

SIGNODE®

Protective Packaging Systems

1-800-323-2464

E-mail: sigpss@signode.com
www.signode.com

Fax: 847-913-9078



A Tradition and a Promise

Since 1913, Signode has been the leading worldwide provider of protective packaging systems, offering our customers low-cost solutions, high quality products and excellent service. As a Signode customer, you are assured that:

We will be your lowest cost supplier

- By reducing your costs
- By improving the arrival condition of your products
- By making your operations more productive

We'll guarantee your satisfaction

- With the highest quality products
- With on-site sales and engineering assistance
- With supervised installation, maintenance and safety training

We'll be the easiest to do business with

- By offering the most highly trained and responsive direct sales and service representatives in the industry
- By providing 24-hour, 7 days-a-week toll-free technical assistance
- By ensuring 24-hour emergency service and parts availability

Strapping Systems

Manufactured in the United States, Signode steel and plastic strapping is the number-one choice among packaging professionals worldwide. It has achieved this status through its unequalled performance reliability. Because Signode strapping is manufactured to exact specifications, you are assured high quality and dependability with every coil.

We manufacture two types of steel strapping: Apex Plus™ and Magnus®; and four types of plastic strapping: economical Empax™ and Contrax® polypropylene, heavy-duty Dymax® nylon and heavy-duty Tenax® polyester strapping. To effectively and efficiently apply the strapping, we manufacture a full line of hand tools, power strapping equipment and accessories. Your Signode sales representative can help you select the system that's suited to your particular application.

Stretch Wrapping Systems

For nearly 20 years, Signode Packaging Systems has been one of the world's largest producers of stretch wrapping systems, including stretch film and application equipment. These systems may be used exclusively or in conjunction with strapping systems to help protect products from damage during handling, transit and storage. We produce our own stretch films in a variety of types and sizes, including hand application films and machine applied films. We also offer a full line of application equipment from hand-held wrappers to fully automatic turntable and overhead stretch wrapping systems.

Tape Packaging Systems

Signode Packaging Systems is a premier supplier of high quality pressure sensitive carton-sealing tapes and tape application equipment. These systems are used worldwide to package everything from produce and meat products to clothing and electronic parts. To accommodate this wide range of applications, we offer an extensive line of manual and machine-applied pressure sensitive tapes, hand applicators and heavy-duty carton sealers.

The Signode System

Whether you require strapping, stretch film or tape, our sales, equipment service, customer service and engineering departments can help you design and implement the optimum protective packaging system for your application.

At Signode, we are committed to preserving and protecting the environment, from energy conservation to managing the waste we generate, as well as that of the customers we serve. Ask your sales representative about our sustainability and environmental initiatives.





Steel Strapping

Strapping.....	4, 5
Sealless joint types	5
Seal joint types.....	5
Seals	6
Manual tensioners.....	7
Manual sealers.....	8
Pneumatic tensioners	9
Pneumatic sealers	9
Manual combination tools	10
Pneumatic combination tools....	10, 11
Pneumatic accessories.....	11
Coil Lifter	11
Dispensers.....	12, 13

Steel and Plastic Strapping Accessories

Tool suspension systems.....	14
Power strap feeders (PSF)	14
Strap cutters	15
Digital tension meter	15
Edge protectors	15
Loading and bracing supplies	15



Plastic Strapping

Strapping	16, 17
Strapping kit.....	18
Seals and buckles.....	18
Manual tensioners	19
Manual sealers	19
Manual combination tools.....	20
Pneumatic combination tools.....	20
Battery-operated tools	21
Dispensers.....	21
Pneumatic accessories	21

Power Application Equipment

TableTyer	22
LBX-2000	22
LBX-2300/2330	22
HBX-4300/4330.....	23
HB-4310 side seal.....	23
MH-VRB	23
MHG	24
MOD-710.....	24
LBX-6520	25
LBX-Magazine.....	25



Stretch Film

Hand grade film	26
Machine grade film.....	26

Power Application Equipment

Raptor 525 turntable	27
Raptor 1525P turntable.....	28
Raptor 1525CN turntable.....	28
Cobra 525 overhead.....	29
Cobra 1525A overhead	30
Cobra 1525CN overhead.....	30
Octopus 303.....	31
Octopus 505, 606, 808, 808 Twin	31
Ringmaster	32



Carton-Sealing Tape

Tape.....	33
Heavy-duty tape heads.....	34

Power Application Equipment

LD-Xss.....	34
Legend.....	34
LD-7.....	34

Complementary protective packaging products

Angleboard
GaleWrap
Lachenmeier
Reddi-Pac

Mill wound



Ribbon wound

For uncompromising quality and packaging effectiveness

Consistent high quality makes Signode steel strapping the first choice among packaging professionals worldwide.

Types, sizes and finishes for all demanding applications

Signode offers two basic types of steel strapping: Apex Plus and Magnus. Each is specially formulated to meet the demands of a particular range of applications. And for each strapping type, there is a selection of sizes and finishes which matches the specific requirements of those applications.

Apex Plus™ strapping

A cold-rolled, low carbon steel strapping. Manufactured with superior edge conditioning and coating.

Magnus® strapping

A cold-rolled, medium carbon steel strapping. Heat-treated with a Signode process that combines fine surface and controlled physical properties with high strength and excellent shock resistance.

Steel strapping

The particular type of strapping best suited to a specific application generally depends on three factors:

- 1) the strapping's function or purpose,
- 2) the package characteristics and
- 3) shipping or handling considerations.

In a specific application, strapping may perform one or more of the following functions: package reinforcement, carton closure, securement, unitization, baling, bundling, bracing, palletization, compression retention and pilferage reduction.

Package characteristics that influence strap selection are: weight,

Apex Plus™ strapping

Strap Size				Part Number	Average Strength*		Yield		Coil Winding	Coil Weight lbs	Strap Finish
Width		Thickness			lbs	N	ft/lb	M/kg			
inch	mm	inch	mm								
3/8	9.5	.017	0.43	2X1502	975	4 340	46.1	31.0	Mill	105	Painted & Waxed
1/2	12.7	.017**	0.43	2X1504	1,275	5 670	34.6	23.3	Mill	105	Painted & Waxed
1/2	12.7	.020	0.51	2X1270	1,475	6 560	29.4	19.7	Mill	105	Painted & Waxed
1/2	12.7	.020	0.51	2X1174	1,475	6 560	29.4	19.7	Mill	105	Zinc
5/8	15.9	.017**	0.43	2X1505	1,625	7 230	27.7	18.6	Mill	105	Painted & Waxed
5/8	15.9	.020	0.51	2X1253	1,825	8 120	23.6	15.8	Mill	105	Painted & Waxed
3/4	19.0	.017**	0.43	2X1506	1,900	8 450	23.1	15.5	Mill	105	Painted & Waxed
3/4	19.0	.020	0.51	2X1509	2,150	9 560	19.6	13.1	Mill	105	Painted & Waxed
3/4	19.0	.023	0.58	2X1551	2,500	11 120	17.1	11.5	Mill	105	Painted & Waxed

Magnus® strapping

Strap Size				Part Number	Average Strength [*]		Yield		Coil Winding	Coil Weight lbs	Strap Finish
Width		Thickness			lbs	N	ft/lb	M/kg			
inch	mm	inch	mm								
1/2	12.7	.020	0.51	085604	1,525	6 780	29.4	19.7	Mill	105	Painted & Waxed
		.020	0.51	075955	1,525	6 780	29.4	19.7	Mill	105	Zinc
5/8	15.9	.020**	0.51	085644	1,900	8 450	23.6	15.8	Mill	105	Painted & Waxed
		.020	0.51	076061	1,900	8 450	23.6	15.8	Mill	105	Zinc
		.023	0.58	088432	2,175	9 670	20.5	13.7	Mill	105	Painted & Waxed
3/4	19.0	.020	0.51	089397	2,250	10 010	19.6	13.1	Mill	105	Painted & Waxed
		.023	0.58	089370	2,600	11 560	17.1	11.5	Mill	105	Painted & Waxed
		.025	0.64	085680	2,800	12 450	15.7	10.5	Ribbon	75	Painted & Waxed
		.025**	0.64	085684	2,800	12 450	15.7	10.5	Mill	105	Painted & Waxed
		.025	0.64	076310	2,800	12 450	15.7	10.5	Mill	105	Zinc
		.029	0.74	2X1295	3,400	15 125	13.5	9.1	Ribbon	75	Painted & Waxed
		.029	0.74	2X1424	3,400	15 125	13.5	9.1	Mill	105	Painted & Waxed
1-1/4	31.8	.025	0.64	089367	4,650	20 680	9.4	6.3	Ribbon	110	Painted & Waxed
		.029	0.74	2X1268	5,400	24 020	8.1	5.5	Ribbon	110	Painted & Waxed
		.029	0.74	2X1296	5,400	24 020	8.1	5.5	Ribbon	110	Zinc
		.035	1.12	0X4985	6,400	28470	6.7	2.0	Ribbon	110	Painted & Waxed
		.044	1.12	2X1438	7,900	35 140	5.3	3.5	Ribbon	110	Painted & Waxed
2	50.8	.044	1.12	2X1439	12,500	55 600	3.3	2.2	Ribbon	120	Painted & Waxed

Anchor strapping — Apex Plus

3/4	19.0	.017	0.43	2X1518	1,350	6 000	20.1	13.6	Mill	105	Painted & Waxed
-----	------	------	------	--------	-------	-------	------	------	------	-----	-----------------

Anchor strapping — Magnus

1-1/4	31.8	.029	0.74	2X1421	4,020	19 130	7.6	3.4	Ribbon	110	Painted & Waxed
-------	------	------	------	--------	-------	--------	-----	-----	--------	-----	-----------------

* Strap break strengths are listed as averages. Always use American Society for Testing Materials (ASTM D-3950) minimum break strengths for package design/safety factor purposes. For proper strap selection, contact your Signode sales representative.

** 300 ft. demonstration coils are available for these sizes.

stability, rigidity, integrity and sharpness of the edges (sharp edges may demand heavier strapping or corner protection).

Shipping considerations that affect the choice of strapping include: how far the package is shipped; how it's handled by both the shipper and receiver; and where and how it's stored.

If you have questions regarding your specific application, call your Signode sales representative for help in determining your strapping requirements.



Signode steel strapping plants are ISO-9000 certified.

Steel strap packaging

Coil winding

Signode strapping is produced in two basic coil windings:

Mill wound

The strapping is oscillated uniformly and tightly across the 2-1/2" (63.5mm) width of the coil.

Ribbon wound

Each layer is wound directly over the one below it so that the width of the strapping is the width of the coil.

Coil sizes

Inside diameter: 16" (406.4mm)

Outside diameter: Mill wound coils measure 23" (584.2mm). Ribbon wound coils vary from 23-1/2" to 27" (596.9mm to 685.8mm) depending on strap size.

Standard multi-coil skids

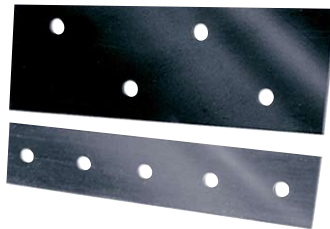
Twelve mill wound coils make up a standard skid. The number of ribbon wound coils will vary with strapping width.



Ribbon wound skid



Mill wound skid



Anchor strapping

The standard or stocked version of punched strapping comes in two sizes:

3/4" x 0.017" (19.0 x 0.43mm)
Apex Plus with in-line 0.140" (3.5mm) holes on 3/4" (19.0mm) centers and a strap strength of 1,310 lbs. (5 827 N).
1-1/4" x 0.029" (31.8 x 0.74mm)
Magnus with staggered 0.250" (6.4mm) holes on 1-1/2" (38.1mm) centers and a strap strength of 4,020 lbs. (17 881 N).

Standard strap finishes

Signode produces three different steel strapping finishes. Each is tailored to the requirements of particular tensioning methods, sealing devices and packaging applications.

Painted

Painted strapping is coated to offer corrosion resistance. Available in a wide range of Magnus strapping sizes, it is used in crimp-type seal systems to produce high joint strength.

Painted and waxed

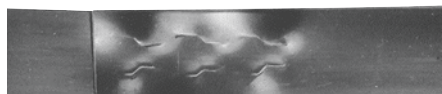
Painted and waxed strapping also provides corrosion resistance. Available in all Apex Plus and Magnus strap sizes, it can be used in notch or crimp-type seal systems. Its primary advantage is improved tension transmission around load corners. Waxed strapping is required for feedwheel-type tensioners.

Zinc painted and waxed

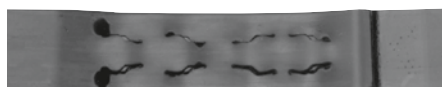
Zinc finish strapping is waxed and has a zinc-enriched coating to provide outstanding resistance to rust. Available in a variety of Apex Plus and Magnus sizes, it has the same improved tension transmission characteristics as the painted and waxed strapping. Zinc finish protects where it is needed most—at points of surface damage and scratches.

Sealless joint types

Sealless joints can be made with Signode manual or pneumatic combination tools. Using interlocking keys, the sealless joints provide static joint strength equal to that of notch-type joints. The reverse lock sealless joint features one reversed interlocking key for added security in impact conditions.



Three key sealless joint



Four key, reverse lock, sealless joint

Basic seal joint types

Notch joint

One way to lock strap ends is to cut, or "notch" the seal and the strapping it joins to form tabs at the edges. These tabs are bent down (down notch joint) or bent up (reverse notch joint). The strength of the notch joint comes from the mechanical interlock between the seal and strapping. Notch joints are typically used on waxed strapping in packaging and unitizing applications.



Down notch joint



PACKAGE SURFACE



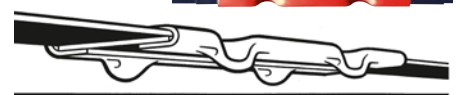
Reverse notch joint



Crimp joint

Another way to seal the ends of strapping is to press or "crimp" undulations into the seal and strapping ends. The strength of the crimp joint comes from the deformed seal creating high frictional forces. Crimp joints produce high static and dynamic joint strengths and are used on applications like carloading in which the strapped load is subject to severe impact.

Crimp joint



PACKAGE SURFACE

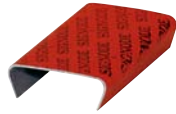
Seals

The choice of a specific seal is often most strongly influenced by the type of tool or machine selected to apply it.

Five standard seal types

Snap-on seals

Placed over the overlapping strap ends either during or after tensioning the strapping. Eliminates pre-threading. Speeds the strapping operation.



Thread-on seals

Must be threaded over the overlapping strap ends before the tensioning tool is applied. Generally used on bales, bundles and larger strap sizes.



Open-flange seals

Heavy-duty version of the snap-on. Requires no pre-threading.



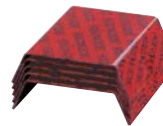
Push-type seals

Used where strap is tensioned by butting the nose of the tensioner against the seal. Overlapping flanges withstand the higher stress.



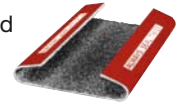
Nestack® seals

Held together by interlocking nibs. This Signode development permits loading partial stacks into magazines of seal feed combination tools and power strapping machines.



Microgrip® seals

For severe impact applications using waxed strapping. Microgrip seals are coated inside with a high-friction grit which bites through the wax to provide maximum holding power.



