#### ROUGHNECK HEAVY DUTY

The Uniweld Roughnecks are complete super heavy duty oxy-fuel or propane outfits for cutting, welding, brazing and heating.

780A CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer.

RV SERIES REGULATORS have single scale 2-1/2" gauges, stainless steel diaphragms and accessibility to the seat from the rear.

WH360 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

ROUGHNECK Includes one Type 11-8 heating tip & one each Type 4 -1,-3,-5 welding tips.

ROUGHNECK II Includes one Type 11-8 heating tip and one Type 4 -2 welding tip.

#### ROUGHNECK PROPANE

Includes an RV8012 regulator, GPN-2 cutting tip, grade "T" hose and Type 12 -8 heating tip.
Specially designed to cut, braze and heat with Propane.

Cutting Capacity: 3/4" with supplied tip; up to 8" with optional tips [See pgs. 14-24] Welding Capacity: 1/2" with supplied tips; up to 3" with optional tips [See pg. 25] Heating Tips: [See pgs. 30, 31]



|   | ROUGHNECK<br>HEAVY DUTY         | WELDING<br>HANDLE   |                       |                  | i WELD/BRAZ<br>TIPS  | E HEATING<br>TIP | G OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | ACCESSORIES   |  |
|---|---------------------------------|---------------------|-----------------------|------------------|----------------------|------------------|--------------------------------------|--------------------------------------|---|--|
|   | PART# OPH1-780A<br>UPC# 80000   | WH360               | 780A                  | 1-101-1          | TYPE 4<br>-1, -3, -5 | TYPE<br>11-8     | RV8010<br>CGA540                     | RV8011<br>CGA510                     | TWIN HOSE 25' 1/4" "B"<br>GOGGLES, LIGHTER              |  |
|   | PART# OPH1-780A-4<br>UPC# 80002 | 4 WH360             | 780A                  | 1-101-1          | TYPE 4<br>-1, -3, -5 | TYPE<br>11-8     | RV8010<br>CGA540                     | RV8011<br>CGA510                     | NO ACCESSORIES  |  |
| 4 | ROUGHNECK II<br>HEAVY DUTY      | WELDING<br>HANDLE   |                       |                  | i WELD/BRAZ<br>Tip   | E HEATING<br>TIP | G OXYGEN*<br>REGULATOR<br>5-125 PSIG |                                      | ACCESSORIES   |  |
|   | PART# KVH780A<br>UPC# 80080     | WH360               | 780A                  | 1-101-1          | TYPE<br>4-2          | TYPE<br>11-8     | RV8010<br>CGA540                     | RV8011<br>CGA510                     | TWIN HOSE 25′ 1/4" "B"<br>GOGGLES, LIGHTER              |  |
|   | PART#KVH780A-4<br>UPC#80081     | WH360               | 780A                  | 1-101-1          | TYPE<br>4-2          | TYPE<br>11-8     | RV8010<br>CGA540                     | RV8011<br>CGA510                     | NO ACCESSORIES  |  |
| • |                                 | WELDING<br>HANDLE # | CUTTING<br>ATTACHMENT | CUTTING W<br>TIP | VELD/BRAZE<br>Tip    |                  | REGULATOR R                          | PROPANE*<br>EGULATOR<br>2-40 PSIG    | ACCESSORIES   |  |
|   | PART# KVP780A<br>UPC# 80082     | WH360               | 780A                  | GPN-2            | -<br>-               | TYPE<br>12-8     | RV8010<br>CGA540                     | RV8012<br>CGA510                     | GRADE "T"<br>TWIN HOSE 25' 1/4" "B"<br>GOGGLES, LIGHTER |  |
|   | PART#KVP780A-4<br>UPC# 80083    | WH360               | 780A                  | GPN-2            | -                    | TYPE<br>12-8     | RV8010<br>CGA540                     | RV8012<br>CGA510                     | NO ACCESSORIES  |  |

#### V-STYLE THRE MIX

## **CUTTING & WELDING OUTFITS**





#### FABRICATOR HEAVY DUTY



The Uniweld Fabricator is a basic heavy duty oxy-fuel outfit for cutting, welding, brazing and heating.

780A CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer.

RV\*\* or RUH83 SERIES REGULATORS with large, easy to read single scale 2-1/2" gauges.

