81215-61220   \$102 410004-41026   \$146 61121-61139   \$64 81205-61220   \$100 2410004-6108   \$100 61094-61100   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-6108   \$100 61004-61						
\$7800.3790.9   79   \$60982-61067   67   \$0315-81206   102   308001-38134   106   61094-61100   64   81207   103   38300-38346   107   61109-61114   66   81215-81230   102   41000-41026   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   1146   11						
Section   Sect						
98300-88346 107 61108-61114 65 81215-81230 102 41000-41026 1 146 61121-61139 6.4 81404-81480 103 42001-42054 105 61145-61151 66 81506-81530 102 42001-42054 105 61145-61151 66 81506-81530 102 42001-42054 105 61145-61151 66 81506-81530 102 42001-42054 105 61145-61151 66 81506-81530 102 42001-42054 105 61145-61151 66 81506-81530 102 42001-42054 105 61145-61151 66 81506-81505 102 42001-42054 105 61145-61151 66 81506-81505 102 42001-42054 105 61145-61151 66 81506-81505 102 42001-42054 105 61145-61151 66 81506-81505 102 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-42054 105 42001-						
41000-41026						
42001-42054						
45000-45693						
48001 48062					81505-81530	102
48631-48686 55 63250-63259 67 81815-82220 102 48701-48721 54 63280-64132 64 82225 110 48701-48721 55 63250-63259 67 81815-82220 102 48701-48721 55 63250-63259 67 81815-82220 102 48701-48788 55 46200-64422 67 82230-82430 102 50000-50045 70 64520-64538 64 8311-83173 99 50050-50052 74 64776 66 8320-83430 102 50000-50055 77 64520-64538 64 8311-83173 99 50050-50052 77 74 64982-64568 66 68 8320-83430 102 50000-50056 77 64982-64568 66 67 84550-84079 1004 50000-50057 77 77 64982-64568 67 84550-84079 1004 50000-50057 77 77 77 77 77 77 77 77 77 77 77 77 7						
48631-48668 55 63250-63259 67 81815-82220 102 48731-48768 55 64200-64222 67 82230-82430 102 250000-500045 76 64200-64222 67 82230-82430 102 250000-500045 76 64520-64538 648 83110-83173 99 250000-500087 76 64520-64538 648 83110-83173 99 250000-500087 76 64520-64538 668 8310-83173 99 250000-500087 76 64520-64538 67 84050-84079 100 25010-50113 74 6510-65112 65 84089-84079 104 25010-50115 74 6510-65112 65 84089-84079 104 25010-50115 74 6510-65112 65 84089-84079 104 25010-50115 74 6510-65112 65 84089-84079 104 25010-50115 77 7125-71281 91 84113-84117 99 25010-50200 77 7125-71281 91 84113-84117 99 25010-50200 77 7125-71281 91 84113-84117 99 25010-50200 77 7125-71281 91 84113-84117 99 25010-50200 77 7125-71281 91 84113-84117 99 25010-50200 77 77 77 77 77 77 77 77 77 77 77 77 7						
48701-48721 54 63280-64132 64 82225 5110 50000-50045 77 64520-64538 64 83110-83173 99 50050-500505 74 64772-64776 66 83205-83430 102 50000-500367 70 64826-64838 64 83110-83173 99 50050-500507 70 64826-64898 67 84050-84079 100 50100-50113 74 65108-65112 65 84089-84097 104 50120-50165 70 70 7001-71182 93 84101-84108 96 50100-50165 77 70 7001-71182 93 84101-84108 96 5020-50255 77 71205-71281 87 84113-84111 98 5020-50255 77 717205-71281 87 84113-84111 98 5020-50255 77 7180-71994 9122 84170-84174 99 50220-50235 77 7180-71994 9122 84170-84174 99 50220-50235 77 73020-73320 98 8420-84216 96 50220-50334 57 73341 91 8420-84216 96 50339-50359 73 73341 90 8500-85256 109 50339-50356 56 73360 92 85100-85257 110 50370-50372 73 73381 90 8500-85056 109 50360-50334 72 73380 92 85300-85407 111 50510-5033 73 73381 90 86122-86124 113 50610-5033 73 73381 90 86122-86124 113 50610-5033 73 73381 90 86122-86124 113 50610-5053 73 73741-73717 91 8603-8604 111 50510-5053 73 7374-737789 92 8800-88004 113 51022-51100 70 78885-73608 91 86133-86204 1112 51022-51100 70 73885-73608 91 86133-86204 1112 51242-51296 72 73702-73780 90 87131-87204 1112 51242-51296 72 73702-73880 90 95000 114 51242-51257 70 73736-73890 91 95000-88004 113 52100-52125 70 73736-73890 99 95000 144 52100-52125 70 73736-73890 99 95000 144 52100-52125 70 77382-73881 99 95000 144 52100-52125 70 77382-73880 99 95000 144 52100-52125 70 77382-73880 99 95000 144 52100-52125 70 77382-73880 99 95000 144 52100-52125 70 77382-73880 99 95000 144 52100-52125 70 77382-77389 99 95000 144 52100-52125 70 77382-77389 99 95000 144 5410-54000 774-7405-74072 93 95000-9504 141 52100-52125 70 77382-77389 99 95000 144 5410-54000 774-7405-77405 119 95000-9500 144 5410-54000 774-7405-77405 119 95000-9500 144 5410-54000 774-7405-77405 119 95000-9500 144 5410-54000 774-7405-77405 119 95000-9500 144 5410-54000 774-7405-77405 119 95000-9500 144 5410-54000 774-7405-77405 119 9500-9500 146 5410-54000 77740-77755 119 9500-9500 144 55210-55200 77740-77785 119 9500-9500 144 55210-55200 77740-77785 119 9500-						
48731-48768						
50000-50045         70         64520-64538         64         83110-83173         99           50005-50052         74         64772-64776         68         83206-83430         102           50060-50087         70         6488-64966         67         84050-84079         100           50100-50113         74         65108-65112         68         84089-84097         104           50105-50165         70         70001-71182         93         84101-84117         98           50165-50200         71         71205-71281         87         84113-84117         98           50208-50235         76         71980-71994         91,22         84170-84174         99           50238-50262         72         2000-72145         94         84200-84216         96           5024-50284         76         73020-73320         92         84230-8423         97           50300-50311         57         73340         92         84907-88568         98           50329-50334         73         7340         92         84907-88568         98           50329-50335         73         7340         98         98008-89569         100           50340-50335         73 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