Seal Name	Strap Size		Part Number	Seal Type	Joint Type	Tool Name	Seal Length		Standard Package	Approximate Shipping Weight	
	inch	mm					inch	mm		lbs	kg
38 AL	3/8	9.5	000555	Nestack	Double Notch	AL-38	.860	21.8	12,600	34	15
38 C			000450	Snap-on		C-3820	1.120	28.5	5,000	28	13
38 SPC			000453	Push	Single Notch	SRC-3820	1.047	26.6	5,000	38	17
12 AL	1/2	12.7	000554	Nestack	Double Notch	AL-12	.860	21.8	9,100	28	13
12 AMP			000512	Nestack		AM-12, AMP-1-12	1.120	28.5	5,700	44	20
12 C			000500	Snap-on	Double Notch	C-1223, YC-1223	1.120	28.5	6,000	44	20
12 SPC			000503	Push	Single Reverse Notch	PNSC-2-12, SRC-1223	1.047	26.6	3,000	30	14
58/34 AMP	5/8	15.9	000567	Nestack	Double Notch	AM-58, AM-34, AMP-1-58, AMP-1-34	1.120	28.5	4,000	40	18
58 C			000550	Snap-on		C-5823, YC-5823	1.250	31.8	4,800	45	20
58 SPC			000553	Push	Single Notch	PNSC-2-58, SRC-5823	1.047	26.6	5,000	58	26
34 C	3/4	19.0	000600	Snap-on	Double Notch	C-3423, YC-1-3425	1.250	31.8	5,000	55	25
34 HCOF			005256	Open-flange		SYC-3431, RCND-34	2.200	55.9	1,500	50	23
34 HOC			005271	Push		PRHM-34, PRHR-34, RCD-3431, RCNS2-34, SYC-3431, RCND-34	2.200	55.9	700	31	14
34 MNT			007255	Nestack	Double Notch	AHP-34	1.500	38.1	2,400	48	22
34 PNSC			000572	Push	Single Notch	PNSC-2-34, SRC-3423	1.047	26.6	4,000	54	25
34 SHOC			005273	Push	Single Notch	RCNS2-34, SYC-3431	1.500	38.1	1,200	31	14
104 DG*	1-1/4	31.8	007200	Thread-on	Four Crimp	B-1431, B-1450, NSP-1435	4.750	120.7	500	53	24
107 DG*			000575	Thread-on	Double Crimp	B-1431, B-1450, NSP-1435	2.937	74.6	700	46	21
107 DG OF*			000580	Open-flange		B-1431, B-1450, NSP-1435	2.937	74.6	500	33	15
114 A	1-1/4	31.8	000612	Nestack	Double Notch	AH-114, AHP-2-114	1.500	38.1	1,150	34	15
114 OF			008796	Open-flange	Double Notch	C-1431, C-1450, RC-1435-50, RCD-1431, RCNS2-114, RCND-114	2.200	55.9	1,000	50	23
114 P			005269	Push	Double Notch	C-1431, C-1450, PRHR-114, RC-1435-50, RCD-1431, RCNS2-114, RCND-114	2.200	55.9	700	46	21
114 TO			005267	Thread-on	Double Notch	RCNS2-114, RCND-114	2.200	55.9	1,000	50	23
117 HDG OF*	1-1/4	31.8	000585	Open-flange	Double Crimp	B-1450, N-1444-50LSH, N-1457-LSH-2A	2.937	74.6	500	41	19
117 HDG TO*			0X4308	Thread-on	Double Crimp	B-1450, N-1444-50LSH	2.937	74.6	500	41	19
208 DG*	2	50.8	000588	Thread-on	Double Crimp	B-250, NS-250-65L	2.937	74.6	300	43	20
208 TO	2	50.8	001871	Thread-on	Double Crimp	B-250, NS-250-65L	2.937	74.6	300	43	20

Power Strapping Machine (PSM) seals

38 MNA	3/8	9.5	000562	Nestack	Single Notch	M2, M5, M200 (300 cap)	.750	19.0	9,000	29	13
38 MN MNS	3/8	9.5	000462	Nestack	Single Notch	M2, M25	.680	17.2	9,000	25	11
12 MNA	1/2	12.7	000563	Nestack	Single Notch	M20, M200 (250 cap)	.750	19.0	5,400	28	13
12 MN MNS	1/2	12.7	000515	Nestack	Single Notch	M2, M4, M5, M6, M25	.680	17.2	8,400	26	12
58 MB	5/8	15.9	000435	Nestack	Double Notch	M22-58, M200 (300 cap)	.984	24.9	4,000	36	16
58 MN	5/8	15.9	008996	Nestack	Single Notch	M2, M4, M5, M6	.680	17.2	8,400	30	14
58 MNA	5/8	15.9	000565	Nestack	Single Notch	M20-58, M200 (250 cap)	.750	19.0	4,800	30	14
34 MB	3/4	19.0	000569	Nestack	Double Notch	M40, M400	.984	24.9	3,000	38	17
34 MNK	3/4	19.0	000566	Nestack	Single Notch	M22-34, M220 (250 cap)	.750	19.0	3,700	37	17
34 MNT	3/4	19.0	007255	Nestack	Triple Notch	M20-34, MH-34, M200 (250 cap)	1.500	38.1	2,400	48	22
114 M	1-1/4	31.8	000561	Nestack	Double Notch	M361	2.000	50.8	750	42	19

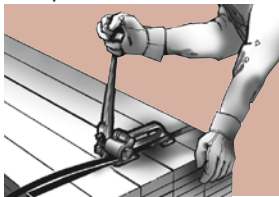
* All seals designated as "DG" have an aluminum oxide grit glued to the inner face. Grit seals are used in crimp joint systems in conjunction with lubricated strapping to provide a source of friction.

Signode hand tensioners allow operators to bring strap to desired tension with minimal interruption, effort and strap waste.

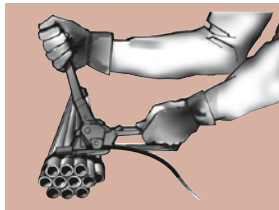
Most tensioners have a base which goes under the strapping and rests on the flat surface of the object being strapped. For smaller or irregular bundles, a push-type tensioner, which has no base under the strap is recommended.

Feedwheel—for general use

The feedwheel tensioner has a serrated feedwheel which engages the strapping firmly. There is no limit to the amount of slack it can pull out of the strap. Fast and easy to use, it requires the use of painted and waxed strapping.

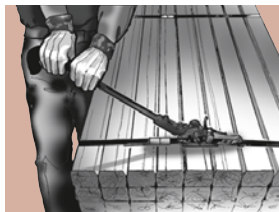


Push-type feedwheel—for round or irregular bundles



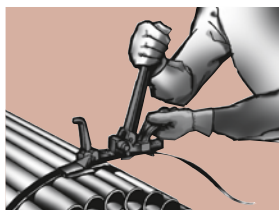
Windlass—for heavy-duty applications

The windlass tensioner simply winds one end of the strapping around a slotted windlass shaft. Used with dry, heavier strapping precut to desired lengths.



Rack-and-pinion—for heavy round or irregular applications

The rack-and-pinion tensioner uses a serrated gripping dog to hold the pulled strap end. It can be used with either dry or lubricated strapping on round or irregular shaped packages. This tensioner has limited take-up.



Model	Part Number	Strap Size				Strap Type	Strap Finish	Mech. Adv.	Weight	
		Width		Thickness					lbs	kg
		inch	mm	inch	mm					
Feedwheel tensioners										
ST	003480	3/8–3/4	9.5–19.0	0.017–0.023	0.43–0.58	Apex Plus, Magnus	Painted & Waxed	12	4	1.8
T	003450	5/8–3/4	15.9–19.0	0.017–0.035	0.43–0.64			18	5	2.3
TH-34-114	020500	3/4–1-1/4	31.8	0.029–0.035	0.74–0.89	Magnus		25	7	3.2



ST

T

TH-114

Push-type feedwheel tensioners

PF	017900	3/8–3/4	9.5–19.0	0.017–0.023	0.43–0.58	Apex Plus, Magnus	Painted & Waxed	18	4	1.8
PFH	017930	3/4–1-1/4	19.0–31.8	0.025–0.035	0.64–0.89	Apex Plus, Magnus	Painted & Waxed	23	7	3.2



PF

PFH

Windlass tensioners

4A1-114	184125	1-1/4	31.8	0.029–0.050	0.74–1.27	Magnus	Painted, Painted & Waxed	28	12	5.4
4A1-2	184140	2	50.8	0.044–0.050	1.12–1.27	Magnus		33	16	7.3

Rack-and-pinion tensioners

PH-2	010065	3/4–1-1/4	19.0–31.8	0.017–0.035	0.43–0.89	Apex Plus, Magnus	Painted, Painted & Waxed, Dry	22	7	3.2
------	--------	-----------	-----------	-------------	-----------	-------------------	-------------------------------	----	---	-----



4A1-114, 4A1-2

PH-2

Manual Sealers

For steel strapping



Signode manual sealers provide positive sealing action with minimal effort. Light and durable, they lock strap ends into a high strength joint. Notch-type sealers cut into the seal and outer edges of the strapping, turning tabs down (down notch) or up (reverse notch).



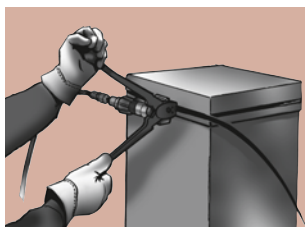
Crimp-type sealers press the edges of the strapping and seal into wavy crimps specially shaped to produce maximum frictional forces on the strapping.



Two sealer types Side-action and front-action

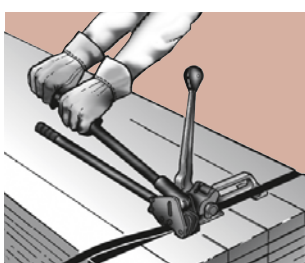
Front-action

Front-action sealer handles are held perpendicular to the strapping, usually in front of the operator who pushes the handles together close to the chest. Generally for light-duty strapping applications.



Side-action

The side-action sealer's lower handle can be rested on the flat surface of the unit being strapped. Operators can apply much of their weight with both hands on the upper handle. Generally for heavier strapping applications.



Model	Part Number	Strap Size				Working Position	Seal Name	Joint Type	Weight	
		Width		Thickness					lbs	kg
		inch	mm	inch	mm	(Action)				
Regular-duty sealers—front and side-action										
C-3820	008600	3/8	9.5	0.017-0.020	0.43-0.51	Front	38 C	Double Notch	3	1.4
SRC-3820	008620						38 SPC	Single Rev. Notch		
C-1223	008605	1/2	12.7	0.017-0.023	0.43-0.58	Front	12 C	Double Notch		
SRC-1223	008625						12 SPC	Single Rev. Notch		
YC-1223	023850	5/8	15.9	0.017-0.023	0.43-0.58	Side	12 C	Double Notch		
C-5823	008610					Front	58 C	Double Notch		
SRC-5823	008630						58 SPC	Single Rev. Notch		
YC-5823	023858					Side	58 C	Double Notch		
C-3423	008615	3/4	19.0	0.017-0.023	0.43-0.58	Front	34 C	Double Notch		
SRC-3423	008635						34 PNSC	Single Rev. Notch		
YC-1-3425	023875	3/4	19.0	0.017-0.025	0.43-0.64	Side	34 C	Double Notch		

C-3820
C-1223
C-5823
C-3423



YC-1223
YC-5823
YC-1-3425



SRC-3820
SRC-1223
SRC-5823
SRC-3423



Heavy-duty sealers—side-action

Model	Part Number	Width	Thickness	Working Position (Action)	Seal Name	Joint Type	Weight
		inch	mm				lbs
SYC-3431	004040	3/4	19.0	Side	34 HC OF, 34 HOC, 34 SHOC	Single Notch	6 2.7
RCD-3431	020560			Side	34 HOC	Dble. Rev. Notch	7 3.2
B-1431	020380	1-1/4	31.8	Side	104 DG, 107 DG	Single Crimp	6 2.7
B-1450	020580				104 DG, 107 DG, 107 DG OF, 117 HDG OF		8 3.6
C-1435	003970				114 OF, 114 P	Single Notch	8 3.6
C-1450	003990				114 OF, 114 P	Single Notch	8 3.6
RC-1435-50	004050				114 OF, 114 P	Single Rev. Notch	7 3.2
RCD-1431	020350				114 OF, 114 P	Dble. Rev. Notch	7 3.2
B-250	020530	2	50.8	Side	208 DG	Single Crimp	12 5.4



Pneumatic Tensioners & Sealers



For steel strapping

Tensioners

Signode pneumatic tensioners take most of the effort out of strapping large or compressible packages. They also make tensioning uniform and precise through adjustment of the air pressure regulator.



All pneumatic tensioners, except the WP-2, have unlimited strap take-up. It is essential that an air filter-regulator-lubricator assembly be installed ahead of the tool on the air line. See page 11 for pneumatic tool accessories.

Model	Part Number	Strap Size				Strap Type	Strap Finish	Maximum Strap Tension		Weight	
		Width		Thickness				lbs	N	lbs	kg
		inch	mm	inch	mm						

Feedwheel tensioners

FN-114T	008810	3/4-1-1/4	19.0-31.8	.031-.044	0.79-1.12	Magnus	Painted & Waxed	3,000	13 350	24	10.9
HN-1-114	027050	1-1/4	31.8	.029-.044	0.74-1.12	Apex, Magnus	Painted & Waxed	2,800	12 454	18	8.2



FN-114T



HN-1-114

Push-type tensioner

PN-2-114	423500	3/4-1-1/4	19.0-31.8	.020-.044	0.51-1.12	Magnus	Painted & Waxed	1,600	7 117	8.1	3.7
PN-2-2	428360	2	50.8	.044	1.12	Magnus	Painted & Waxed	1,600	7 117	8.1	3.7



PN-2-114



PN-2-2

Windlass tensioner

WP-2	023070	2	50.8	.044	1.12	Magnus	Painted & Waxed	8,000	35 590	23	10.4
------	--------	---	------	------	------	--------	-----------------	-------	--------	----	------



WP-2

Sealers

Signode pneumatic sealers let compressed air do most of the work. They are used to achieve high production on heavy strapping, especially when seals are in awkward positions or whenever productivity must be maximized.

These labor-saving sealers come in two basic styles. Those featuring pistol grips are lightweight for easy one-hand operation. Diaphragm types are for heavier-duty applications such as carloading.



All pneumatic sealers require an air filter and regulator. See page 11 for pneumatic tool accessories.

Model	Part Number	Strap Size				Seal Name	Joint Type	Weight	
		Width	Thickness	inch	mm			lbs	kg

Sealers

RCND-34	427770	3/4	19.0	0.025-0.040	0.64-1.12	34C, 34 HCOF, 34 HOC	Dble. Rev. Notch	11	5.0
RCNS2-34	424200	3/4	19.0	0.025-0.031	0.64-0.79	34 HOC, 34 SHOC,	Single Rev. Notch	9	4.1
RCND-114	427800	1-1/4	31.8	0.025-0.040	0.64-1.12	114 I, 114 OF, 114 TO	Dble. Rev. Notch	11	5.0
RCNS2-114	424125	1-1/4	31.8	0.025-0.031	0.64-0.79	114 OF, 114 P, 114 TO	Single Rev. Notch	9	4.1
N-1444-50LSH	024271	1-1/4	31.8	0.044-0.050	1.12-1.27	117 HDG OF	Double Crimp	22	10.0
N-1457-LSH-2A*	423810	1-1/4	31.8	0.050-0.057	1.27-1.45	117 HDG OF	Double Crimp	32	14.5
NSP-1435	015600	1-1/4	31.8	0.029-0.035	0.79-0.89	107 DG, 107 DG OF	Single Crimp	9	4.1
NS-250-65L	014360	2	50.8	0.044-0.050	1.12-1.27	208 DG	Single Crimp	22	10.0
RCNS-250	046840	2	50.8	0.044-0.050	1.12-1.27	208 TO	Single Rev. Notch	10	4.5

Pistol grip



NSP-1435
RCNS2-34
RCNS2-114
RCNS-250

Large diaphragm



RCND-34, RCND-114



N-1444-50LSH
N-1457-LSH-2A
NS-250-65L

* Three seals are required per joint.