WH360 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 8" with optional tips [See pgs. 14-24]
Welding Capacity: 3" with optional tips [See pg. 25]

Heating Tips: [See pgs. 30,31]



| FABRICATOR<br>HEAVY DUTY   | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | GAUGES |   |
|----------------------------|-------------------|-----------------------|------------------------------------|--------------------------------------|--------|---|
| PART# KV780A<br>UPC# 80004 | WH360             | 780A                  | RV8010<br>CGA540                   | RV8011<br>CGA510                     | 2-1/2" | Add (FB) to Part# to include<br>U.L. Listed Flashback Arrestors |
| PART# KR780A<br>UPC# 81100 | WH360             | 780A                  | RUH8310<br>CGA540                  | RUH8311<br>CGA510                    | 2-1/2" | on the Welding Handle. [See pg. 104]                            |

FABRICATOR OUTFITS AVAILABLE WITH CGA300 ACETYLENE REGULATORS - ORDER BY ADDING (-1) TO END OF PART#



The Uniweld Professional is a basic heavy duty oxy-fuel cutting outfit.

CUTTING TORCH with heavy duty precision machined forged brass head and body. Universal mixer for most fuel gases 3 PSIG and above. 830 (top rear lever) or 850 (bottom rear lever).

RV\*\* or RUH83 SERIES REGULATORS with large, easy to read single scale 2-1/2" gauges.

\*\*RV SERIES have stainless steel diaphragms and accessibility to the seat from the rear.







KV830-21



| PROFESSIONAL<br>HEAVY DUTY   | HAND<br>CUTTING<br>TORCH | OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | GAUGES | PROFESSIONAL<br>HEAVY DUTY   | HAND<br>CUTTING<br>TORCH | OXYGEN* REGULATOR 5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | GAUGES |
|------------------------------|--------------------------|------------------------------------|--------------------------------------|--------|------------------------------|--------------------------|------------------------------|--------------------------------------|--------|
| PART# KV830-21<br>UPC# 80100 | 830-21<br>90°            | RV8010<br>CGA540                   | RV8011<br>CGA510                     | 2-1/2" | PART# KR830-21<br>UPC# 81200 | 830-21<br>90°            | RUH8310<br>CGA540            | RUH8311<br>CGA510                    | 2-1/2" |
| PART# KV850-21<br>UPC# 80200 | 850-21<br>90°            | RV8010<br>CGA540                   | RV8011<br>CGA510                     | 2-1/2" | PART# KR850-21<br>UPC# 81300 | 850-21<br>90°            | RUH8310<br>CGA540            | RUH8311<br>CGA510                    | 2-1/2" |

PROFESSIONAL OUTFITS AVAILABLE WITH CGA300 ACETYLENE REGULATORS - ORDER BY ADDING (-1) TO END OF PART#



## **OUTFITS CUTTING & WELDING**

#### V-STYLE TURE MIX





### THE SPECIALIST

## ALL-AMERICAN

The Uniweld All-American is a heavy duty oxy-fuel outfit for cutting, welding and brazing.

780A CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer.

RV or RUH83 SERIES REGULATORS with large, easy to read single scale 2-1/2" gauges.

WH360 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 3/4" with supplied tip; up to 8" with optional tips [See pgs. 14-24] Welding Capacity: 3/32" with supplied tip; up to 3" with optional tips [See pg. 25] Heating Tips: [See pgs. 30-31]

The Uniweld Specialist is a heavy duty oxy-fuel outfit for cutting, welding and brazing. Oxygen and fuel flashback arrestors with built-in check valves prevent reverse flow of gases and flashback. Packed in its own handy tool box with utility tray.

780A CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer.

RUH83 SERIES REGULATORS with large, easy to read single scale 2-1/2" gauges.