60050-50052         74         64772-64776         66         82205-83430         102           50060-50087         70         64982-64966         67         84050-84079         100           50100-50113         74         66108-65112         65         84089-84097         104           50120-50165         70         70001-71182         93         84101-84108         96           50166-60200         71         71205-71281         87         84113-84117         98           50208-60282         72         72000-72145         94         84200-84216         96           5028-60284         76         73020-73320         92         8423-8423         97           50300-60311         57         73321         90         84331-8438         98           50320-60334         75         73341         90         85000-8506         109           50380-60367         56         73600         92         8500-85237         110           50410-6034         27         3361         90         8528-8528         109           50410-6034         27         3361         90         8528-8528         109           50410-6034         27         33702-7378						
50006-50087         70         64982-64986         67         84080-84097         104           50100-50113         74         65108-6512         65         84089-84097         104           50166-50200         71         77         7001-71182         93         84101-84108         96           50208-50235         76         71980-71994         91,122         84170-84174         99           5028-50262         72         72000-72145         94         8420-84216         96           5028-50262         72         72000-72145         94         8420-84216         96           5028-50264         76         73020-73320         92         84230-84283         97           5030-50311         57         73340         92         84907-84918         96           5032-50334         75         73340         92         84907-84918         96           5032-50339         73         73341         90         85026-5056         199           5030-50372         73         366         92         85100-8523         110           5030-50372         73         366         93         28500-8529         109           5041-50384         72         733						
50100-50113						
50120-50165         70         70001-71182         93         84101-84108         96           50166-50200         71         71267-71281         87         8411-84117         98           50288-50235         76         71980-71994         91,122         84170-84174         99           50288-50262         72         72000-72145         94         84200-84293         97           50286-50284         76         73020-73320         92         84230-84293         97           50300-50311         57         73340         92         84907-84918         96           50328-50359         73         73341         90         86038-85056         109           50308-50367         56         73360         92         85100-85237         110           50307-50372         73         73361         90         8628-85289         109           50410-50434         72         73380         92         85300-85407         111           50610-50533         73         73381         90         86128-86289         10           5010-50533         73         73381         90         86128-86124         113           5060-50566         56         73420-73680						
50166-50200         71         71205-71281         87         84118-84117         98           50208-50235         76         71980-71994         91.22         84170-84174         99           5028-50284         76         72020-72145         94         84200-84216         96           5026-50284         76         73020-73320         92         84230-84293         97           50300-50311         57         73321         90         84331-84380         98           50320-50334         75         73340         92         84507-84918         96           50336-50369         73         73341         90         85000-85056         109           50308-50367         56         73800         92         85000-85056         109           50410-50434         72         73380         92         85000-8507         111           50610-50533         73         73381         90         86128-85289         109           5060-5056         56         73420-73680         92         85000-85407         111           5060-5056         56         73420-73680         92         86128-8128         109           5060-5056         56         73420-73680						
50208-50235         76         71980-71994         91,122         84170-84174         99           50238-50262         72         72000-72145         94         84200-84216         96           50284-50284         76         73020-73320         92         84230-84293         97           50300-50311         57         73340         92         84907-84918         96           50338-50334         75         73341         90         8500-85066         109           50338-50367         56         73360         92         85100-85287         110           50370-50372         73         73361         90         8528-85289         109           50410-50424         72         73380         92         85100-85289         109           50610-50533         73         73381         90         8628-85289         109           50610-50566         56         73420-73680         92         86132-86240         111           50610-50566         56         73420-73680         92         86133-86244         112           51022-5100         70         73685-73689         91         86528-86481         101           51242-51296         72         73702-7370						