Combination Tools

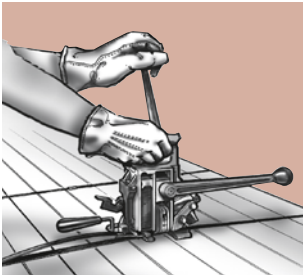
For steel strapping



Combination tools function as tensioners, sealers, and cutters. They save time by eliminating the handling of separate tools.

Manual seal-feed

Seal-feed combination tools carry a stack of seals in a magazine for fast, easy loading. Manually operated seal-feed combination tools include the AH, AL, and AM series models.



Manual sealless

The SCM and SCMH sealless combination tools require no metal seals, saving time and money. Production interruptions for reloading are eliminated, along with the purchasing, inventorying and loading of seals. Sealless combination tools use interlocking keys to secure the ends of the strap.



Pneumatic seal-feed

Using applied air pressure as a power source, pneumatic seal-feed combination tools quickly and effortlessly tension, seal and cut the strapping. These tools include the AHP and the AMP.



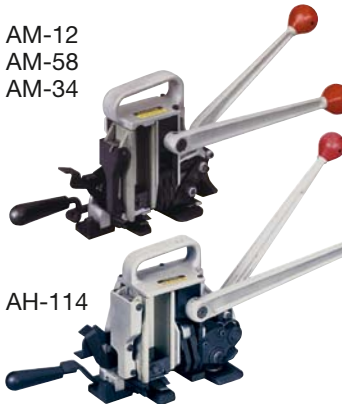
Pneumatic sealless

Pneumatic sealless combination tools include the SLP and the SPC.

Model	Part Number	Strap Size				Strap Type	Seal Name	Joint Type	Weight	
		Width		Thickness					lbs	kg
		inch	mm	inch	mm					
Manual seal-feed										
AL-38	023380	3/8	9.5	0.017-0.020	0.43-0.51	Apex Plus	38 AL	Double Notch	8	3.6
AL-12	023300	1/2	12.7	0.017	0.43		12 AL			
AM-12	023230	1/2	12.7	0.017-0.023	0.43-0.58	Apex Plus, Magnus	12 AMP	Double Notch	14	6.4
AM-58	023220	5/8	15.9	0.017-0.023	0.43-0.58		58/34 AMP			
AM-34*	023200	3/4	19.0	0.017-0.025	0.43-0.64					
AH-114	015700	1-1/4	31.8	0.031-0.035	0.79-0.89	Magnus	114 A	DRN**	25	11.3

Manual sealless										
SCM-12	424350	1/2	12.7	0.017-0.023	0.43-0.58	Apex Plus, Magnus	Sealless	3 Key	8.4	3.8
SCM-58	424358	5/8	15.9							
SCM-34	424334	3/4	19.0	0.017-0.025	0.43-0.64					
SCM-Ti-12	426840	1/2	12.7	0.017-0.023	0.43-0.58	Apex Plus, Magnus	Sealless	3 Key	6	2.7
SCM-Ti-58	426845	5/8	15.9							
SCM-Ti-34	426850	3/4	19.0	0.017-0.025	0.43-0.64					
SCMH-58	424510	5/8	15.9	0.020-0.023	0.51-0.58	Apex Plus, Magnus	Sealless	3 Key	11	5.0
SCMH-34	424500	3/4	19.0	0.023-0.031	0.58-0.79					

AM-12
AM-58
AM-34



AH-114

SCM-12
SCM-58
SCM-34

SCM-Ti-12
SCM-Ti-58
SCM-Ti-34

AL-38
AL-12



SCMH-58
SCMH-34

Pneumatic seal-feed										
AMP-1-12	024780	1/2	12.7	0.020-0.023	0.51-0.58	Magnus	12 AMP	Double Notch	22	10
AMP-1-58	024770	5/8	15.9	0.020-0.023	0.51-0.58	Apex Plus,	58/34 AMP		22	10
AMP-1-34	024760	3/4	19.0	0.020-0.025	0.51-0.64	Magnus			22	10
AHP-34	023700	3/4	19.0	0.031	0.79	Magnus	34 MNT		40	18.1
AHP-2-114	015650	1-1/4	31.8	0.025-0.035	0.64-0.89	Magnus	114 A	DRN**	40	18.1

Pneumatic sealless										
SLP-12	422350	1/2	12.7	0.017-0.023	0.43-0.58	Apex Plus, Magnus	Sealless	3 Key	15	6.4
SLP-58	422355	5/8	15.9	0.017-0.023	0.43-0.58					
SLP-34	422360	3/4	19.0	0.017-0.025	0.43-0.64					
SPC-3431	422446	3/4	19.0	0.025-0.031	0.64-0.79	Magnus	Sealless	4 Key	24	10.8
SPC-114	423125	1-1/4	31.8	0.025-0.031	0.64-0.79	Magnus	Sealless	4 Key	37	16.8



*A conversion kit is available to accommodate 0.031 strapping (Part No. 306815).

**Double Reverse Notch

Pneumatic push-type

Pneumatic push-type combination tools, including the PNSC and PRH-Series models, are used with push-type seals on irregular-shaped packages. Air power tensions, seals and cuts the strapping.



Model	Part Number	Strap Size				Strap Type	Seal Name	Joint Type	Weight	
		Width		Thickness					lbs	kg
		inch	mm	inch	mm					
Pneumatic push-type										
PNSC 2-12	422495	1/2	12.7	0.017-0.023	0.43-0.58	Apex Plus, Magnus	12 SPC	Single Reverse Notch	9.5	4.3
PNSC 2-58	422496	5/8	15.9	0.017-0.023	0.43-0.58		58 SPC			
PNSC 2-34	422497	3/4	19.0	0.017-0.025	0.43-0.64		34 PNSC			
PNSC 2-34HT	422881	3/4	19.0	0.017-0.025	0.43-0.64		34 PNSC			
PRHM-34	306700	3/4	19.0	0.025-0.031	0.64-0.79	Magnus	34 HOC	Double	16	7.3
PRHR-34	424234	3/4	19.0	0.025-0.031	0.64-0.79	Magnus	34 HOC	Reverse	34	15.4
PRHR-114	423570	1-1/4	31.8	0.025-0.035	0.64-0.89		114 P	Notch	34	15.4



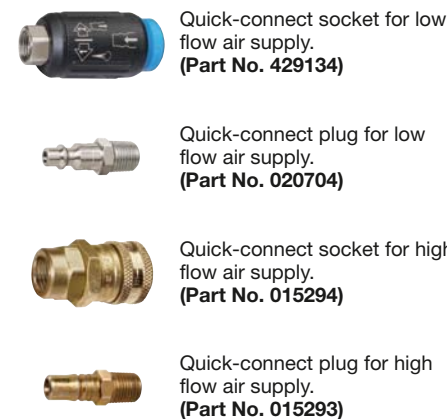
Pneumatic accessories



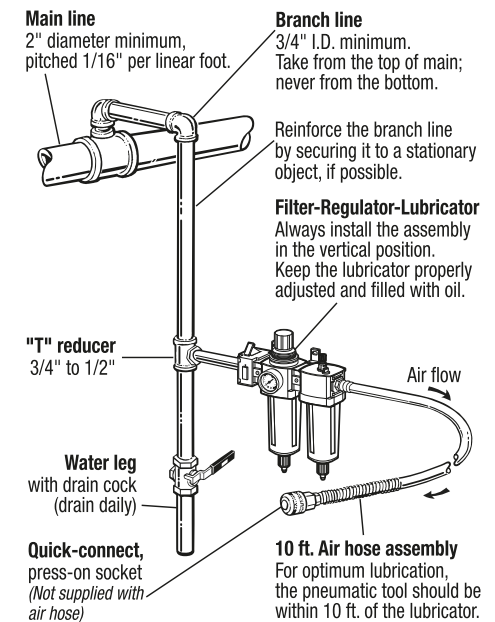
Note: Use lightweight, non-detergent oil in lubricator, such as Non-Fluid Oil No. LS-1236 (Part No. 008556) or equivalent.

A filter-regulator-lubricator (FRL) assembly (Part No. 429141, with hose) or (Part No. 429130, without hose) is needed with all pneumatic tools. Additional fittings and air hoses are available from Signode, such as those shown at right, to help provide optimum operation. Please contact your local Signode sales representative for more information on the proper fittings for your specific tool.

Check the air pressure at the tool with a separate air gauge to verify proper air pressure.



Recommended Air Line Piping



Swivel connector for 10' air hose for low flow air supply. (Part No. 426903)

Filter bushing (Part No. 024631) Screened bushing reduces airborne particles from entering the tool.

Dispensers

For steel strapping

SIGNODE®



DF-7A
Inexpensive model for mill wound coils.
General use.



DF-15
For typical shipping room. Easily loaded with
mill wound coils.



DF-10RW
Accepts mill wound or ribbon wound coils
3/4" and 1-1/4" in width.



DO-3A
Overhead dispenser for mill wound coils. Wall
mounting bracket (WB, Part No. 002817) and
ceiling bracket (CB-9, Part No. 002816) are
available.



Straproller Feature
Prevents strap spillage and tangling.



DF-23
Fits almost anywhere. Pays off from the inside
of the coil. Mobile with optional DM-23 cart.
Cover required for strap over 0.023" (0.58mm).
Cover sold separately (Part No. 024219).



DM-23
Makes the DF-23 mobile (Part No. 017000).



Coil Lifter
Capable of lifting up to 125 lb. strap coils,
the standard coil lifter is designed for easy
dispenser loading, both vertically and horizontally.
Accommodates both mill and ribbon wound
steel strap coils as well as standard plastic coils.
Available in a stationary (Part No. 425650) or
portable model (Part No. 424700).

Strap Dispenser Model	Part Number	Strap Size		Coil winding		Feeds from		Strap- troller Feature	Portable	Tool Tray	Dimensions						Dispenser Weight	
				Mill	Ribbon	Outside Vert. Coil	Inside Horiz. Coil				Height		Width		Length			
		inch	mm								inch	mm	inch	mm	inch	mm	inch	mm
DF-7A	059999	3/8–3/4	9.5–19.0	•		•			•	•	28	711	13-1/2	343	35	889	63	28
DF-15*	273725	3/8–3/4	9.5–19.0	•		•		•	•	•	37-3/4	959	25	635	16	406	54.5	24.7
DF-10RW	020420	3/4 or 1-1/4	19.0 or 31.8	•	•	•		•	•	•	41	1 041	18-1/2	470	28	711	94	43
DO-3A	002870	3/8–3/4	9.5–19.0	•		•		•			31	787	6-3/4	171	27-3/4	705	41	18
DF-23	024200	3/8–3/4	9.5–19.0	•			•				8	200	24-1/2	622	24-1/2	622	35	16

* Dispenser can be used with both steel and plastic strapping.



DTR-3

Heavy-duty carloading. Rubber tires for easy mobility. Holds one coil 3/4", two coils 1-1/4", and one coil 2" strapping.



DT-1-10RW

Heavy-duty dispenser. Ideal for outdoor use in rough terrain.



DH-1-34, DH-1-114, DH-1-2

For use with heavy-duty strapping.



DA-34-114

Heavy-duty dispenser. Pays off from inside of coil.



DF-1-12

For power equipment only. Dancer arm and brake. Base sold separately (Part No. 024360).



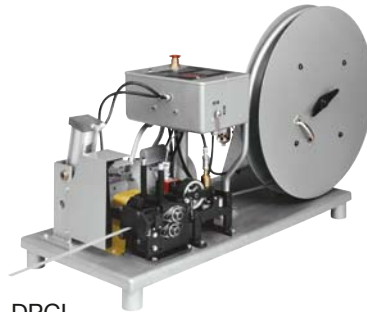
DP-1-12R

Pneumatic reversing dispenser. Generally for power strapping machines with large chute systems.



DC-1A

Built-in strap cutter for pre-cutting. Holds any two ribbon wound coils.



DPCL

Cuts strapping automatically up to 100 ft. in length.

Strap Dispenser Model	Part Number	Strap Size		Coil winding		Feeds from		Strap- troller Feature	Portable	Tool Tray	Dimensions						Dispenser Weight	
				Mill	Ribbon	Outside Vert.coil	Inside Horiz.coil				Height		Width		Length			
		inch	mm								inch	mm	inch	mm	inch	mm	lbs	kg
DTR-3	164520	3/4-2	19.0-50.8		•	•			•	•	46-1/2	1 181	15-1/4	387	27-1/2	699	110	50
DT-1-10RW	011442	5/8-1-1/4	15.9-31.8	•	•	•		•	•	•	42	1 067	22	559	34	864	125	57
DH-1-34	047538	3/4	19.0		•	•					29-3/4	756	6-3/4	171	22-1/4	565	46	21
DH-1-114	047537	1-1/4	31.8		•	•					29-3/4	756	7-1/4	184	22-1/4	565	46	21
DH-1-2	047539	2	50.8		•	•					29-3/4	756	8	203	22-1/4	565	46	21
DA-34-114	020400	3/4 or 1-1/4	19.0 or 31.8		•		•				25-1/4	641	27-1/2	699	31	787	131	59
DF-1-12	031317	3/8-3/4	9.5-19.0	•		•					32	813	10	254	24-1/2	622	95	43
DP-1-12R	040900	3/8-3/4	9.5-19.0	•		•					36-3/4	933	12-3/8	314	47-1/4	1 200	170	77
DC-1A	005720	3/4-2	19.0-50.8		•	•					29*	737	15	381	32-1/2	826	97	44
DPCL	083001	3/8-2	9.5-50.8	•	•	•					36	914	21	533	52	1 321	450	204

* With coil.

Tool Suspension Systems

For steel and plastic strapping



Overhead tool balancers

Tool balancers are the easiest and most efficient way to suspend strapping tools from a fixed ceiling bracket, monorail, jib or bridge crane.



BFL-9

Part No. 423283*
6-9 lbs. (2.7-4.1 kg),
6.6 ft. (2 m) cable travel

BFL-13

Part No. 306809*
9-13 lbs. (4.1-5.9 kg),
6.6 ft. (2 m) cable travel

BFL-18

Part No. 423278*
13-18 lbs. (5.9-8.2 kg),
6.6 ft. (2 m) cable travel



EB2500R

Part No. 485001*
18-25 lbs. (8.2-11.4 kg),
6.6 ft. (2 m) cable travel

EB3500R

Part No. 485002
25-35 lbs. (11.3-15.9 kg),
6.6 ft. (2 m) cable travel

EB4500R

Part No. 485003
35-45 lbs. (15.9-20.5 kg),
6.6 ft. (2 m) cable travel

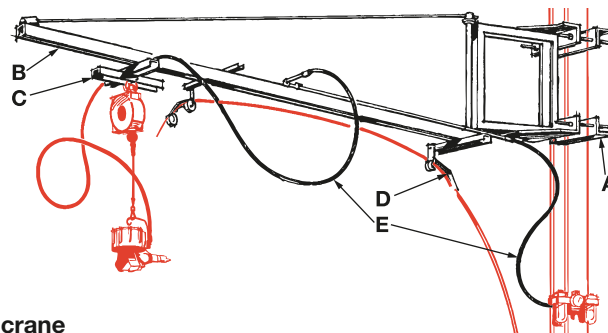


10FLR

Part No. 485010
4-10 lbs. (1.8-4.5 kg),
8 ft. (2.4 m) cable travel

15FLR

Part No. 485011
8-15 lbs. (3.6-6.8 kg),
8 ft. (2.4 m) cable travel



Jib crane

Signode's JN-15, Part No. 084165, is a 15 ft. (4.6 m) jib crane used to suspend pneumatic combination tools overhead. It handles steel strapping in widths up to 1-1/4" (31.8 mm).