WH360 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 3/4" with supplied tip; up to 8" with optional tips [See pgs. 14-24]
Welding Capacity: 3/32" with supplied tip; up to 3" with optional tips [See pg. 25]
Heating Tips: [See pgs. 30-31]

| ALL-AMERICAN<br>HEAVY DUTY                                     | WELDING<br>HANDLE             | CUTTING<br>ATTACHMENT  | CUTTING<br>TIP         | WELD/BRAZE<br>TIP               | OXYGEN*<br>REGULATOR<br>5-125 PSIG         | ACETYLENE* REGULATOR 2-15 PSIG             | ACCESSORIES   |  |
|--|-------------------------------|------------------------|------------------------|---------------------------------|--|--|---|--|
| PART# KAV780A<br>UPC# 80006                                    | WH360                         | 780A                   | 1-101-1                | TYPE<br>4-1                     | RV8010<br>CGA540                           | RV8011<br>CGA510                           | TWIN HOSE 20' 1/4" "B"<br>GOGGLES, LIGHTER  |  |
| PART# KAR780A<br>UPC# 81102                                    | WH360                         | 780A                   | 1-101-1                | TYPE<br>4-1                     | RUH8310<br>CGA540                          | RUH8311<br>CGA510                          | TWIN HOSE 20′ 1/4" "B"<br>GOGGLES, LIGHTER  |  |
| PART# KAV780A-4<br>UPC# 80008                                  | WH360                         | 780A                   | 1-101-1                | TYPE<br>4-1                     | RV8010<br>CGA540                           | RV8011<br>CGA510                           | NO ACCESSORIES  |  |
| PART# KAR780A-4<br>UPC# 81104<br><i>ALL-AMERICAN OUTFITS A</i> | WH360<br>I <i>VAILABLE WI</i> | 780A<br>TH CGA300 ACET | 1-101-1<br>YLENE REGUL | TYPE<br>4-1<br>LATORS - ORDER E | RUH8310<br>CGA540<br>BY <i>ADDING (-1)</i> | RUH8311<br>CGA510<br><i>TO END OF PAR1</i> | NO ACCESSORIES  Add (FB) to Part# to include U.L. I # Arrestors on the Welding Handle |  |
| THE SPECIALIST<br>HEAVY DUTY                                   | WELDING<br>HANDLE             | CUTTING<br>ATTACHMENT  | CUTTING<br>TIP         | WELD/BRAZE<br>TIP               | OXYGEN*<br>REGULATOR<br>5-125 PSIG         | ACETYLENE*<br>REGULATOR<br>2-15 PSIG       | ACCESSORIES   |  |
| PART# KAR780ASPF-4<br>UPC# 81109                               | WH360                         | 780A                   | 1-101-1                | TYPE<br>4-1                     | RUH8310<br>CGA540                          | RUH8311<br>CGA510                          | BLACK PLASTIC TOOL BOX<br>AND TRAY TFA100 & TFA101                                    |  |

Optional Twin Hose Set, "B" fittings [Pg. 103]; Spiral Tip Cleaner [Pg. 106]; Safety Goggles [Pg. 105]; Wrenches [Pg. 105]

**FLASHBACK ARRESTORS** 

## **CUTTING & WELDING OUT**

## <u>ROLLIN' ROUGHNECK</u>

The Uniweld Rollin' Roughneck is the roughest, toughest most complete portable heavy duty oxy-acetylene welding and cutting system you'll ever find.

780A CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer for maximum performance & stability.

RV SERIES REGULATORS have single scale 2-1/2" gauges, stainless steel diaphragms & accessibility to the seat from the rear.

WH360 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 3/4" with supplied tip; up to 8" with optional tips [See pgs. 14-24] Welding Capacity: 1/2" with supplied tips; up to 3" with optional tips [See pg. 25]

Heating Tips: [See pgs. 30, 31]



UNIWELD

| ROLLIN' ROUGHNECK<br>HEAVY DUTY | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | WELD/BRAZE<br>TIPS   | HEATING<br>TIP | OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE* REGULATOR 2-15 PSIG | ROLLIN'<br>ROUGHNECK<br>CART |  |
|---------------------------------|-------------------|-----------------------|----------------|----------------------|----------------|------------------------------------|--------------------------------|------------------------------|--|
| PART# 80060<br>UPC# 80060       | WH360             | 780A                  | 1-101-1        | TYPE 4<br>-1, -3, -5 | TYPE<br>11-8   | RV8010<br>CGA540                   | RV8011<br>CGA510               | 509<br>W/O CYLINDERS         |  |
| PART# 80061<br>UPC# 80061       | WH360             | 780A                  | 1-101-1        | TYPE 4<br>-1, -3, -5 | TYPE<br>11-8   | RV8010<br>CGA540                   | RV8011<br>CGA510               | 509FW†<br>W/O CYLINDERS      |  |