50288-50262         72         72000-72145         94         84200-84216         96           50264-50264         76         73020-73320         92         84230-84293         97           50300-50314         57         73321         90         84331-84380         98           50320-50334         75         73341         90         8500-85066         109           50380-5039-7         56         73360         92         8500-85266         109           50380-50372         73         73361         90         85208-85289         109           50410-50434         72         73360         92         85100-85237         111           50410-50434         72         73380         92         85288-85289         109           50410-50434         72         73380         92         8530-8647         111           50410-50434         72         73380         92         8513-8627         111           50510-50533         73         73381         90         86122-86124         113           5060-50666         56         56         73420-73680         92         86133-86244         112           5102-5100         70         73685-73688 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
50264-50284         76         73020-73320         92         84230-84293         97           50300-50334         57         73340         92         84907-84918         96           50320-50334         75         73341         90         85000-85056         109           50380-50367         56         73360         92         85100-85237         110           50370-50372         73         73361         90         85268-8288         109           50410-50434         72         73380         92         85300-88407         111           50510-50533         73         73381         90         8122-88124         113           50510-50533         73         73381         90         8122-88124         113           50510-50566         56         75420-73680         92         86133-88204         112           51022-51100         70         7368-73680         91         8635-8481         101           51222-51296         72         73702-73700         90         87131-8720         112           521342-51375         73         73714-7371         91         88006-8810         112           52228-52362         76         73820-73808						
50300-50314         57         73321         90         84937-84918         96           50320-50334         75         73340         92         84907-84918         96           50388-50359         73         73341         90         85000-85056         109           50380-50367         56         73860         92         85100-85237         110           50370-50372         73         73381         90         85285-85289         109           50410-50434         72         73380         92         85300-88407         111           50410-50434         72         73380         92         85300-88407         111           50610-50533         73         73381         90         86122-86124         113           50660-5066         56         73420-73680         92         86132-8624         112           51022-51100         70         73685-73698         91         8635-86481         101           5142-51375         73         7314-73771         91         8800-8810         112           52028-52345         76         7380-73780         92         88006-88810         112           52208-52345         76         73820-73808 <td< td=""><td></td><td></td><td></td><td></td><td>84200-84216</td><td>96</td></td<>					84200-84216	96
50320-50334         75         73340         92         84907-84918         96           50338-50369         73         73341         90         85000-85056         109           50380-50367         56         73380         92         85100-85237         110           50370-50372         73         73381         90         85258-85289         109           50410-50434         72         73380         92         85300-85407         111           5060-50566         56         73420-73680         92         86133-86204         112           51060-50533         73         7381         90         86122-86124         113           5102-5100         70         73685-73698         91         8635-86481         101           51242-5196         72         73702-73708         90         8713-87204         112           51342-51375         73         73714-73717         91         88002-88004         113           52100-52155         70         73736-73780         90         8713-87204         112           52302-5234         76         73802-73880         90         95002         123,141,145           52302-52334         75         73820-73880 <td></td> <td></td> <td></td> <td></td> <td>84230-84293</td> <td>97</td>					84230-84293	97
50338-50359         73         73341         90         85006-850566         109           50360-50367         56         73360         90         8528-85289         109           50360-50372         73         73361         90         8528-85289         109           50410-50434         72         73380         92         8580-85407         111           15010-50533         73         73381         90         81812-86124         113           50560-50566         56         65         673420-73680         92         86133-86204         112           51222-51100         70         73685-73688         91         8635-86481         101           51242-51296         72         73702-73708         90         87131-87204         112           51342-51375         73         73714-73717         91         8602-88004         113           52108-5225         70         73736-73780         92         88006-8810         112           52208-5234         75         73820-73880         99         990-00         141           52716-52756         74         7380-73890         92         95002         123, 141, 45           52716-52756         74						