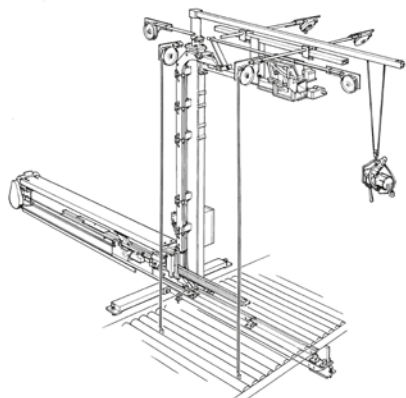
- A. Post mounting bracket D. Strap guide rollers
B. Enclosed trolley track E. Air line components
C. Tool carrier assembly

* Ratchet lock halts cable at desired position, prevents creep. The lock can be released by a tug and can also be disengaged.

Power Strap Feeder (PSF-2)

For plastic and steel strapping

The PSF-2 power strap feeder is designed to improve virtually any manual packaging operation regardless of package size, strapping material, pallet type or packaging line configuration.



The modular design can be customized to accommodate your packaging operation.

Standard features: automatic strap feed shutoff, automatic seal feed bend-over device.

Options: chute extensions, casters, pallet void feeding attachments, strap grippers, strap directors and more.

Efficiency

Automatic strap feeding greatly improves production speed and helps eliminate bottlenecks.

Economy

The PSF-2 requires only one operator (two or more are required for manual strap feeding), which can significantly reduce operating costs. Your labor cost savings, coupled with increased production, elimination of bottlenecks and the PSF-2's low cost, gives you a relatively quick return on investment.

Specifications

Maximum package size:	76"H (1930 mm), 48" (1219 mm) front to back
Steel strapping:	3/8" x .017" to 3/4" x .031" (9.5 mm x 0.43 mm to 19 mm x 0.79 mm)
Plastic strapping:	Tenax® 1716, 1718, 1816, 1818, 1822, 2030, 2040 Contrax® HD 723, HD 729, 816, 818
Dispenser:	DF-23, DF-1-12D
Tool suspension:	Overhead jib suspension with cable
Motor:	1/4 hp (.1864 KW), 1140 RPM, 115V, single phase, 60Hz

Cutters—for plastic and steel strapping



(19.0 x 0.79mm). Shipping weight: 1.5 lbs. (0.68 kg)

Model CY-29
Part No. 426000
Lightweight.
Improved alloy steel. Cuts strap through 3/4" x 0.031"



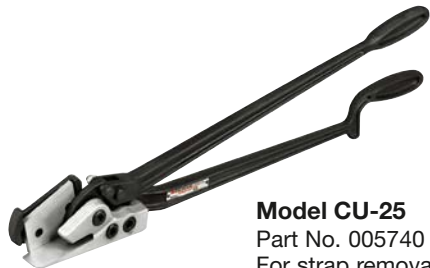
steel. Cuts strap through 1-1/4" x 0.035" (31.8 x 0.89mm). Shipping weight: 3 lbs. (1.35 kg)

Model CY-30
Part No. 426010
Lightweight.
Improved alloy



One-hand operation. Cuts strap through 1-1/4" x 0.035" (31.8 x 0.89mm). Shipping weight: 3 lbs. (1.35 kg)

Model CU-30
Part No. 005899
Lightweight.



or cutting strap to length. Replaceable blades. Cuts strap through 2" x 0.050" (50.8 x 1.27mm). Shipping weight: 8 lbs. (3.6 kg). Available with extra long handles; Part No. 0X1528; for 2" x 0.050".

Model CU-25
Part No. 005740
For strap removal

Digital tension meter for plastic and steel strapping

The Tensiometer is easy to operate and provides instant tension values for polyester or steel strapping without table conversions.



Model	Part Number	Tension Range lbs.	Strap Thickness - inch (mm)	
			Polyester	Steel
250	428480	5-250	0.012-0.026 (0.30-0.66)	
500	428490	25-500	0.017-0.040 (0.43-1.02)	
2000	428485	100-2,000	0.020-0.055 (0.51-1.40)	0.017-0.44 (0.43-1.12)

Steel



MF-11, MF-12



7



EG3A

Plastic



PL1



P41 Series

Steel and plastic edge protectors

For strapping up to 1-1/4" (31.8 mm) wide, Signode steel and plastic edge protectors cushion your product and

allow straps to be tightly applied without causing damage. Plastic ribbed edge protectors are available in red, blue, white or yellow for color coding.

Model	Part Number	Color	Composition	Maximum Strap Width		Edge Protector Dimensions						Standard Package	Package Weight	
						Length		Width		Thickness			lbs	kg
				inch	mm	inch	mm	inch	mm	inch	mm			
MF-11†	001261	Metallic	Steel	3/4	19.0	5/8	15.9	4	101.6	0.031	0.79	1,000	57	25.9
MF-12†	001263					5/8	15.9	4	101.6	0.048	1.22	1,000	57	25.9
7	001598	Metallic	Steel	1-1/4	31.8	2	50.8	2-3/4	69.9	0.030	0.76	500	47	21.3
EG3A	001260					2-1/2	63.5	3-1/8	79.4	0.031	0.79	150	31	14.1
PL1	085971	White	Plastic	3/4	19.0	1-1/4	31.8	2	50.8	0.062	1.58	2,000	23	10.4
P41 Series	041504	Red	Plastic	1-1/4	31.8	2	50.8	2-3/4	69.9	0.093	2.11-2.36	1,000	40	18.1
	041505	White												
	041506	Blue												
	041507	Yellow												

*Galvanized † For use in automatic edge protector applicators

Anti-skid plates

Anti-skid plates are simple, inexpensive devices that minimize product shifting in trailers or railcars.

No. 1, Part No. 005493

Used principally beneath pallets or skids in trailers, trailers on flatcars (TOFC), containers on flatcars (COFC), open top railcars and boxcars. For heavy loads. Dimensions: 3-3/4" x 5" (95.2 mm x 127.0mm). Standard pack: 125 pcs., 36 lbs. (16.3 kg).

No. 2, Part No. 001999

Used beneath pallets or skids in trailers or railcars. For lighter loads. Diameter: 1-3/8" (34.9mm). Standard pack: 2500 pcs., 43 lbs. (19.5 kg).



1



2

Anchor plates

Used to secure ends of strap to car studs. Fasten with No. 225 Microlock nails (Part No. 002989).



Model	Part Number	Strap Width		Plate Dimensions		Standard Pack	Shipping Weight	
		inch	mm	inch	mm		lbs	kg
—	001294B	1-1/4	31.8	4 x 2 x 1/8	101.6 x 50.8 x 3.18	200	51	23.2

Combination Anchor-Brakeman® plates

These are used primarily as retarder plates in boxcars with nailable steel floors for controlled floating loads. They can also be used as either anchor plates on walls or Brakeman plates in boxcars with wood floors.



Model	Part Number	Strap Width		Plate Dimensions		Standard Pack	Shipping Weight	
		inch	mm	inch	mm		lbs	kg
NSP-114	001462	1-1/4	31.8	2 x 6 x 0.134	50.8 x 152.4 x 3.40	200	50	22.8
NSP-2	001461	2	50.8	2 x 6 x 0.134	50.8 x 152.4 x 3.40	125	52	23.6

Plastic Strapping

Four types for a wide range of applications



Signode plastic strapping is manufactured for use with hand tools and high-production power strapping machines. All types have controlled surface properties that minimize

tensioning effort, increase tension-transmission around corners and improve operating efficiency. All are split-resistant to increase reliability in tools and power equipment.

Specifications for all varieties of Signode plastic strapping along with general methods of application for each type are detailed in the following tables.



Contrax® strapping – polypropylene

Contrax polypropylene strapping is a good choice for light and medium-duty applications, including palletizing, unitizing, bundling, carton closure and reinforcement. It resists splitting and has a smooth, uniform surface so it performs reliably in power

strapping machines and hand tools.

Contrax strapping has “elastic memory” which absorbs shock and keeps strapping tight during handling and shipping.

Strap Name		Standard Color	Part Number	Strap Width		Average Strength *		Approximate Length per Coil		Approx. Coil Outside Dia.		Core Size Inside Dia.		Approximate Coil Width		Coil Weight lbs	Standard Package Coils/Pallet	Strapping Application Methods
				mm	inch	lbs	N	feet	m	inch	mm	inch	mm	inch	mm			
Light Duty Contrax	LD 213	Clear	2X1602	6	1/4	145	640	21,000	5 793	16	406	4	102	6	152	26	30	ML Power Strapping Machines
	LD 213	Yellow	2X1603															
	LD 216	Clear	2X1604	6	1/4	200	890	16,500	5 030	16	406	4	102	6	152	25		
	LD 216	Yellow	2X1605															
Heavy Duty Contrax	HD 719	Clear	2X1610	10.5	7/16	400	1 780	12,000	3 659	24	609	16	406	6	152	36	12	MOD-710 Power Strapping Machines, Pneumatic Tension-Weld Tools
	HD 719	Black	2X1611															
	HD 723	Clear	2X1612	10.5	7/16	500	2 220	9,000	2 744	24	609	16	406	6	152	34		
	HD 723	Black	2X1613															
	HD 729	Black	2X1618	10.5	7/16	600	2 670	7,700	2 348	24	609	16	406	6	152	36		
	816	Black	010366	12	1/2	500	2 220	8,000	2 439	24	609	16	406	6	152	33	Pneumatic Tension-Weld Tools, Hand Tools using metal seals	
	818	Black	010385	12	1/2	600	2 670	7,000	2 134	24	609	16	406	6	152	35		
LB, SP Light Duty Contrax	LB 112	Clear	2X1844	5	3/16	100	445	30,000	9 146	16	406	7.8	200	7.8	198	28	24	LBX Power Strapping Machines
	LB 112	Yellow	2X1870															
	LB 212	Clear	2X1845	6	1/4	150	667	24,000	7 317	16	406	7.8	200	7.8	198	27		
	LB 212	Yellow	2X1848															
	LB 113	Clear	2X1601	5	3/16	120	530	25,000	7 622	16	406	7.8	200	7.8	198	31	24	LB, SP & SureTyer Power Strapping Machines
	LB 113	Yellow	2X1709															
	SP 216	Clear	2X1606	6	1/4	200	890	18,000	5 488	16	406	7.8	200	7.8	198	28		
SP 216	Yellow	2X1607																
HB, SP General Duty Contrax	HB 612	Clear	2X1738	9	3/8	225	1 000	16,000	4 878	16	406	7.8	200	7.8	198	29	24	HBX Power Strapping Machines
	HB 612	Black	2X1727															
	HB 812	Clear	2X1885	12	1/2	300	1 330	12,000	3 659	16	406	7.8	200	7.8	198	27		
	HB 812	Black	2X1886															
	SP 616	Clear	2X1608	9	3/8	300	1 330	12,000	3 659	16	406	7.8	200	7.8	198	28	24	HB, SP & SureTyer Power Strapping Machines
	SP 616	Black	2X1609															
	SP 719	Clear	2X1614	10.5	7/16	400	1 780	9,000	2 744	16	406	7.8	200	7.8	198	28		
	SP 719	Black	2X1615															
	SP 723	Clear	2X1616	10.5	7/16	500	2 220	7,500	2 287	16	406	7.8	200	7.8	198	27		
SP 723	Black	2X1617																

* Strap break strengths are listed as averages. Always use American Society for Testing Materials (ASTM D-3950) minimum break strengths for package design/safety factor purposes. For proper strap selection, contact your Signode sales representative.



Empax™ strapping – polypropylene

Empax waffled strapping is designed to perform in hot-knife sealing machines that require embossed strapping. It is a good choice for many light and medium-duty applications. A variety of coil sizes are available for use in many power strapping machines.

Empax has “elastic memory” to keep straps tight, and features consistent width and gauge control to run smoothly in your strapping machine. It is an economical choice for many applications.

Strap Name	Part Number	Standard Color	Strap Width		Average Strength *		Approximate Length per Coil		Core Size Inside Dia.		Face Width		Approx. Coil Outside Dia.		Coil Weight lbs	Standard Package Coils/Pallet	Strapping Application Methods
			mm	inch	lbs	N	feet	m	inch	mm	inch	mm	inch	mm			
Empax	2X1230	White	6	1/4	200	890	18,000	5 490	8	203	8	203	16	406	28	24	Hot-knife sealing power machines that require embossed strapping
	2X1112		9	3/8	300	1 330	12,900	3 930	8	203	8	203	16	406	28		
	2X1113		9	3/8	300	1 330	12,900	3 930	9	229	8	203	17	432	28		
	2X1114		12	1/2	350	1 557	9,900	3 020	8	203	8	203	16	406	28		
	2X1115		12	1/2	350	1 557	9,900	3 020	9	229	8	203	17	432	28		

* Strap break strengths are listed as averages. Always use American Society for Testing Materials (ASTM D-3950) minimum break strengths for package design/safety factor purposes. For proper strap selection, contact your Signode sales representative.



At Signode, we are committed to preserving and protecting the environment, from energy conservation to managing the waste we generate, as well as that of the customers we serve. Our innovative Closed Loop Recycling Program enables companies to recycle used polyester strapping to reduce their packaging waste and disposal costs.



Tenax® strapping – polyester

Tenax polyester strapping can be tensioned to a higher percentage of its break strength than any other strapping material. It provides superior retained tension under hot, humid conditions and is more resistant to such environments than other plastic strapping. It also provides greater

load stability during storage and shipping.

Tenax strap is strong, yet resilient enough to perform smoothly and reliably in power strapping machines and hand tools. And it's more tear and snag resistant than other plastic strapping.