TIRES

ROLLIN' ROUGHNECK INCLUDES: 25' TWIN HOSE, 1/4" "B" FITTINGS [Pg. 103], GOGGLES SHADE #5 [Pg. 105], FLINT LIGHTER [Pg. 105], TORCH FLASHBACK ARRESTORS [Pq. 104] INSTALLED AND 18" STAINLESS STEEL PIGTAIL ASSEMBLY. † 509FW COMES WITH BUILT-IN FIREWALL

The Uniweld Da Box® is the perfect outfit to mount on your truck for maximum mobility and security. Includes V style Roughneck outfit, padlocking, heavy duty gauge steel construction. Add the desired braided stainless steel hose pigtails to complete the Da Box® Outfit.

Part# DABOX [cabinet only] **UPC#30017** Accepts all Uniweld Roughneck **Outfits** 



#### PIGTAILS

| PART#    | UPC#  | LENGTH | DESCRIPTION                      |
|----------|-------|--------|----------------------------------|
| PT300-24 | 43601 | 24"    | Flexible Stainless Steel Pigtail |
| PT300-36 | 43602 | 36"    | Assemblies with Brass Fittings   |
| PT300-48 | 43603 | 48"    | CGA300 Acetylene                 |
| PT510-24 | 43621 | 24"    | Flexible Stainless Steel Pigtail |
| PT510-36 | 43622 | 36"    | Assemblies with Brass Fittings   |
| PT510-48 | 43623 | 48"    | CGA510 Acetylene or Propane      |
| PT540-24 | 43631 | 24"    | Flexible Stainless Steel Pigtail |
| PT540-36 | 43632 | 36"    | Assemblies with Brass Fittings   |
| PT540-48 | 43633 | 48"    | CGA540, Oxygen, 3000 PSIG        |

**ADDITIONAL PIGTAILS AVAILABLE ON REQUEST** 

| DA BOX <sup>®</sup><br>HEAVY DUTY<br>OUTFIT | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | WELD/BRAZE<br>TIPS   | HEATING<br>TIP | OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | DA BOX<br>BOX |  |
|---|-------------------|-----------------------|----------------|----------------------|----------------|------------------------------------|--------------------------------------|---------------|--|
| PART# DABOX-V<br>UPC# 80400                 | WH360             | 780A                  | 1-101-1        | TYPE 4<br>-1, -3, -5 | TYPE<br>11-8   | RV8010<br>CGA540                   | RV8011<br>CGA510                     | DA-BOX        |  |

DA BOX-V INCLUDES: 25'TWIN HOSE, 1/4" "B" FITTINGS [Pa. 103], GOGGLES SHADE #5 [Pg. 105], FLINT LIGHTER [Pg. 105], CGA510 POL to CGA300 CA ADAPTOR [Pg. 97], REGULATOR FLASHBACK ARRESTOR INSTALLED [Pa. 104]



## **OUTFITS CUTTING & WELDING**

#### V-STYLE TURE MIX



## ALL-TRADES



The Uniweld All-Trades is a medium duty oxy-fuel outfit for cutting, welding, brazing and heating.

CA350 CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer.

RUH82 SERIES REGULATORS with large, easy to read single scale 2" gauges.

WH350 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 1/2" with supplied tip; up to 6" with optional tips [See pgs. 14-17, 22, 24]

**KL250** 

Welding Capacity: 1/4" with supplied tips; up to 1-1/4" with optional tips [See pg. 25]

Heating Tips: [See pg. 29]

Add (FB) to Part# to include U.L. Listed Flashback Arrestors on the Welding Handle. [**See pg. 104**]

| ALL-TRADES<br>MEDIUM DUTY       | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | WELD/BRAZE<br>TIPS    | HEATING<br>TIP | OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG |   |
|---------------------------------|-------------------|-----------------------|----------------|-----------------------|----------------|------------------------------------|--------------------------------------|---|
| PART# OPH5-350A<br>UPC# 81000   | WH350             | CA350                 | 3-101-0        | TYPE 13<br>-0, -2, -4 | TYPE<br>29-4   | RUH8210<br>CGA540                  | RUH8211<br>CGA510                    | TWIN HOSE 20' 3/16" "B"<br>GOGGLES, LIGHTER |
| PART# OPH5-350A-4<br>UPC# 81002 | WH350             | CA350                 | 3-101-0        | TYPE 13<br>-0, -2, -4 | TYPE<br>29-4   | RUH8210<br>CGA540                  | RUH8211<br>CGA510                    | NO ACCESSORIES                              |





The Uniweld All-Trades II is a medium duty oxy-fuel outfit for cutting, welding and brazing.