50360-50367         56         73360         92         85100-85237         110           50370-50372         73         73361         90         85285-85289         109           50410-50434         72         73380         92         85300-85407         111           50510-50563         73         73381         90         81612-86124         113           50560-50566         56         73420-73680         92         86133-86204         112           51022-51100         70         73685-73988         91         8635-86481         101           51242-51296         72         73702-73708         90         87131-87204         112           51242-51295         72         73702-73708         90         860481         101           51242-51375         73         73744-73717         91         8800-86804         113           52100-52125         70         73736-73780         92         88604         113           52200-52334         75         73802-73808         90         90000         141           52300-52334         75         73890-73899         91         95000-900         141           52410-52736         74         73890-73899 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
50370-50372         73         73361         90         85285-85289         109           50410-50434         72         73380         92         85300-88407         111           50510-50533         73         73381         90         86122-86124         113           50560-50566         56         73420-73680         92         86133-86204         112           51022-51100         70         73685-73698         91         86355-86481         101           51242-51296         72         73702-73708         90         87131-87204         112           51342-51375         73         73714-73717         91         88002-88004         113           52005-52284         76         73802-73880         92         8006-88810         112           52208-52334         75         73820-73880         92         95000         121         145           52716-52736         74         73890-73899         91         95003-9500         141         528           52716-52736         74         73890-73899         99         95002         123         141         528         5276-52736         74         73890-73899         99         95003-900         144         524						
50410-50434         72         73380         92         85300-86407         111           50510-50533         73         73881         90         86122-86124         113           50560-50566         56         73420-73680         92         86133-86204         112           51022-51100         70         73688-73698         91         86358-86481         101           51242-5126         72         7302-73708         90         87131-87204         112           51342-51375         73         73714-73717         91         88002-88810         112           52100-52125         70         73736-73780         92         88006-88810         112           52206-52284         76         73802-73808         90         95000         141           52320-5234         75         73802-73880         92         95002         123,141,145           52716-52736         74         73890-73880         99         95000         141           52810-53120         70         73921-73981         90         95003-9504         141           52810-5312         70         73221-73981         90         95009-9504         142           54518         83         7332						
50510-50533         73         73381         90         86122-86124         113           50560-50566         56         73420-73680         92         86133-86204         112           51022-51100         70         73685-73698         91         8635-86481         101           51242-51296         72         73702-73708         90         87131-87204         112           52104-5226         73         73714-73717         91         88002-88004         113           52104-52284         76         73802-73880         92         8000-88810         112           52208-52334         75         73820-73880         92         95000.         121           52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         95002.         123,141,145           5418         83         7422-7389         91         95003-9504         141           52815-5282         77         77         73606-74072         93         95009         95010-9902           444         4518         83         74321-75780         90         95010-9902         144           55342-5						
5050-50566         56         73420-73680         92         86133-86204         112           51022-51100         70         73685-73688         91         86355-86481         101           51242-51296         72         73702-73708         90         87131-87204         112           51342-51375         73         73714-73717         91         88002-88004         113           52100-52125         70         73736-73780         92         88006-88810         112           52208-52284         76         73802-73808         90         95000         141           52305-52334         75         73820-73808         90         95000         141           52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         95000         141           5411-58120         70         73921-73981         90         95009         144           54518         83         74321-75780         90         95009         144           55215-55282         77         76206-76361         89         95030-95045         141           55362-552867         65         76420-7						