Strap Name		Standard Color	Part Number	Strap Width		Average Strength *		Approximate Length per Coil		Approx. Coil Outside Dia.		Core Size Inside Dia.		Approximate Coil Width		Coil Weight	Standard Package Coils/Pallet	Strapping Application Methods
				mm	inch	lbs	N	feet	m	inch	mm	inch	mm	inch	mm	lbs		
Tenax	HB1612	Green	2X2202	9	3/8	250	1 110	16,000	4 878	16	406	7.9	200	7.8	200	40	24	HBX Large Frame Strapping Machines
	HB1812		2X2201	12	1/2	350	1 560	12,000	3 659	16	406	7.9	200	7.8	200	40		
	1616ELC		2X1710	9	3/8	425	1 890	14,500	4 420	24	609	16	406	6	152	57		MOD-710 Power Strapping Machines
	1716LC		2X1488	10.5	7/16	475	2 110	11,550	3 520	24	609	16	406	6	152	55		MOD-710 Power Strapping Machines, Pneumatic Tension-Weld Tools
	1718LC		2X1498	10.5	7/16	550	2 450	9,900	3 018	24	609	16	406	6	152	53	12	MOD-710 Power Strapping Machines, Pneumatic Tension-Weld Tools
	1816		010379	12	1/2	500	2 220	10,500	3 200	24	609	16	406	6	152	51		
	1818		010361	12	1/2	600	2 670	9,000	2 740	24	609	16	406	6	152	51		
	1822		010355	12	1/2	800	3 560	6,500	1 980	24	609	16	406	6	152	50		Hand Tools using metal seals

High-Strength Tenax® – polyester

Strap Name		Standard Color	Part Number	Strap Width		Average Strength *		Approximate Length per Coil		Approx. Coil Outside Dia.		Core Size Inside Dia.		Approximate Coil Width		Coil Weight	Standard Package Coils/Pallet	Strapping Application Methods
				mm	inch	lbs	N	feet	m	inch	mm	inch	mm	inch	mm	lbs		
High-Strength Tenax	2030	Green	2X1365	15.6	5/8	1,100	4 890	4,600	1 402	24	609	16	406	6	152	49	24	Power Strapping Machines, Hand Tools designed specifically for use with High-Strength Tenax
	2038		2X1880	15.6	5/8	1,300	5 785	4,000	1 220	24	609	16	406	6	152	55		
	2040**		2X1369	15.6	5/8	1,400	6 230	4,000	1 219	24	609	16	406	6	152	50		
	2040H**		2X1460	15.6	5/8	1,600	7 170	4,000	1 219	24	609	16	406	6	152	57		
	2225**		2X1355	19.0	3/4	2,500	11 120	2,400	732	24	609	16	406	6	152	52	24	Hand Tools designed specifically for use with High-Strength Tenax
	2480		2X1851	25.4	1	2,500	11 120	2,200	670	24	609	16	406	6	152	50		
	10050		2X1842	25.4	1	3,000	13 345	1,800	626	24	609	16	406	6	152	51		

* Strap break strengths are listed as averages. Always use American Society for Testing Materials (ASTM D-3950) minimum break strengths for package design/safety factor purposes. For proper strap selection, contact your Signode sales representative.

** High-Strength Tenax strapping is AAR approved.



Dymax® strapping – nylon

Dymax strapping is oriented during manufacturing, making it six times stronger than ordinary nylon. Ideal for use in cold room applications, such as food processing, it resists tension decay and provides better reinforcement over long storage periods.

Dymax strapping stays tight. It conforms to changes in load size and shape without sacrificing its reinforcement capabilities. A smooth, lubricated finish helps ensure reliable feeding through feedwheel-type strapping equipment.

Strap Name		Standard Color	Part Number	Strap Width		Average Strength *		Approximate Length per Coil		Approx. Coil Outside Dia.		Core Size Inside Dia.		Approximate Coil Width		Coil Weight	Standard Package Coils/Pallet	Strapping Application Methods
				mm	inch	lbs	N	feet	m	inch	mm	inch	mm	inch	mm			
Dymax	304	Black	025512	11.1	7/16	630	2 800	9,000	2 740	24	609	16	406	6	152	44.5	10	Pneumatic Tension-Weld Tools, MOD-710 Power Strapping Machines
	306		025567	11.1	7/16	790	3 510	7,200	2 190	24	609	16	406	6	152	44.5		
	502		025571	12.7	1/2	475	2 110	12,000	3 660	24	609	16	406	6	152	44.5		Hand Tools using metal seals
	504		025583	12.7	1/2	630	2 800	9,000	2 740	24	609	16	406	6	152	44.5		(50SL or 50DL Buckles w/502 Dymax),
	506		025595	12.7	1/2	790	3 510	7,200	2 190	24	609	16	406	6	152	44.5		Pneumatic Tension-Weld Tools
	508		025574	12.7	1/2	950	4 230	6,000	1 830	24	609	16	406	6	152	44.5		

* Strap break strengths are listed as averages. Always use American Society for Testing Materials (ASTM D-3950) minimum break strengths for package design/safety factor purposes. For proper strap selection, contact your Signode sales representative.

Strapping & Seal Kits

For plastic strapping



Self-contained Contrax strapping station

Dispensi-pak*

Everything needed for strapping is contained in this portable package weighing less than 2 lbs. The Dispensi-pak includes 250 ft. of 12mm Contrax strapping and 40 Steelock buckles. (Only shipped in units of ten.)
Part No. 010490

*Use with a DLT tensioner is recommended.

Seals & Buckles

For plastic strapping

Plastic joint types

Normal packaging rates for any application influence both the choice of strap and its joining methods. For low-volume, low-tension strapping of lightweight packages or bundles, Signode Steelock™ or Dylock™ buckles are an economical method of joining strap, since they require no special sealing tool.

Seals for hand tool application

All types of 12mm Signode plastic strapping as well as 16mm and 19mm High-Strength Tenax strapping can be sealed with hand tools using metal seals. Signode manufactures snap-on seals for manual sealers and Nestack seals for use in combination strapping tools with seal magazines.

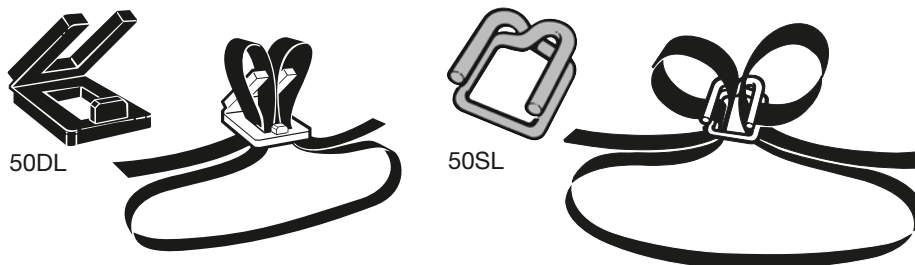
Seal and joint strength

To ensure positive joint strength on all four types of plastic strapping, Signode steel seals and special sealers are used to form crimp joints. Crimp joints are formed by compressing the seal onto overlapping straps. The holding power of the joint is generated by squeezing the straps and the seal together.

Signode snap-on seals use a grit coating on the inside to increase friction between the strapping and the seals, while Nestack seals use steel teeth.

Friction-Weld sealless joint

The Friction-Weld process, developed by Signode, positively joins plastic strapping without the use of seals or applied heat.



Dylock™ & Steelock™ buckles

Seal Name	Strap Size		Part Number	Seal Type	Tool Name	Seal Length		Standard Package	Approx. Shipping Weight	
	mm	inch				inch	mm		lbs	kg
50 DL	12	1/2	000470	Dylock	DLT	.885	20.6	5,000	23	10.4
50 SL	12	1/2	000472	Steelock	DLT	.937	23.8	2,500	52	23.6

Snap-on seals

Snap-on seals are placed on overlapping strap ends either during or after strap tensioning. These seals generally reduce application time.



Seal Name	Strap Size		Part Number	Seal Type	Tool Name	Seal Length		Standard Package	Approx. Shipping Weight	
	mm	inch				inch	mm		lbs	kg
50 DYS	12	1/2	000465	Snap-on	D-504	3/4	19.0	3,100	40	18.1
50 DY	12	1/2	000466	Snap-on	D-504, D-506	1-1/8	28.3	2,500	42	19.1
58 DY	16	5/8	2X1672	Snap-on	D-58	1-1/2	38.1	1,000	28	12.7
34 DY	19	3/4	2X1795	Snap-on	D-34	2-1/8	55.9	1,000	45	20.4

Nestack® seals

Nestack® seals for plastic strapping are stacked seals held together by plastic filaments. Designed for use in seal magazines of combination strapping tools, they are packaged in trays that can be conveniently placed at any strapping station.

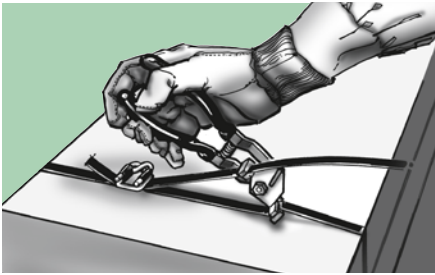


Seal Name	Strap Size		Part Number	Seal Type	Tool Name	Seal Length		Standard Package	Approx. Shipping Weight	
	mm	inch				inch	mm		lbs	kg
50 ASD	12	1/2	000531	Nestack	AMPT-12, AST	1-1/8	28.3	2,000	41	18.6
58 AMT	16	5/8	2X1303	Nestack	AMT-58	1-1/8	28.3	1,440	33	15.0

Manual Tensioners & Sealers

SIGNODE®

For plastic strapping



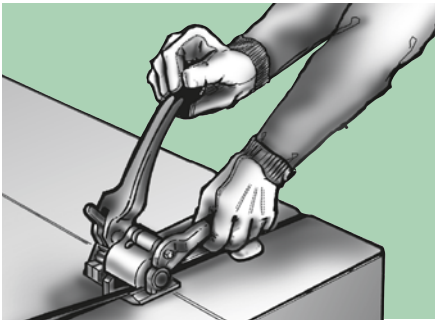
Model	Part Number	Strap Type		Buckle	Description	Shipping Weight	
		Dymax	Contrax*			lbs	kg
DLT	023930	502, 504	816, 818	50SL, 50DL	Gripper with cutter	1	0.45

Walking gripper tensioner

Lightweight tensioner/cutter designed for buckle applications with plastic strapping. Provides maximum tension with Steelock or Dylock buckles.

* Tool may be used with 816, 818 Contrax strapping, but only with the 50DL buckle (Not the 50SL).

DLT



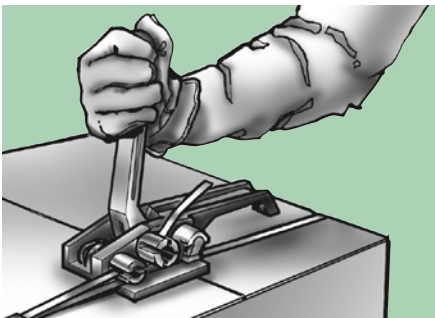
Model	Part Number	Strap Type			Description	Shipping Weight	
		Dymax	Contrax	Tenax		lbs	kg
STD	257080	502, 504, 506, 508	814, 816, 818	1816, 1818, 1822	Feedwheel with cutter	4	1.8
PT-16	426355	—	—	2030, 2040		4	1.8
PT-19	426350	—	—	2220, 2225		4	1.8
PT-25	427445	—	—	2480, 10050		4	1.8
PT-32	427600	—	—	2680, 2625		4	1.8
PTC-16	426060	—	—	2030, 2040		7	3.2
PTC-19	426040	—	—	2220, 2225		7	3.2

Feedwheel tensioner

A serrated feedwheel grips the strapping and rotates to take up slack. Fast and easy to position and use. Take-up is unlimited, and strapping may be used directly off the coil.

STD

PT-16, PT-19, PT-25, PT-32 PTC-16, PTC-19

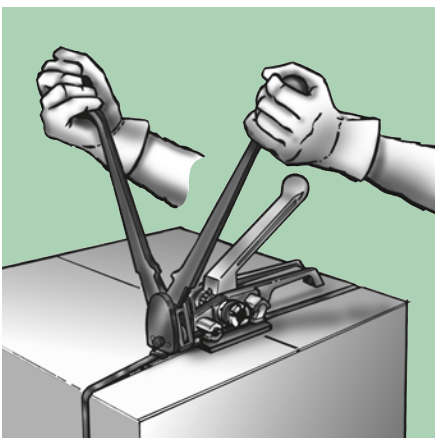


Model	Part Number	Strap Type			Description	Shipping Weight	
		Dymax	Contrax	Tenax		lbs	kg
WHD	257400	502, 504, 506, 508	816, 818	1816, 1818, 1822, 2030, 2040	Windlass with cutter	9	4.1
WHD-34	425380	—	—	2220, 2225	Windlass with cutter	9	4.1

Windlass tensioner

Applies tension by gripping one end of the strapping and winding the other around a slotted shaft.

WHD



Model	Part Number	Strap Type			Seal	Joint Type	Description	Shipping Weight	
		Dymax	Contrax	Tenax				lbs	kg
D-504	023800	502, 504	816	1816, 1818	50DY, 50DYS	Crimp	Front Action	2-1/4	1.0
D-506	023820	506, 508	818	1822	50DY		Front Action	2-1/4	1.0
D-58	423800	—	—	2030, 2038B, 2040	58DY		Front Action	4-1/4	1.9
D-34	424400	—	—	2220, 2225	34DY	Crimp	Side	7	3.0

Sealers

Model D-504, D-506 and D-58 front-action sealers have handles that are perpendicular to the strapping. The side-action D-34 sealer is positioned at right angles to the strapping. To operate, spread the handles, grip the seal between the sealer's jaws and push the handles together.

D-504
D-506

D-58

D-34



Combination Tools

For plastic strapping



Combination strapping tools

Combination tools function as tensioners, sealers and cutters. They save time by eliminating the handling of separate tools. Seal-feed combination tools carry a stack of seals in a magazine for fast, easy loading. Sealless combination tools use friction to weld the strap ends together, creating a secure joint.



Pneumatic Friction-weld

The model VT-10 and VT-13 combination tools apply Contrax, Dymax and Tenax strapping. Strap ends are joined with Signode's patented Friction-weld process, eliminating the need for metal seals.

The VTI-16, VTI-19 and VTI-25 pneumatic friction welding tools are used in baling applications.

The lightweight VT-16HD, VT-19HD, VT-25HD and VT-32HD tools apply High-Strength Tenax strapping at higher tension levels. Ideal for use in both horizontal and vertical applications.

Manual

The AMT-58 is the ideal manual tool for 5/8" (16mm) High-Strength Tenax strapping.

The AST manual seal-feed combination tool uses Contrax, Dymax and Tenax strapping.

High-Strength Tenax strapping tools

Model	Part Number	Strapping	Seal	Joint Type	Applied Tension	Description	Shipping Weight	
							lbs	kg
AMT-58	306930	High-Strength Tenax 2030, 2040	58 AMT	Crimp	400 lbs	Manual	14	6.4
VT-Brick	424765	High-Strength Tenax 2030, 2038B	None	Friction-weld	600 lbs	Pneumatic	10.5	4.8
VTI-16	427110	High-Strength Tenax 2030, 2040			—	Pneumatic	6	2.7
VTI-19	427993	High-Strength Tenax 2220, 2225				Pneumatic	6	2.7
VTI-25	427988	High-Strength Tenax 2480, 10050			800 lbs	Pneumatic	10.5	4.8
VT-16HD	427280	High-Strength Tenax 2030, 2040, 2040H				Pneumatic	10.5	4.8
VT-19HD	426160	High-Strength Tenax 2220, 2225				Pneumatic	10.5	4.8
VT-25HD	423992	High-Strength Tenax 2480, 10050				Pneumatic	11.5	5.0
VT-32HD	428225	High-Strength Tenax 2625, 2680			800 lbs	Pneumatic	11.5	5.0



AMT-58



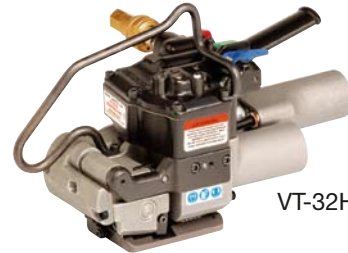
VT-Brick



VTI-16
VTI-19
VTI-25



VT-16HD
VT-19HD
VT-25HD



VT-32HD

Model	Part Number	Strap Type			Seal	Joint Type	Description	Shipping Weight	
		Dymax	Contrax	Tenax				lbs	kg
AST	422950	502, 504, 506, 508	814, 816, 818	1816, 1818, 1822	50ASD	Crimp	Manual	11.5	5.2
VT-10	425255	302, 304, 306	HD719, HD723, HD729	1716, 1718	None	Friction-weld	Pneumatic	7	3.2
VT-13	425256	502, 504, 506	816, 818	1816, 1818, 1822	None	weld	Pneumatic	7	3.2



AST



VT-10
VT-13

Battery-Operated Tools



For plastic strapping

Battery-Operated Friction-weld

The BXT2 combination tool applies polypropylene or polyester strapping, utilizing friction weld joint technology to join the strap ends. An automatic weld function speeds up cycle time.