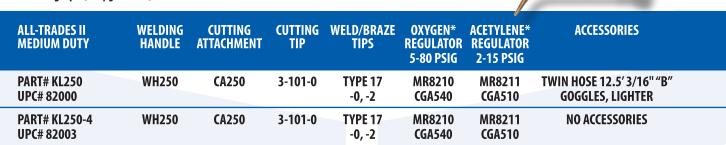
CA250 CUTTING ATTACHMENT with precision machined forged brass head and body and one-piece universal copper mixer.

MR SERIES REGULATORS with large, easy to read single scale 2" gauges.

WH250 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 1/2" with supplied tip; up to 6" with optional tips [See pgs. 14-17, 22, 24] Welding Capacity: 1/8" with supplied tips; up to 1-1/4" with optional tips [See pgs. 26, 27]

Heating Tips: [See pgs. 27-29]



ALL TRADES AND ALL TRADES II OUTFITS AVAILABLE WITH CGA300 ACETYLENE REGULATORS - ORDER BY ADDING (-1) TO END OF PART#; WITH CGA520, ADD (-2) TO END OF PART#.

See page 9 for KL250 Outfits including carrying stand & cylinders.

Add (FB) to Part# to include U.L. Listed Flashback Arrestors on the Welding Handle. [See pg. 104]

## **CUTTING & WELDING OUTFITS**



## THE WURKS®-Y

The Uniweld Wurks-V is a complete 12 piece, easy-to-operate, all-purpose outfit for cutting, welding and brazing that's packed in its own rugged Wurk Box with a compartmented accessory tray.



CA350 CUTTING ATTACHMENT with precision machine forged brass head and body and one-piece universal copper mixer.

MR SERIES REGULATORS with large, easy to read single scale 2" gauges.

WH350 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

Cutting Capacity: 1/2" with supplied tip; up to 6" with optional tips [See pgs. 14-17, 22, 24]







Look for this 12 pack display at your local distributor













**WURKS-V** 

#### Use the Wurks-V for:

**Cutting most Steels** 

Auto, Truck and Trailer Repair

Plumbing and General Home Maintenance **Building Metal Workstands** 

Creating Metal Artwork

Heating Metal Bars and Pipes for Bending Removing Rusty Nuts from Rusty Bolts Repairing Garden and Farm Tools

WURKS-V OUTFITS AVAILABLE WITH CGA300 ACETYLENE REGULATORS - ORDER BY ADDING (-1) TO END OF PART#

| THE WURKS-V<br>MEDIUM DUTY  | WELDING<br>HANDLE | CUTTING CUTT<br>ATTACHMENT TI | ING WELD/BRAZ<br>P TIP |                  |                  | TOOLBOX<br>W/TRAY | ACCESSORIES†                 |  |
|-----------------------------|-------------------|-------------------------------|------------------------|------------------|------------------|-------------------|------------------------------|--|
| PART# WURKS-V<br>UPC# 82150 | WH350             | CA350 3-10                    | 1-0 TYPE<br>13-2       | MR8210<br>CGA540 | MR8211<br>CGA510 | BLACK<br>PLASTIC  | 12.5'TWIN HOSE<br>3/16", "B" |  |

†ACCESSORIES INCLUDE: GOGGLES, SHADE #5 [Pg. 105], FLINT LIGHTER [Pg. 105], TIP CLEANER SET [Pg. 106], LEATHER WELDING GLOVES [Pg. 105]

## **OUTFITS CUTTING & WELDING**

#### V-STYLE TUBE MIX

### ALL-AMERICAN

The Uniweld All-American is a medium duty oxy/fuel outfit for cutting, welding and brazing.

CA350 CUTTING ATTACHMENT with precision machined forged Liast head and body and one-piece copper mixer. Cuts up to 1/2" with supplied tip.

MR or RUH82 SERIES REGULATORS with large, easy to read single scale 2" gauges.