51022-51100         70         73685-73698         91         8355-86481         101           51242-51296         72         73702-73708         90         87131-87204         112           51342-51375         73         73714-73717         91         88002-88004         113           52100-52125         70         73736-73780         92         88006-88810         112           52208-52334         76         73802-73880         90         95000         141           5230-52334         75         73820-73880         92         95002         123, 141, 145           52716-52736         74         73890-73899         91         95002         123, 141, 145           52716-52736         74         73890-73899         91         95002         123, 141, 145           5210-53120         70         73921-73981         90         95008         140           54518         83         74321-75780         90         95009         144           55215-55282         77         76206-76361         89         95030-95045         141           55342-55367         66         76420-76780         90         95046-95047         142           55342-55367         76 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
51242-51296         72         73702-73708         90         87131-87204         112           51342-51375         73         73714-73717         91         88002-88004         113           52105-52125         70         73736-73780         92         88006-88810         112           52205-52284         76         73802-73880         90         95000         123,141,145           52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         95008         140           54016-54400         74         74050-74072         93         95009         144           5418         83         74321-75780         90         95008         140           55215-5282         77         76206-76361         89         95039-95045         141           5342-55367         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-77146         118         96050         144           56215-56282         77         7720-77215         117         95056-9508         142           56215-56282         77         7					86133-86204	112
51342-51375       73       73714-73717       91       88002-88004       113         52100-52125       70       73736-73780       92       88006-88810       112         52208-52284       76       73802-73808       90       95000       141         52716-52736       74       73820-73899       91       95003-95004       141         52810-53120       70       73921-73981       90       95008       140         54016-54400       74       74050-74072       93       95009       144         5418       83       74321-75780       90       95010-95028       140         55215-55282       77       76206-76361       89       95030-95045       141         55342-55357       65       76420-76780       90       95049-95045       141         55420-55464       75       77162-77185       125       95055       141         560215-56282       77       77200-77215       117       95066-95068       142         56313-56353       73       73730-77321       119       95070-95074       144         56313-56353       73       77320-77280       19       95081-95082       144         57100-57113					86355-86481	101
52100-52125         70         73736-73780         92         88006-88810         112           52208-52284         76         73802-73888         90         95000         141           5230-52334         75         73820-73889         92         95002         123, 141, 145           52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         950008         140           54016-54400         74         74050-74072         93         95009         144           54518         83         74321-75780         90         95010-95028         140           55215-55282         77         76206-76361         89         95030-95045         141           55362-55367         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-7146         118         95050         144           45420-55464         75         77162-77185         125         95055         141           56215-56282         77         7720-77215         117         95080-95068         142           56215-56282         77         7						
52208-52284         76         73802-73808         90         95000         141           52320-52334         75         73820-73899         91         95003-95004         141           52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         95008         140           64016-54400         74         74050-74072         93         95009         144           45418         83         74321-75780         90         95010-95028         140           55215-55282         77         76206-76361         89         95030-95045         141           55342-55367         66         76420-76780         90         95046-95047         142           56362-55367         66         77115-77146         118         95050         144           56215-56282         77         7720-777215         117         95056-95068         142           56024-56120         70         7720-777215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           56215-66282         77						
52320-52334         75         73820-73880         92         95002         123, 141, 145           52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         95008         140           54016-54400         74         74050-74072         93         95009         144           54018-8         83         74321-75780         90         95010-95028         140           55215-55282         77         76206-76361         89         95030-95045         141           55362-55367         65         76420-76780         90         95049-95047         142           55362-55367         66         77115-77146         118         95050         141           56024-55364         75         77162-77185         125         95055         141           56024-55365         77         77230-77280         119         95070-95074         142           56215-56282         77         77230-77325         117         95066-95068         142           56215-56282         77         77230-77325         117         95066-95068         142           5700-57513         65						