Used together, the PT tensioner and BTS sealer are ideal for tensioning and joining strap ends in outdoor or harsh environments.



BXT2-16, BXT2-19



BTS-16, 19, 25, 32*



PT*

Model	Part Number	Strap Type	Joint Type	Applied Tension	Description	Shipping Weight	
		Contrax, Tenax				lbs	kg
BXT2-16	428340	9-13 mm Contrax & Tenax	Friction-weld	Up to 550 lbs	Battery	9	4.1
BXT2-19	428350	1816, 1818, 1822 (with Guide change); 816, 818, 2030, 2040, 2040H		Up to 880 lbs		9.3	4.2
BTS-16/PT-16 COMBO	427100	2030, 2040, 2220, 2225, 2480, 10050	Friction-weld	Up to 800 lbs.	Battery	(BTS) 6.8 (PT) 4	3 1.8
BTS-19/PT-19 COMBO	427101						
BTS-25/PT-25 COMBO	427102						
BTS-32/PT-32 COMBO	428220						
		2625, 2680; 32 mm High Strength Tenax					

* The BTS and PT tools can be ordered separately.

Dispensers

For plastic strapping



DD-1A
Floor model with straproller. Can be suspended overhead.



DF-16A
Designed for use with polyester strapping.



DF-1-12D
For power equipment. Dancer arm and brake. Base sold separately (Part No. 024360).



PSD-109
For power equipment. Available in left or right-handed models.



DO-3D
Can be suspended from a wall or ceiling.

Strap Dispenser Model	Part Number	Strap Size		Straproller	Portable	Tool Tray	Dimensions						Dispenser Weight	
							Height		Width		Length			
		inch	mm				inch	mm	inch	mm	inch	mm	lbs	kg
DD-1A	024520	7/16–1/2	10.5–12	●	●	●	41	1 041	12	305	25	635	48	22
DF-16A	422300	3/8–3/4	9–19.0		●	●	38	965	18	457	28-1/2	724	62	28
DF-1-12D	031318	3/8–3/4	9–19.0				36-3/4	933	12-1/2	315	47-1/4	1200	97	44
PSD-109	480171 Left-hand	3/8–3/4	9–19.0				44-1/2	1 130	15	380	38-3/8	975	126	57
	480172 Right-hand													
DO-3D	024500	3/8–3/4	9–19.0	●			31	787	6-3/4	171	27-3/4	705	41	19

Pneumatic accessories See page 11 for additional fittings.



A filter-regulator-lubricator (FRL) assembly (**Part No. 429141**, with hose) or (**Part No. 429130**, without hose) is needed with all pneumatic tools. Additional fittings and air hoses are available from Signode to help provide optimum operation. Please contact your local Signode sales representative for more information on the proper fittings for your specific tool.

Recommended air hose for pneumatic tools: 10' x 1/2" (3.0m x 12mm) i.d. (**Part No. 429145**).

Note: Use lightweight, non-detergent oil in lubricator, such as Non-Fluid Oil No. LS-1236 (**Part No. 008556**) or equivalent.

Power Application Equipment

For plastic strapping



TableTyer™

Strapping System



The low-cost TableTyer™ is the ideal plastic strapping system for low to moderate volume shippers. Its simple tabletop design makes it equally efficient for strapping cartons, bundles or coiled products. Strap tension and length are fully adjustable. Also available in a non-corrosive model.

- Low cost
- Portable
- Applies economical plastic strapping
- Ready to operate in seconds

Specifications

Maximum package weight:	125 lbs.
Strap tension:	Adjustable up to 100 lbs.
Strapping:	6mm (1/4"), 9mm (3/8"), 12mm (1/2") Empax polypropylene strapping.
Machine dimensions:	33-1/2" L x 22" W x 30-3/4"H (adjustable up to 37-1/2"H). (851mm L x 559mm W x 781mm H, adj. up to 953mm).
Electrical:	120 VAC, 1 phase, 60Hz.
Shipping weight:	168 lbs.

LBX-2000™

Semiautomatic Strapping System



The high speed LBX-2000 plastic strapping machine combines jam-resistant technology and lubrication-free operation to maximize strapping operations. Ideal for high-volume applications with varying package or bundle types and sizes. Made in the U.S.A.

- Jam-resistant technology
- Lubrication-free operation
- Variable tension
- Fully accessible strap path
- Easy coil loading
- No adjustments necessary

Specifications

Chute size (maximum package size):	20" W x 15" H (510mm x 380mm). 28" W x 15" H (710mm x 380mm).
Minimum package size:	2"W x 1"H (50mm x 25mm).
Production rate:	Up to 70 straps per minute.
Strap tension:	Adjustable from 2 lbs. to 60 lbs.
Strapping:	Signode Contrax® polypropylene strapping 5mm, 6mm.
Tabletop height:	34" (865mm).
Machine dimensions:	31" W x 21" L x 57" H (790mm W x 530mm L x 1450mm H).
Electrical:	110 VAC, 60Hz.
Shipping weight:	540 lbs.

LBX-2300/2330™

Automatic and Semiautomatic Strapping Systems



Models: LBX-2300 semiautomatic
LBX-2330 automatic

The LBX-2300 Series plastic strapping machines provide the highest available speed, most reliable performance and lowest maintenance operation of any general-duty strapping machine on the market today. With timesaving features and 40% fewer parts, the LBX-2300 Series simplify operation and maintenance to save you time and money.

- Jam-resistant technology
- Automatic loading
- Automatic cut-off and refeed option*
- Fully accessible strap path
- Lubrication-free operation
- Easy coil loading

*Available on 3 phase models only.

Specifications

Chute inner dimensions:

	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
W	16**	405	20	510	28	710	33	840	48	1220
H	10**	255	15	380	20	510	30	760	20	510

Production rate:	Up to 70 straps per minute.
Strap tension:	Adjustable from 2 lbs. to 60 lbs.
Strapping:	Signode Contrax® polypropylene strapping 5mm, 6mm.
Tabletop height:	Adjustable from 26" to 40" (660mm to 1016mm).
Electrical:	120 VAC, 60Hz, 3 phase voltage optional

Shipping weight: 600 lbs.

** Available on semiautomatic models only.

HBX-4300/4330

Automatic and Semiautomatic Strapping Systems



Models: HBX-4300 semiautomatic
HBX-4330 automatic
HBX-4300/4330 large frame
HBX-4300 small anvil

Finishes: Painted
Stainless steel

The HBX-4300 Series plastic strapping machines provide reliable, high speed performance for heavy-duty applications, such as meat packaging, general distribution and the bundling of hardwood flooring. With a number of timesaving features, the HBX Series strapping machines simplify operation and maintenance. In addition to the standard HBX models, the HBX Series line includes specialized models for corrosion resistance in damp environments, oversized products and for small, irregular packages.

Made in the U.S.A.

- Jam-resistant technology
- Bi-directional strap loading
- Out-of-strap feature
- Automatic cut-off and refeed option
- Fully accessible strap path
- Lubrication-free operation
- Variable speed reversible conveyor

Cycle rate: Up to 50-70 straps per minute. Actual rate will vary depending on package size, chute size and operator dexterity.

Specifications

Small frame – chute inner dimensions:

	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
W	16*	405	15	380	28	710	33	840	48	1220
H	10*	255	20	510	20	510	30	760	20	510

Large frame – chute inner dimensions:

	inch	mm	inch	mm
W	65	1650	90	2285
H	20	510	15	380

Minimum package size: 4"W x 4"H non-compressible package on flat tabletop.

Maximum package weight: 100 lbs. on machine or conveyor. May increase depending on weight distribution.

Strapping: Signode 9 mm and 12 mm Contrax polypropylene strapping.

Electrical: 120 VAC, 60Hz; 3 phase voltage optional.

Shipping weight: Small frame: 600-700 lbs.
Large frame: 900-1,100 lbs.

* Available on semiautomatic model only.

HB-4310

Side Seal Strapping System



Finishes: Painted
Stainless steel

The HB-4310 side seal plastic strapping machine combines HB technology with a side-mounted head for consistent, reliable, low maintenance, side seal strapping operation. A corrosion-resistant model (24" x 24" chute only) is available for packaging operations where condensation is a problem. (Not for wash-down applications.)

Made in the U.S.A.

- Jam-resistant technology
- Automatic loading
- Automatic cut-off and refeed option
- Fully accessible strapping head and strap path
- Lubrication-free operation
- High tension

Specifications

Chute inner dimensions:

	Small chute		Medium chute		Large chutes			
	inch	mm	inch	mm	inch	mm	inch	mm
W	24	610	36	914	48	1219	60	1524
H	24	610	36	914	60	1524	60	1524

Maximum package weight: 25 lbs. per roller on the 24" x 24" model only.

Production rate: Up to 52 straps per minute in a 36" x 36" chute with a 34" x 34" package. Actual production will vary depending on package size, chute size and operator dexterity.

Strapping: Signode 9mm or 10.5mm polypropylene strapping.

Strap tension: Adjustable up to 250 lbs.

Electrical: Standard: 120 volt, 60 Hz; 3 phase voltage optional.

Shipping weight: 700-950 lbs.

MH-VRB

Semiautomatic Side Seal Strapping System



The MH-VRB side seal plastic strapping machine applies consistent, high strap tension to palletized loads in a wide range of sizes. The MH-VRB can be used with 9mm or 10.5mm polypropylene or polyester strapping to accommodate a variety of load types, including cartons, palletized products, appliances, bulk bins, bales and bundled items.

- Automatic refeed
- Low maintenance. Few wearing parts to replace
- High tension
- Easy access to strap path
- Quick-change technology

Specifications

Chute size: Contact your Signode Sales representative for chute sizes.

Minimum load height: 47" (including pallet).

Strapping: Signode 9mm or 10.5mm polypropylene or polyester strapping.

Strap tension: Adjustable from 17 lbs. to 200 lbs.

Electrical: 400 volt, 3 phase, 50 Hz

Shipping weight: 1,320 lbs.

Power Application Equipment

For plastic strapping



MOD-710

Side Seal Strapping System



The MOD-710 side seal plastic strapping machine combines quick-change technology with high speed reliable operation to maximize productivity. Simple to operate and easy to maintain, the MOD-710 features a modular head with separate tensioning and sealing modules that are easy to access and can be changed out quickly for routine maintenance. The MOD-710 is available in 69 standard chute sizes and uses Contrax polypropylene or Tenax polyester strapping. Made in the U.S.A.

- Side seal joint
- Few wearable parts to replace
- Quick-change technology
- Smart-weld technology

Specifications

Chute size (maximum package size): Available in chute sizes to accommodate any combination of the following widths and heights:

Maximum Width: 18", 24", 30", 36", 48", 60", 72", 84", 96", 108"

Maximum Height: 24", 30", 36", 48", 60", 72", 84", 96", 108"

Production rate: Up to 1,150 straps per hour. Actual production will vary depending on package and chute size, operator dexterity and material handling equipment.

Tension: Adjustable from 20 to 200 lbs.

Strapping: Signode Contrax polypropylene or Tenax polyester strapping.

Electrical: 230/460 volts, 3 phase, 60Hz.

Shipping weight: 750 lbs.

MHG

Signature Bundling Machine



The MHG Signature Bundling Machine is simpler to operate and maintain than any other signature bundling system currently on the market. The MHG combines fewer parts with a streamlined design to help lower maintenance costs and improve signature quality. Easily adaptable to your stacker specifications as a self-contained unit with a moveable cart or a bolt-on unit with adapter plates.

- Accommodates vertical or horizontal applications
- Custom chute sizes available
- Fully accessible strap path
- Two position strap dispenser
- Modular head technology

Specifications

Minimum center to center: 8.5"

Minimum package size: 15"

Feed rate: 12 feet per second

Module Weight: Feeder module: 20 lbs
Sealer module: 30 lbs

Tension: Up to 30 lbs.

Strapping: 7/16 or 1/2" polyester or polypropylene

Electrical: 208, 230, 400, 440, 460 or 480 volt; 3 phase, 50/60Hz;
575 volt, 3 phase, 60Hz optional

Shipping weight: Dependent on unit configuration

Signode's MOD-710 and MHG both feature our modular head, quick-change technology consisting of separate feed and seal modules. These lightweight, compact modules

are easy to access and can be changed out quickly for routine maintenance. When switching to a spare module, downtime can be limited to a matter of minutes.

MOD-710 feed and seal modules



- Easy to operate
- Less downtime
- Fewer moving parts
- No belts, pulleys or adjustments

MHG feed and seal modules



LBX-6520

Automatic Strapping System



The LBX-6520 high-speed automatic corrugated bundler withstands intense production schedules with minimal maintenance and operator involvement. Preventative maintenance features and automatic jam clearing ensure maximum uptime and long machine life. Made in the U.S.A.

- Fully accessible strap path
- Automatic loading
- Portable operator controls
- Automatic cut-off and refeed
- Adjustable photo eye
- Built-in cycle counter
- Variable speed reversible conveyor
- Single compression bar

Specifications

Maximum package size: 65"W x 19.5"H.

Minimum package size: 6"L x 6"W x 1"H.

Production rate: Up to 50 straps per minute. Actual production will vary depending on conveyor speed and package size.

Maximum package weight: 100 lbs. on machine or conveyor. May increase depending on weight distribution.

Tension: Adjustable from 2 lbs. to 60 lbs.

Conveyor height: Adjustable from 27" to 36".

Optional height kits: 36" to 46" or 41" to 55".

Strapping: 5mm polypropylene strapping.

Electrical: 208, 230, or 460 volts, 3 phase, 60Hz; 575 volts, 3 phase, 60Hz optional.

Shipping weight: Approximately 1,100 lbs.

LBX-Magazine™

Automatic Magazine Bundling System



Loaded with productivity enhancing features, the LBX-Magazine™ minimizes downtime, simplifies maintenance and virtually eliminates make-ready time between magazine runs. The hinged bundle handling device can be pivoted up to 90°, providing complete access to the tabletop and strapping head for maintenance. Made in the U.S.A.

- Three-belt tabletop
- Pop-up bundle diverter
- Ultra low strap tension
- Quick make-ready time
- Automatic cut-off and refeed option
- Strap feed from either direction
- Easy maintenance
- Fully accessible strap path

Specifications

Bundle size:

Minimum: 5" W x 7" L

Maximum: 18" W x 18"L

Height: Up to 14-1/2"

Cycle rate: Up to 42 straps per minute.

Conveyor speed: 50-150 ft per minute

Chute size: 20" W x 15" H

Strapping: 5mm or 6mm polypropylene strapping.

Compression: Up to 120 lbs. at 90 psi

Conveyor height: Adjustable, 26" to 39"

Optional height kit: 40" to 54"

Electrical: 230 volts, 60Hz, FLA 4.7 amp; 460 volts, 60Hz FLA 2.3 amp.

Shipping weight: 950 lbs.