WH350 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes.

#### **ALL-AMERICAN**

Includes one Type 13-2 welding tip

ALL-AMERICAN II Includes one

Type 29-4 heating tip and one Type 13-2 welding tip.

#### ALL-AMERICAN PROPANE

Includes an RUH or MR series regulators, 3-GPN-1 cutting tip. Specially designed to cut with Propane. Also includes 20' grade "T" hose. Optional brazing & heating tips (See pgs. 27, 29)

Cutting Capacity: 1/2" with supplied tip; up to 6" with optional tips [See pgs. 14-17, 22, 24] Welding Capacity: 1/8" with supplied tip; up to 1-1/4" with optional tips [See pg. 25]

Heating Tips: [See pg. 29]



| ALL-AMERICAN<br>MEDIUM DUTY    | WELDING<br>HANDLE |                       | CUTTING<br>IT TIP | WELD/BRA<br>Tip   | ZE OXYGE<br>REGUL <i>i</i><br>5-125 I | ATOR REGUL                         | ATOR                                 | SSORIES                                    |
|--------------------------------|-------------------|-----------------------|-------------------|-------------------|---------------------------------------|------------------------------------|--------------------------------------|--|
| PART# KR350<br>UPC# 81004      | WH350             | CA350                 | 3-101-0           | TYPE<br>13-2      | RUH82<br>CGA5                         |                                    |                                      | E 20′ 3/16" "B"<br>ES, LIGHTER             |
| PART# KM350<br>UPC# 82100      | WH350             | CA350                 | 3-101-0           | TYPE<br>13-2      | MR82<br>CGA5                          |                                    |                                      | E 20′ 3/16" "B"<br>ES, LIGHTER             |
| ALL-AMERICAN II<br>MEDIUM DUTY | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP    | WELD/BRAZE<br>TIP | HEATING<br>TIP                        | OXYGEN*<br>REGULATOR<br>5-125 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | ACCESSORIES                                |
| PART# KRH350<br>UPC# 81070     | WH350             | CA350                 | 3-101-1           | TYPE<br>13-2      | TYPE<br>29-4                          | RUH8210<br>CGA540                  | RUH8211 TV<br>CGA510                 | VIN HOSE 20' 3/16" "B"<br>GOGGLES, LIGHTER |
| PART# KMH350<br>UPC#82180      | WH350             | CA350                 | 3-101-1           | TYPE<br>13-2      | TYPE<br>29-4                          | MR8210<br>CGA540                   | MR8211 TV<br>CGA510                  | VIN HOSE 20' 3/16" "B"<br>GOGGLES, LIGHTER |
|                                |                   |                       |                   | TIP R             | OXYGEN*<br>EGULATOR<br>5-125 PSIG     | PROPANE*<br>REGULATOR<br>2-40 PSIG | ACCES:                               | SORIES                                     |
| PART# KRP350<br>UPC# 81071     | WH350 (           | CA350 3-G             | PN-1              | -                 | RUH8210<br>CGA540                     | RUH8212<br>CGA510                  | TWIN HOSE                            | DE "T"<br>20' 3/16" "B"<br>, LIGHTER       |
| PART# KMP350<br>UPC# 82181     | WH350             | CA350 3-G             | PN-1              | :                 | MR8210<br>CGA540                      | MR8212<br>CGA510                   | TWIN HOSE                            | DE "T"<br>20' 3/16" "B"<br>, LIGHTER       |

ALL-AMERICAN AND ALL-AMERICAN II (EXCEPT ALL-AMERICAN PROPANE) OUTFITS AVAILABLE WITH CGA300 ACETYLENE REGULATORS - ORDER BY ADDING (-1)
TO END OF PART#, ALL-AMERICAN AND ALL-AMERICAN II OUTFITS AVAILABLE WITHOUT ACCESSORIES - ORDER BY ADDING (-4) TO END OF PART#

## V-STYLE CUTTING & WELDING OUTFITS CUNIWELD



# ALL-AMERICAN OXYACETYLENE OUTFIT KL350-P MEDIUM DUTY KL350-P-TU

The Uniweld Oxyacetylene Outfit is a portable oxy/fuel outfit for cutting, welding and brazing in remote locations.

CA350 CUTTING ATTACHMENT cuts up to 3/8" with supplied tip.