52716-52736         74         73890-73899         91         95003-95004         141           52810-53120         70         73921-73981         90         95008         140           54016-54400         74         74050-74072         93         95009         144           54518         83         74321-75780         90         95010-95028         140           55215-55282         77         776206-76361         89         95030-95045         141           55342-55357         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-77146         118         95050         144           56240-55464         75         771620-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           56215-56282         77         77230-77280         119         95070-95074         144           56215-56282         77         77230-77280         119         95070-95074         144           56215-56282         77         77230-77285         125         95081         142           57100-5713         65						
52810-53120         70         73921-73981         90         95008         140           54016-54400         74         74050-74072         93         95009         144           54518         83         74321-75780         90         95010-95028         140           55215-55282         77         76206-76361         89         95030-95045         141           55342-55367         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-77146         118         95050         144           55420-55464         75         77162-77185         125         95055         141           56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           46313-66353         73         7300-77321         117         95080         142           5710-5713         65         77382-77332         120         95081-95082         142           57100-5713         65         77382-77335         125         95083         144           57200-57513         65         77500-775						
54016-54400         74         74050-74072         93         95009         144           54518         83         74321-75780         90         95010-95028         140           55215-55282         77         76206-76361         89         95030-95045         141           55342-55357         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-77146         18         95050         144           55420-55464         75         77162-77185         125         95055         141           56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           46313-56353         73         77300-77321         117         95086-95068         142           57100-57513         65         77325-77332         120         95081-95082         142           57200-57513         65         77325-77352         125         95083         144           57200-57513         65         77500-7577         116         95095-95097         145           57600-57913         66						
54518       83       74321-75780       90       95010-95028       140         55215-55282       77       76206-76361       89       95030-95045       141         55342-55367       65       76420-76780       90       95046-95047       142         55362-55367       66       77115-77146       118       95050       144         55420-55464       75       77162-77185       125       95055       141         66024-56120       70       77200-77215       117       95056-95068       142         56215-56282       77       77230-77280       119       95070-95074       144         56313-56353       73       7300-77321       117       95080       143         57106-57090       70       77325-77332       120       95081-95082       142         57100-57113       65       77382-77395       125       95083       144         57200-57513       65       77500-77577       116       95085-95097       145         57600-57913       66       7762-77685       125       95100       144         58016-58090       70       77810-77826       121       95101-95108       145         5800-58006						
55215-55282         77         76206-76361         89         95030-95045         141           55342-55357         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-77146         118         95050         144           55420-55464         75         77162-77185         125         95055         141           56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         7730-77280         119         95070-95074         144           56313-56353         73         77300-77321         117         95080         142           57106-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57200-57513         65         77500-77577         116         95095-95097         145           57600-57913         66         77750-77565         125         95100         144           5800-58006         64         77710-77756         121         95101-95108         145           5811-58126         65						
55342-55367         65         76420-76780         90         95046-95047         142           55362-55367         66         77115-77146         118         95050         144           55420-55464         75         77162-77185         125         95055         141           56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           56313-56353         73         7300-77281         117         95080         143           57016-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57120         70         77440-77496         115         95085         142           57200-57513         65         77500-77577         116         95095-95097         145           58006-58006         64         77710-77756         125         95100         144           5811-58116         65         77810-77825         124         95101-95108         145           58120         70         778475-77						