Hand Grade Films

Enduralock™

Enduralock™ is specially formulated to stretch less than conventional hand application films for superior integrity on loads that shift during transit. This two-sided cling film is exceptionally tough and resilient and has minimal width reduction, providing superior load holding power at an economical price.

GaleWrap™

A patented oriented hand wrap film that performs like machine applied, power prestretched films, GaleWrap™ provides far greater load integrity than conventional hand application films that continue to stretch as loads shift during transit. Patented hemmed edges provide excellent film strength and tear resistance.

Machine Grade Films

Silent Tough One-Sided

This three-layer, one-sided cling blown film combines the strength properties of blown film with the silent unwind and clarity of cast film for superior performance.

Cast Film

Signode five-layer cast films provide excellent clarity and quiet delivery. Formulated with a state-of-the-art resin mixture, this "true" one-sided cling film eliminates loads sticking together in transit, while providing excellent strength at prestretch levels up to 300%. The high clarity of cast film makes it an excellent choice for applications using bar code scanning equipment.

Specialty films

Ultraviolet film

Signode ultraviolet-resistant, one-sided cling blown films are specially formulated to resist damage from ultraviolet light and proven to last up to one year in the Florida sun. In contrast, non-UVI films deteriorate outdoors in about four months. STO UVI film is formulated for quiet unwind.

Hand Grade Films

Film Name	Gauge		Roll Length		Roll Width		
	microns	mil	meters	feet	mm	inch	
Enduralock™							
Enduralock 12	12	45	450	1,476	445	11.5	
Enduralock 15	16, 19	63, 75	450	1,476	370	14.5	
Enduralock 18	16, 19	63, 75	450	1,476	445	17.5	
GaleWrap™							
GaleWrap 12			457, 610	1,500, 2,000	304	12	
GaleWrap 15	Oriented prestretch		457, 610	1,500, 2,000	381	15	
GaleWrap 18			457, 610	1,500, 2,000	457	18	

Machine Grade Films

Film Name	Gauge		Roll Length		Roll Width		Suggested Prestretch
	microns	mil	meters	feet	mm	inch	
Silent Tough One-sided cling blown film							
STO-18	18	0.71	1 981	6,500	508, 762	20, 30	250%
STO-20	20	0.79	1 829	6,000	508, 762	20, 30	250%
STO-27	27	1.06	1 372	4,500	508, 762	20, 30	300%
Cast Film Differential cling							
CFD-60	15.3	0.60	2 438	8,000	762	30	250%
CFD-70	17.8	0.70	1 829	6,000	508, 762	20, 30	250%
CFD-80	20.3	0.80	1 829	6,000	508, 762	20, 30	250%
CFD-115	29.2	1.15	1 219	4,000	508	20	300%

Specialty Films

Film Name	Gauge		Roll Length		Roll Width		Suggested Prestretch
	microns	mil	meters	feet	mm	inch	
Ringmaster™ Film							
RCA-75	19.1	0.75	1 829	6,000	305	12	250%
RSO-115	29.2	1.15	1 189	3,900	305	12	300%
Silent Tough Ultraviolet							
One-sided cling blown film							
STO-UV-20	20	0.79	1 829	6,000	508	20	250%
STO-UV-27	27	1.06	1 372	4,500	508, 762	20, 30	300%
One-sided cast film							
CVD-115	29.2	1.15	1 067	3,500	508, 762	20, 30	250%

Raptor 525 Low Profile Turntable



- Automatic load height sensing
- Variable-speed film carriage with banding mode for load reinforcement
- Adjustable force-to-load film tension
- Top and bottom wrap counters
- Variable-speed turntable up to 12 RPM
- Soft start and stop turntable acceleration
- Forklift portable from front or rear

The Raptor 525 wraps up to 35 loads per hour, making it an economical solution for low-volume applications. Its low cost, efficient operation and wide selection of optional equipment, make the 525 one of our most popular and practical stretch wrapping machines.

Performance		Raptor 525
Loads per hour		Up to 35
Rotation speed		12 rpm
Maximum load size		60" x 60" x 80" H (84" dia.) (Plus 5" overwrap)
Maximum load weight		4,000 pounds
Film Delivery System		
Film capacity		20" roll width x 10" dia.
Film payout		Strain gauge
Pre-stretch level		250% (optional 100% to 300%)
Force control		Variable
Film threading		Easy thread design
Carriage speed		Adjustable down speed
Controls		
Controller		PLC
Operator interface		Push button controls
Load height sensor		Photo eye
Wrap pattern		Fixed top and bottom wrap count. Select 2 & 2, 3 & 3, 4 & 4, 5 & 5. Reinforce wrap feature.
Emergency stop		Mushroom head
Electrical disconnect		Lockable
Electrical enclosure		CSA approved
Power Requirements		
Voltage		120 VAC, 15 amp, 1 phase, 60 Hz
Turntable		
Diameter		59.875" (0.5" thick, smooth plate)
Bearing type		Multiple polyurethane covered bearings
Drive system		Spring tensioned chain
Structure		
Portability		Lift truck portable front and rear
Machine weight		1,700 pounds
Construction		Heavy duty, welded
Optional ramp		48" W x 70" L
Color		Dark bronze frame, yellow turntable

Power Application Equipment

For stretch film



Raptor 1525P High Profile Turntable



- Adjustable force-to-load film tension
- Automatic load positioning and load height sensing
- Automatic rewrap
- Adjustable top and bottom wraps, film over-wrap and overlap
- Film break alarm
- Soft start and stop turntable acceleration
- Automatic film cut and heat seal

The Raptor 1525P is designed for efficient, economical pallet wrapping in low to medium volume applications. The rugged ring and pinion gear drive system provides long-term dependability. The 1525P automatically wraps up to 45 loads per hour.

Performance	Raptor 1525P
Loads per hour	Up to 45
Rotation speed	Adjustable up to 16 rpm
Maximum load size	50" x 54" x 80" H (72" dia.)
Minimum load size	36" x 36" x 28" H
Maximum load weight	4,000 pounds
Turntable elevation	16"

Film Delivery System

Film capacity	20" roll width x 10" dia.
Pre-stretch type	Strain gauge
Pre-stretch level	250% (optional 100% to 300%)
Force control	Variable
Film threading	Octo-Thread design, W film threading pattern
Cut and seal	Controlled impulse cutter and heat sealer

Controls

Controller	Allen-Bradley PLC
Operator interface	Touch screen
Load height sensor	Photo eye
Wrap settings	Re-wrap function, overwrap and overlap adjustments
Wrap counters	Independent top and bottom
Cycle counters	Total cycle counter and resettable counter
Emergency stop	Mushroom head
Electrical disconnect	Lockable
Electrical enclosure	CSA approved

Power Requirements

Voltage	240 VAC, 20 amp, 1 phase, 60 Hz
Pneumatic	80 psi, 3 CFM (clean, dry air)

Turntable

Size	52" x 52" x 3/8" thick octagonal formed steelplate with 4" skirt
Bearing type	Ring gear

Structure

Portability	Lift truck portable front and rear
Machine weight	2,500 pounds
Construction	Heavy duty, welded
Color	Dark bronze

Raptor 1525CN Conveyorized Turntable



The 1525CN employs a rugged ring gear bearing with precision ground pinion gear drive system to provide years of maintenance-free operation. The 1525CN wraps up to 45 loads per hour. Even light, fragile loads can be wrapped at high speeds when the machine is equipped with the top platen option. Model 1525CR is the same as above without the standard infeed and exit conveyors.

Performance	Raptor 1525CN
Loads per hour	Up to 45
Rotation speed	Adjustable up to 16 rpm
Maximum load size	50" x 54" x 80" H (72" dia.)
Minimum load size	36" x 36" x 28" H
Conveyor elevation	20"
Maximum load weight	4,000 pounds

Film Delivery System

Film capacity	20" roll width x 10" dia.
Pre-stretch type	Strain gauge
Pre-stretch level	250% (optional 100% to 300%)
Force control	Variable
Film threading	Octo-Thread design; W film threading pattern
Cut and seal	Controlled impulse cutter and heat sealer

Controls

Controller	Allen-Bradley PLC
Operator interface	Touch screen
Load height sensor	Photo eye
Wrap settings	Re-wrap function, overwrap and overlap adjustments
Wrap counters	Independent top and bottom
Cycle counters	Total cycle counter and resettable counter
Emergency stop	Mushroom head
Electrical disconnect	Lockable
Electrical enclosure	CSA approved

Power Requirements

Voltage	480 VAC, 30 amp, 3 phase, 60 Hz
Pneumatic	80 psi, 3 CFM (clean, dry air)

Turntable

Size	76-1/2" dia.
Bearing type	Ring gear
Drive system	Ring and pinion
Conveyor rollers	3-1/2" dia. on 3-3/4" centers; every roller driven; rollers set in pillow block bearings
Transition rollers	Included

Structure

Machine dimensions	1525CN: 114" x 192" x 98" H 1525CR: 114" x 95-1/2" x 98" H
Machine weight	1525CN: 5,675 pounds; 1525CR: 3,250 pounds
Construction	Heavy duty, welded
Color	Dark bronze

Cobra 525



- User-friendly control panel can be preprogrammed with multiple wrap patterns
- Consistent force-to-load film tension regardless of load position, size and shape
- Prestretches film 250%

The Cobra 525 is designed for loads that, because of their instability, weight or shape, must remain stationary during the wrapping cycle. The positive, non-slip dual “V” belt drive ensures consistent rotation speed, easy maintenance and accurate home positioning. The Cobra 525 wraps up to 35 loads per hour.

Performance		Cobra 525
Loads per hour		Up to 35
Rotation speed		12 rpm
Maximum load size		50" x 50" x 80" H
Maximum load weight		Floor capacity
Film Delivery System		
Film capacity		20" roll width x 10" dia.
Film payout		Strain gauge
Pre-stretch level		250% (optional 100% to 300%)
Force control		Variable
Film threading		Easy thread design
Carriage speed		Adjustable down speed
Controls		
Controller		PLC
Operator Interface		Push button controls
Load height sensor		Photo eye
Wrap pattern		Fixed top and bottom wrap count. Select 2 & 2, 3 & 3, 4 & 4, 5 & 5. Reinforce wrap feature.
Emergency stop		Mushroom head
Electrical disconnect		Lockable
Electrical enclosure		CSA approved
Power Requirements		
Voltage		120 VAC, 15 amp, 1 phase, 60 Hz
Rotary Arm		
Drive system		Dual V-belt drive
Bearing type		Dual pillow block bearings
Structure		
Installation		Column mounted or floor mounted
Machine weight		Column mounted: 1,400 pounds; Floor mounted: 1,700 pounds
Construction		Heavy duty, welded
Frame color		Dark bronze
Rotating arm color		Yellow

Power Application Equipment

For stretch film



Cobra 1525A



- User-friendly control panel can be preprogrammed with multiple wrap patterns
- Consistent force-to-load film tension regardless of load position, size and shape
- Prestretches film 250% standard
- Automatic film cut and heat seal

The Cobra 1525A automatic overhead stretch wrapping machine combines the speed of an automatic system with the cost of a semiautomatic machine. The positive, non-slip dual "V" belt drive ensures consistent rotation speed, easy maintenance and accurate home positioning. The 1525A wraps up to 35 loads per hour.

Performance

Loads per hour	Up to 35
Rotation speed	12 rpm
Maximum load size	50" x 50" x 80" H (70" dia.)
Minimum load size	24" x 24" x 28" H (film clamp justified)
Maximum load weight	Floor capacity

Film Delivery System

Film capacity	20" roll width x 10" dia.
Pre-stretch type	Strain gauge
Pre-stretch level	250% (optional 100% to 300%)
Force control	Variable
Film threading	Octo-Thread design; W film threading pattern
Cut and seal	Controlled impulse cutter and heat sealer

Controls

Controller	Allen-Bradley PLC
Operator interface	Touch screen
Load height sensor	Photo eye
Wrap settings	Re-wrap function; overwrap and overlap adjustments
Wrap counters	Independent top and bottom
Cycle counter	Non-resettable
Emergency stop	Mushroom head
Electrical disconnect	Lockable
Electrical enclosure	CSA approved

Power Requirements

Voltage	120 VAC, 20 amps, 1 phase, 60 Hz
Pneumatic	80 psi, 3 CFM (clean, dry air)

Rotary Arm

Drive system	Dual V-belt drive
Bearing type	Dual pillow block bearings

Structure

Installation	Floor mounted gantry frame
Machine weight	2,400 pounds
Construction	Heavy duty, welded
Color	Dark bronze; Rotating arm color: Yellow

Cobra 1525CN



- Prestretches film 250% standard
- Adjustable force-to-load film tension
- Automatic load height sensing
- Top and bottom digital wrap counters
- Automatic film cut and heat seal
- Minimal maintenance and service

The Cobra 1525CN is the most versatile of our automatic overhead stretch wrapping machines, offering a full range of load size and machine control options. It can be integrated into an existing production line or used as a stand-alone, off-line unit. Optional conveyors are available. The 1525CN wraps up to 40 loads per hour. Model 1525CR is the same as above without the standard infeed, process and exit conveyors.

Performance

Loads per hour	Up to 40
Rotation speed	12 rpm (optional to 18 rpm)
Maximum load size	50" x 50" x 80" H (70" dia.)
Minimum load size	36" x 36" x 28" H (film clamp justified)
Maximum load weight	1525CN: 4,800 pounds; 1525CR: dependent on conveyor

Film Delivery System

Film capacity	20" roll width x 10" dia.
Pre-stretch type	Strain gauge
Pre-stretch level	250% (optional 100% to 300%)
Force control	Variable
Film threading	Octo-Thread design; W film threading pattern
Cut and seal	Controlled impulse cutter and heat sealer

Controls

Controller	Allen-Bradley PLC
Operator interface	Touch screen
Load height sensor	Photo eye
Wrap settings	Re-wrap function; overwrap and overlap adjustments
Wrap counters	Independent top and bottom
Cycle counters	Total cycle counter and resettable counter
Emergency stop	Mushroom head
Electrical disconnect	Lockable
Electrical enclosure	CSA approved

Power Requirements

Voltage	480 VAC, 30 amp, 3 phase, 60 Hz
Pneumatic	80 psi, 3 CFM (clean, dry air)

Rotary Arm

Drive system	Dual V-belt drive
Bearing type	Dual pillow block bearings

Structure

Machine weight	1525CN: 7,150 pounds; 1525CR: 2,000 pounds
Construction	Heavy duty, welded
Color	Dark bronze; Rotating arm color: Yellow

Octopus 303 Rotary Ring

Octopus 505, 606, 808 Rotary Ring

808 Twin Rotary Ring

- Bottom-to-top wrap cycle
- Automatic film cut and heat seal
- Top and bottom wrap counters
- Easily adjustable force-to-load film tension
- Film break alarm



- Bottom-to-top wrap cycle
- Automatic film cut and heat seal
- Top and bottom wrap counters
- Easily adjustable force-to-load film tension
- Film break alarm

The compact Octopus™ 303 fits easily into tight spaces and can be mounted over an existing conveyor or equipped with its own conveyors. The patented rotary wrapping ring can be programmed to start and stop film application at any height on the load without returning to the starting point. This reduces film costs by up to 30% and generates a virtually unlimited selection of wrapping patterns. The Octopus 303 wraps up to 60 loads per hour.