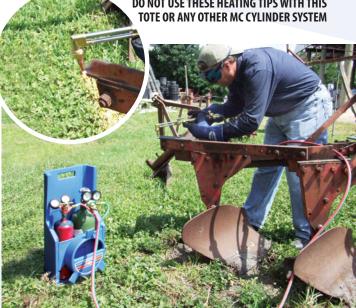
RS SERIES REGULATORS with easy to read single scale 1-1/2" gauges with protective boots.

WH350 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes. Uses Type 13 series tips.

Cutting Capacity: 1/2" with supplied tip; up to 5" with optional tips [See pg. 14]

Welding Capacity: 1/8" with supplied tip; up to 1-3/4" with optional tips [See pg. 25]

Safety Note: MC cylinders (10 cu.ft.) will not provide adequate volume for multiflame heating tip (rosebud) DO NOT USE THESE HEATING TIPS WITH THIS TOTE OR ANY OTHER MC CYLINDER SYSTEM





Use 20 cu.ft (R) Oxygen cylinder and 10 cu.ft. (MC) Acetylene cylinder



KL350-P-TU

| ALL-AMERICAN<br>UNIWELD TOTE<br>MEDIUM DUTY | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | WELD/BRAZE<br>TIP |                | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | Made Do Miles  |  |
|---|-------------------|-----------------------|----------------|-------------------|----------------|--------------------------------------|--|--|
| PART# KL350-P<br>UPC# 82174                 | WH350             | CA350                 | 3-101-0        | TYPE<br>13-2      | RSOB<br>CGA540 | RSMC2B<br>CGA200                     | TWIN HOSE 12.5′3/16""B", WRENCH, GOGGLES, LIGHTER, TIP CLEANER |  |
| PART# KL350-P-TU<br>UPC# 82175              | WH350             | CA350                 | 3-101-0        | TYPE<br>13-2      | RSOB<br>CGA540 | RSMC2B<br>CGA200                     | TWIN HOSE 12.5′3/16""B", WRENCH, GOGGLES, LIGHTER, TIP CLEANER |  |

KL350-P-TU INCLUDES 10 CU.FT. ACETYLENE CYLINDER AND 20 CU.FT. OXYGEN CYLINDER, SHIPPED EMPTY. KL350-P SHIPPED WITHOUT CYLINDERS.

## **OUTFITS CUTTING & WELDING**

MADE IN U.S.A.

## UNIWELD TOTE MEDIUM DUTY

The Uniweld Tote is a portable oxy/fuel outfit for cutting, welding and brazing. Select either rugged steel cart or molded plastic cart.

CA250 CUTTING ATTACHMENT Cuts up to 1/2" with supplied tip.

RS SERIES REGULATORS with easy to read single scale 1-1/2" gauges

with protective boots.

KL250-C-TU

WH250 WELDING HANDLE can be used with most fuel gases and acetylene for heating, brazing, welding and other flame processes. Uses Type17 tips prevalent in the HVAC/Plumbing industry.



Use 20 cu.ft (R) Oxygen cylinder and 10 cu.ft. (MC) Acetylene cylinder









Cutting Capacity: 1/2" with supplied tip; 3" with optional tips [See pg. 14]
Welding Capacity: 3/32" with supplied tip; 1-1/4" with optional tips [See pg. 26]

KL250-P and KL250-C: Cylinders not included.