55362-55367         66         77115-77146         118         95050.         144           55420-55464         75         77162-77185         125         95055.         141           56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           56313-56353         73         77300-77321         117         95080.         143           57016-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083.         144           57200-57513         65         77500-77577         116         95085-95097         145           57600-57913         66         77672-77685         125         95100.         144           58000-58006         64         77710-77756         121         95101-95108         145           58111-58116         65         77830-77865         124         95109-95108         145           58120         70         77810-777825         124         95109-95108         144           58110-58090         70					95030-95045	141
55420-55464         75         77162-77185         125         95055         141           56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           56313-56353         73         77300-77321         117         95080         143           57016-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57120         70         77440-77496         115         95085-95097         145           57600-57513         65         77500-77577         116         95095-95097         145           57600-57913         66         77672-77685         125         95100         144           58000-5806         64         7771-7777825         121         95101-95108         145           5811-58196         65         77830-77825         123         95121-95140         144           58120         70         77875-77890         122         95153-95173         142           58131-58136         66						
56024-56120         70         77200-77215         117         95056-95068         142           56215-56282         77         77230-77280         119         95070-95074         144           56313-56353         73         77300-77321         117         95080.         143           57016-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57200-57513         65         77500-77577         116         95095-95097         145           57600-57913         66         77672-77685         125         95100         144           58016-58090         70         77810-77865         121         95101-95108         145           5811-5816         65         77830-77865         123         95121-95108         145           58120         70         77810-77825         124         95109         144           58121-58126         65         779156         123         95121-95108         145           58131-58136         66         77915         51         95107-95108         145           58152-58156         64         7						
56215-56282         77         77230-77280         119         95070-95074         144           56313-56353         73         77300-77321         117         95080         143           57010-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57120         70         77440-77496         115         95085         142           57200-57513         65         77500-77577         116         95095-95097         145           57600-57913         66         77672-77685         125         95100         144           58006-58006         64         77710-77756         121         95101-95108         145           58016-58090         70         77810-77825         124         95109         144           58111-58116         65         77830-77865         123         95121-95140         145           58120         70         77875-77890         122         95153-95173         143           5812-58126         65         77915         51         95175-95187         142           5813-58136         66         77917 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
56313-56353         73         77300-77321         117         95080         143           57016-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57120         70         77440-77496         115         95085         142           57200-57513         65         77500-77577         116         95095-95097         145           57600-57913         66         77672-77685         125         95100         144           58006-58006         64         77710-77756         121         95101-95108         145           58016-58090         70         77810-77825         124         95109         144           58111-58116         65         77830-77865         123         95121-95108         145           58120         70         77875-77890         122         95153-95140         145           58121-58126         65         77915         51         95175-95187         142           58131-58136         66         77917         52         95195         146           58160-58149         67         77920-77921						
57016-57090         70         77325-77332         120         95081-95082         142           57100-57113         65         77382-77395         125         95083         144           57120						
57100-57113         65         77382-77395         125         95083         144           57120         70         77440-77496         115         95085         142           57200-57513         65         77500-77577         116         95095-95097         145           57600-57913         66         77672-77685         125         95100         144           58000-58006         64         77710-77756         121         95101-95108         145           58016-58090         70         77810-77825         124         95109         144           58111-58116         65         77830-77865         123         95121-95140         145           58120         70         77875-77890         122         95153-95173         143           58121-58126         65         77915         51         95175-95187         142           58131-58136         66         77917         52         95195         146           58142-58146         67         77920-77921         51         95201-95232         146           58160-58179         65         77930-77931         51         95240         123, 145           58180-58199         66         77932-77933						