The ultimate in high speed pallet wrapping, the Octopus 505, 606, 808 and 808 Twin have earned a reputation for high efficiency and reliability. The 808, which wraps up to 120 loads per hour, outperforms competitive machines by a wide margin. All models feature the patented rotary wrapping ring which can be programmed to start and stop film application at any height on the load. These machines can be equipped with a variety of options, including conveyors, a vertical top platen, a top-sheet dispenser, corner post applicators, and extended load diagonals.

Performance	303	505	606	808	808 Twin
Loads per hour	Up to 60	Up to 80	Up to 100	Up to 120	Up to 150
Maximum load size	48" W x 50" L x 80" H (69" dia.)				50" W x 56" L x 80" H (75" dia.)
Minimum load size	36" W x 36" L x 28" H (film clamp justified)				
Maximum load weight	Conveyor dependent (4,800 pounds w/ITW Muller conveyor)				
Film Delivery System					
Film capacity	20" roll width x 10" dia.				
Film payout	Strain gauge				
Pre-stretch level	250% (optional 75% to 300%)				
Force control	Variable				
Film threading	Octo-Thread design; W film threading pattern				
Cut and seal	Controlled impulse cutter and heat sealer				
Film tail treatment	—				
Controls					
Controller	Allen-Bradley PLC				
Operator interface	Touch screen	Touch screen	Allen-Bradley Panel View	Allen-Bradley Panel View	Touch screen
Load height sensor	Photo eye				
Wrap settings	Re-wrap function, overwrap and overlap adjustments				
Wrap counters	Independent top and bottom				
Emergency stop	Mushroom head				
Electrical disconnect	Lockable				
Electrical enclosure	CSA approved				
Power Requirements					
Voltage	80 VAC, 3 phase, 30 amps				
Pneumatic	80 psi, 3 CFM (clean, dry air)				
Ring Lift and Rotation					
Lift method	Reinforced belt	Chain	Chain	Chain	Belt
Lift motor	480 VAC - SEW Eurodrive				
Lift control	Variable frequency drive				
Rotation method	Belt drive				
Rotation motor	480 VAC - SEW Eurodrive				
Rotation control	Variable frequency drive				
Structure					
Machine weight	3,500 pounds	4,500 pounds	4,500 pounds	4,500 pounds	5,500 pounds
Construction	Aluminum frame; structural steel channel			Heavy duty, welded frame	
Color	Structure: Light & Bark bronze; Ring frame: Yellow				

Power Application Equipment

For stretch film



Ringmaster™ Semiautomatic and Automatic Horizontal Systems



- Multiple wrap configurations, including full length wrapping, head and tail banding and continuous wrapping with hot wire cutting between products
- Automatic and semiautomatic control packages available
- In-feed and out-feed conveyor options available
- Powered prestretch optional

The Ringmaster™ horizontal stretch wrapping system is ideal for unitizing pipe, tubing, textile rolls, carpeting, lumber, molding, doors, siding and more. By fully encapsulating products in a web of film, the Ringmaster provides protection from scratches, dirt, dust and moisture. Semiautomatic and automatic models are available.

Performance	1200	2400	3600	4800	6000	7000	8000	9000
Ring size	12"	24"	36"	48"	60"	70"	80"	90"
Ring speed*	5-70 RPM	5-60 RPM	5-50 RPM	5-40 RPM	5-30 RPM	5-30 RPM	5-30 RPM	5-30 RPM

Load Capabilities

Round capacity (diameter)	2"-10"	4"-22"	8"-35"	12"-48"	18"-50"	24"-60"	36"-70"	40"-80"
Minimum rectangular capacity	2"W x 3"H	4"W x 5"H	8"W x 6"H	12"W x 12"H	18"W x 10"H	24"W x 12"H	30"W x 24"H	40"W x 30"H
Maximum rectangular capacity	10"W, 12" diag.	22"W, 25" diag.	30"W, 35" diag.	40"W, 42" diag.	50"W, 60" diag.	60"W, 70" diag.	70"W, 80" diag.	80"W, 90" diag.
Minimum length	36" (12" film width); 48" (20" film width)							
Maximum length	Unlimited							

Film Delivery System

Film carriage	Core brake standard; powered prestretch optional
Film roll width	10", 12" or 20"
Maximum film roll diameter	10"

Power Requirements

Power requirements**	120 VAC, 1 phase, 50/60 Hz, 10 to 20 amps (Models 1200 to 4800)	240 VAC, 1 phase, 50/60 Hz, 10 to 20 amps (Models 6000 to 9000)
Controller voltage	120 VAC	
Controller type	Allen-Bradley MicroLogix 1200	
Air requirements	80 psi in applications with top platens and/or auto cut/clamp	

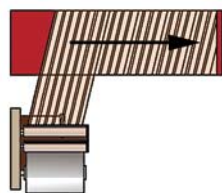
Mechanical

Machine dimensions	42"L x 60"W x 60"H	30"L x 60"W x 60"H	40"L x 81"W x 71"H	42"L x 95"W x 82"H	60"L x 96"W x 95"H	60"L x 106" W x 105" H	60"L x 115"W x 115"H	60"L x 126"W x 125"H
Construction	Structural steel tubing							
Leveling	Adjustable four (4) point legs							
Finish	Industrial enamel							
Shipping weight	615 lbs.	715 lbs.	790 lbs.	1,150 lbs.	1,575 lbs.	1,740 lbs.	1,960 lbs.	2,150 lbs.

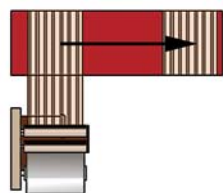
* Bundling and wrapping rates will vary with film width, product size and wrap pattern.

** Adding multiple options/conveyors may change the voltage requirements.

Configurations



Full length spiral wrap



Head and tail banding wrap
(option available on the automatic models only)



Continuous wrap with hot wire cut

Signode manufactures a full line of pressure sensitive carton-sealing tapes to fulfill the requirements of a wide range of manual and machine applications. These tapes feature biaxially-oriented polypropylene backing for excellent bi-directional strength and are available with either a rubber-based or acrylic blend adhesive. Each of these adhesives possesses performance characteristics which make it ideal in certain operating conditions.

Acrylic adhesive combines cold performance, good quick-stick, and resistance to aging, weathering and U/V light.

Rubber-based adhesive offers high shear strength, excellent peel adhesion to kraft fiberboard and good quick-stick.

The 100 and 200 Series light-duty carton-sealing tapes are ideal for single-strip closure of regular slotted containers. For medium-duty applications, the 400 and 600 Series carton-sealing tapes are an excellent choice. The 800, 1000 and 1200 Series tapes are designed for the heaviest-duty applications, including tabbing, hinging and splicing.

Tape *	Backing Material	Grade	Standard Roll Length	Standard Roll Width **	Color	Adhesive Type	Total Thickness	Tensile Strength	Peel Adhesion ***	Elongation at Break	Temperature Range
			Yards (m)	Inches (mm)			Mils	Lbs./in. width	Ozs./in. width	%	F°
100 Series	B.O.P.P.†	Manually applied	110 (101)	2, 3 (48, 72)	Clear	Acrylic	1.60	28	19	90-100	Application +35° to +140°
		Machine applied	1000 (914) 1500 (1372) 2000 (1829)	2, 3 (48, 72) 2 (48) 2, 3 (48, 72)							Storage -40° to +150°
200 Series	B.O.P.P.	Manually applied	55 (50) 110 (101) 220 (201)	2 (48) 2, 3 (48, 72) 2 (48)	Clear	Rubber	1.60	24	28	90-100	Application +45° to +120°
		Machine applied	1000 (914) 1500 (1372) 2000 (1829)	2, 3 (48, 72) 2 (48) 2, 3 (48, 72)							Storage -20° to +140°
2XL Series	B.O.P.P.	Manually applied	220 (201)	2 (48)	Clear	Rubber	1.60	24	28	90-100	Application +45° to +120° Storage -20° to +140°
		Manually applied	220 (201)	2 (48)	Clear	Acrylic	1.65	24	17	90-100	Application +35° to +140° Storage -40° to +150°
400 Series	B.O.P.P.	Manually applied	110 (101) 220 (201)	2, 3 (48, 72) 2 (48)	Clear	Acrylic	1.90	38	23	90-100	Application +35° to +140°
		Machine applied	1000 (914) 1500 (1372) 2000 (1829)	2, 3 (48, 72) 2 (48) 2, 3 (48, 72)							Storage -40° to +150°
600 Series	B.O.P.P.	Manually applied	55 (50) 110 (101)	2 (48) 2, 3 (48, 72)	Clear	Rubber	1.85	28	32	90-100	Application +45° to +120°
		Machine applied	1000 (914) 1500 (1372) 2000 (1829)	1.5, 2, 3 (36, 48, 72) 2 (48) 2 (48)							Storage -20° to +140°
800 Series	B.O.P.P.	Manually applied	60 (55)	2, 3 (48, 72)	Clear	Rubber	2.50	38	46	90-100	Application +45° to +120°
		Machine applied	1000 (914)	2, 3 (48, 72)							Storage -40° to +140°
1000 Series	B.O.P.P.	Manually applied	60 (55)	2, 3 (48, 72)	Clear	Rubber	3.00	35	54	120-150	Application +45° to +120°
		Machine applied	1000 (914)	2, 3 (48, 72)							Storage -40° to +140°
1200 Series (RULE 41)	Polyester	Manually applied	60 (55)	2, 3 (48, 72)	Clear	Rubber	3.20	45	56	120-140	Application +45° to +120°
		Machine applied	1000 (914)	2 (48)							Storage -40° to +140°

* Color and printed tapes are available upon request.

** Additional widths are available for some tape products. Please consult your Signode Sales Representative.

*** Adhesion to steel industry test. Not necessarily indicative of performance of tape on fiberboard.

† Biaxially-oriented polypropylene.

NOTE: Signode tape is manufactured to conform to UPS, Parcel Post, Motor Freight classification Rule 222, Air Freight and FDA requirements for indirect food contact.

Power Application Equipment

For carton sealing

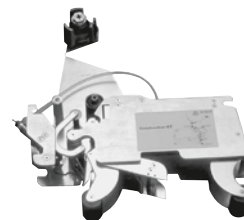
SIGNODE®

CaseLocker™ Heavy-Duty Tape Heads

Little David CaseLocker tape cartridges offer sealing solutions for a wide variety of applications.

Each tape head can be outfitted with low tape/no tape sensors to minimize downtime, or air cylinders to retract the

wipe down arms to bypass totes or pre-sealed cartons that do not require tape sealing.



LD-Xss

Semiautomatic Uniform Washdown Case Sealer. Available with 2" or 3" heads



Legend

Semiautomatic Random Case Sealer. Available with 2" or 3" heads



LD-7

Automatic Uniform Case Sealer. Available with 2" or 3" heads



Package Size	Length	Width	Height		Length	Width	Height		Length	Width	Height
Minimum	4-1/2"	4"	4-1/2"	Minimum	6"	4-1/2"	2-5/8"	Minimum	4-1/2"	4-1/2"	4-1/2"
Maximum	N/A	28"	24"	Maximum	N/A	22"	24"	Maximum	N/A	22"	24"
Maximum Weight	Up to 40 lbs.			Maximum Weight	Up to 40 lbs.			Maximum Weight	Up to 50 lbs.		
Tape Roll Diameter	16"			Tape Roll Diameter	16"			Tape Roll Diameter	16"		

Features

- Heavy duty stainless steel design
- Maintenance-free operation
- Lubrication-free tape heads
- Anti-microbial easy clean design
- UL approved
- Available in top and bottom belt design
- Interchangeable tape heads
- Quick, easy changeovers on tape rolls
- Rugged construction
- Maintenance-free operation
- Lubrication-free tape heads
- UL approved
- Interchangeable tape heads
- Quick, easy changeovers on tape rolls
- Can process cartons as low as 2" tall
- Rugged construction
- Maintenance-free operation
- Lubrication-free tape heads
- UL approved
- Interchangeable tape heads
- Quick, easy changeovers on tape rolls
- Available in top and bottom belt design

Specifications

Drive speed: 80' per minute

Controls: Allen-Bradley

Electrical: 110 volts, 1 phase, 60 Hz

Machine operating height:
Adjustable from 24" to 30"

Machine dimensions:
39-7/8" L x 34-3/8" W x 58-1/4" H.

Shipping weight: 269 lbs. (uncrated)

Drive speed: 80' per minute

Controls: Allen-Bradley PLC

Electrical: 115-220 volts, 1 phase, 60 Hz

Air requirements: 85 psi @ 10 cfm.

Machine operating height:
Adjustable from 24" to 30"

Machine dimensions:
37-5/16" L x 30-3/16" W x 61-3/16" H.

Shipping weight: 230 lbs. (uncrated)

Drive speed: 80' per minute

Controls: Allen-Bradley PLC

Electrical: Two gear motors; 1/6 hp, 110 volts, 1 phase, 60 Hz

Air requirements: 70 psi @ 4 cfm.

Machine operating height:
Adjustable from 24" to 30"

Machine dimensions:
36-1/4" L x 31-1/4" W x 57-1/2" H.

Shipping weight: 196.5 lbs. (uncrated)



Complementary protective packaging products

Signode is one of a number of ITW companies that specialize in products for protective packaging. Our products work in conjunction with other ITW protective packaging products to provide a comprehensive solution to your needs.



Angleboard

Angleboard offers rigid right angle protection for load stability and package protection.

- Angleboard
- AngleWrap
- Cornerboard
- Formaboard



GaleWrap

GaleWrap's orbital stretch wrap solutions are designed for a wide range of products and product configurations.

- Yellow Jacket 110 Series
- Yellow Jacket Stinger Series



Lachenmeier

Lachenmeier's pallet packaging machines, including stretch hood and shrink wrapping, provide outstanding load stability and protection.

- Combi-Shrink
- Power Flex
- Multi Flex



Reddi-Pac

Reddi-Pac's laminated paperboard packaging materials help prevent product damage during shipping and handling.

- Handle U-Board
- Hinged U-Board
- Jumbo Corner
- Qwik-Crate
- Reddi-Crate
- U-Board
- Uni-Crate

Economic Evaluation Summary



Customer _____ Date _____

Annual Costs	Present	Proposed
--------------	---------	----------

Package container costs (If applicable)

a. _____	\$ _____	\$ _____
b. _____	\$ _____	\$ _____
c. _____	\$ _____	\$ _____
d. _____	\$ _____	\$ _____

Reinforcement/closure cost

a. _____	\$ _____	\$ _____
b. _____	\$ _____	\$ _____
c. _____	\$ _____	\$ _____
d. _____	\$ _____	\$ _____

Labor cost

a. _____	\$ _____	\$ _____
b. _____	\$ _____	\$ _____
c. _____	\$ _____	\$ _____
d. _____	\$ _____	\$ _____

Other costs

a. _____	\$ _____	\$ _____
b. _____	\$ _____	\$ _____
c. _____	\$ _____	\$ _____
d. _____	\$ _____	\$ _____

Total cost: \$ _____ \$ _____

1. Estimated annual savings: (Present minus proposed) \$ _____

Investment

2. Equipment \$ _____

3. Approximate annual depreciation
(Line 2 divided by 8 years) \$ _____

4. Annual savings after depreciation
(Line 1 minus line 3) \$ _____

5. Profit after taxes
(Line 4 x 34% and state tax) \$ _____

6. Approximate annual cash savings
(Line 5 + line 3) \$ _____

7. Payback period _____ Years
(Line 2 divided by line 6)

Comments: _____

Signode Packaging Systems Sales • 800 Corporate Woods Pkwy. • Vernon Hills, IL 60061

1-800-323-2464 For additional information on our products and services, please go to www.signode.com