57120						
57200-57513       65       77500-77577       116       95095-95097       145         57600-57913       66       77672-77685       125       95100       144         58000-58006       64       77710-77756       121       95101-95108       145         58016-58090       70       77810-77825       124       95109       144         58111-58116       65       77830-77865       123       95121-95140       145         58120       70       77875-77890       122       95153-95173       143         58121-58126       65       77915       51       95175-95187       142         58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58180-58199       65       77930-77931       51       95240       123, 145         58200-58206       65       77936       51       95250       142         5824-58380       71       77937-77938       52       95255-95257       146         58500-58780       71       77942						
57600-57913       66       77672-77685       125       95100       144         58000-58006       64       77710-77756       121       95101-95108       145         58016-58090       70       77810-77825       124       95109       144         58111-58116       65       77830-77865       123       95121-95140       145         58120       70       77875-77890       122       95153-95173       143         58121-58126       65       77915       51       95175-95187       142         58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58500-58806       65       77940       51       95266-95280       143         58550-58780       71       77942						
58000-58006       64       77710-77756       121       95101-95108       145         58016-58090       70       77810-77825       124       95109       144         58111-58116       65       77830-77865       123       95121-95140       145         58120       70       77875-77890       122       95153-95173       143         58121-58126       65       77915       51       95175-95187       142         58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58200-58506       65       77940       51       95266-95280       143         58500-58780       71       77942       52						
58016-58090       70       77810-77825       124       95109       144         58111-58116       65       77830-77865       123       95121-95140       145         58120       70       77875-77890       122       95153-95173       143         58121-58126       65       77915       51       95175-95187       142         58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         5824-58380       71       77937-77938       52       95255-95257       146         58500-58780       71       77942       52					95100	
58111-58116       65       77830-77865       123       95121-95140       145         58120       70       77875-77890       122       95153-95173       143         58121-58126       65       77915       51       95175-95187       142         58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123       145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58120						
58121-58126       65       77915       51       95175-95187       142         58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58131-58136       66       77917       52       95195       146         58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58142-58146       67       77920-77921       51       95201-95207       129         58152-58156       64       77922       52       95210-95232       146         58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58152-58156     64     77922     52     95210-95232     146       58160-58179     65     77930-77931     51     95240     123, 145       58180-58199     66     77932-77933     52     95245-95247     140       58200-58206     65     77936     51     95250     142       58224-58380     71     77937-77938     52     95255-95257     146       58500-58506     65     77940     51     95266-95280     143       58550-58780     71     77942     52						
58160-58179       65       77930-77931       51       95240       123, 145         58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58180-58199       66       77932-77933       52       95245-95247       140         58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58200-58206       65       77936       51       95250       142         58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58224-58380       71       77937-77938       52       95255-95257       146         58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58500-58506       65       77940       51       95266-95280       143         58550-58780       71       77942       52						
58550-58780						
58550-58780       71       77942       52         58850-58856       66       77947-77953       51					95266-95280	143
58850-58856 51			77942	52		
	5885U-58856	66	7 / 947 - 7 / 953	51		

## **EVERY** order is





## From phone order to truck United Abrasives continues to

- Manufacturer of both Bonded & Coated Abrasives.
- Market Leaders focused on the metal fabrication, construction, and industrial MRO markets.

## a RUSH delivery!



## in less than 10 minutes! break the innovation barrier.

- Service Leader speak with a live person. Accurate and complete shipments!
- Same Day Shipping Everyday!

## United Abrasives, Inc. / SAIT Worldwide









SAIT U.S.A.













U.S. Headquarters 185 Boston Post Rd North Windham, CT 06256 860.456.7131 • 800.428.5927

Salt Lake City Distribution Center 837 West 2600 South South Salt Lake City, UT 84119 United Abrasives Canada, Inc. 1835 Meyerside Drive, Unit 3 Mississauga, Ontario L5T 1G4 800.345.7248