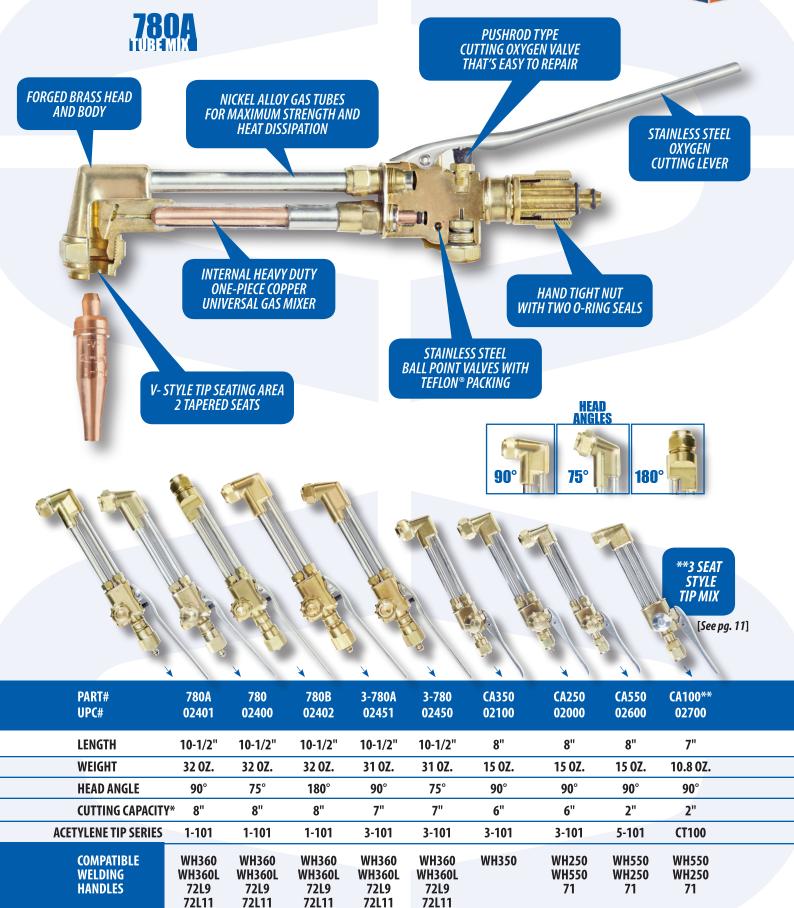
KL250-P-TU and KL250-Ć-TU: Cylinders and outfits are unitized, packaged in one master carton\*\*

|                                | WELDING<br>HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | WELD/BRAZE<br>TIP | OXYGEN*<br>REGULATOR<br>2-60 PSIG | ACETYLENE*<br>REGULATOR<br>2-15 PSIG | CARRYING<br>STANDS/<br>CYLINDERS | ACCESSORIES                                |  |
|--------------------------------|-------------------|-----------------------|----------------|-------------------|-----------------------------------|--------------------------------------|----------------------------------|--|--|
| PART# KL250-P<br>UPC# 82006    | WH250             | CA250                 | 3-101-0        | TYPE<br>17-1      | RSOB<br>CGA540                    | RSMC2B<br>CGA200                     | #511<br>PLASTIC                  | TWIN HOSE 10'3/16" "B"<br>GOGGLES, LIGHTER |  |
| PART# KL250-C<br>UPC# 82007    | WH250             | CA250                 | 3-101-0        | TYPE<br>17-1      | RSOB<br>CGA540                    | RSMC2B<br>CGA200                     | #500S<br>STEEL                   | TWIN HOSE 10'3/16" "B"<br>GOGGLES, LIGHTER |  |
| PART# KL250-P-TU<br>UPC# 82009 | WH250             | CA250                 | 3-101-0        | TYPE<br>17-1      | RSOB<br>CGA540                    | RSMC2B<br>CGA200                     | #511 PLASTIC<br>MC/R             | TWIN HOSE 10'3/16" "B"<br>GOGGLES, LIGHTER |  |
| PART# KL250-C-TU<br>UPC# 82051 | WH250             | CA250                 | 3-101-0        | TYPE<br>17-1      | RSOB<br>CGA540                    | RSMC2B<br>CGA200                     | #500S STEEL<br>MC/R              | TWIN HOSE 10'3/16" "B"<br>GOGGLES, LIGHTER |  |
|                                |                   |                       |                |                   |                                   |                                      |                                  |  |  |

#### V-STYLE TURE MIX

## **CUTTING ATTACHMENTS**







## **WELDING HANDLES**

### <u>WH360</u>





FORGED BRASS REAR TORCH AND VALVE BODIES

The Uniweld Gas/Air Adaptor is used for brazing and soldering when no oxygen is required when using Twister® or soft flame tips. [See Uniweld HVAC/R Catalog].

STAINLESS STEEL BALL POINT VALVES WITH TEFLON® PACKING

Use an F11 Adaptor to convert the 71, WH250 and WH550 handles [Screw Connect]. Use an F13 Adaptor to convert the 71, WH250 and WH550 handles [Quick Connect]. Use an F12 Adaptor for the WH350 handle [Screw Connect].



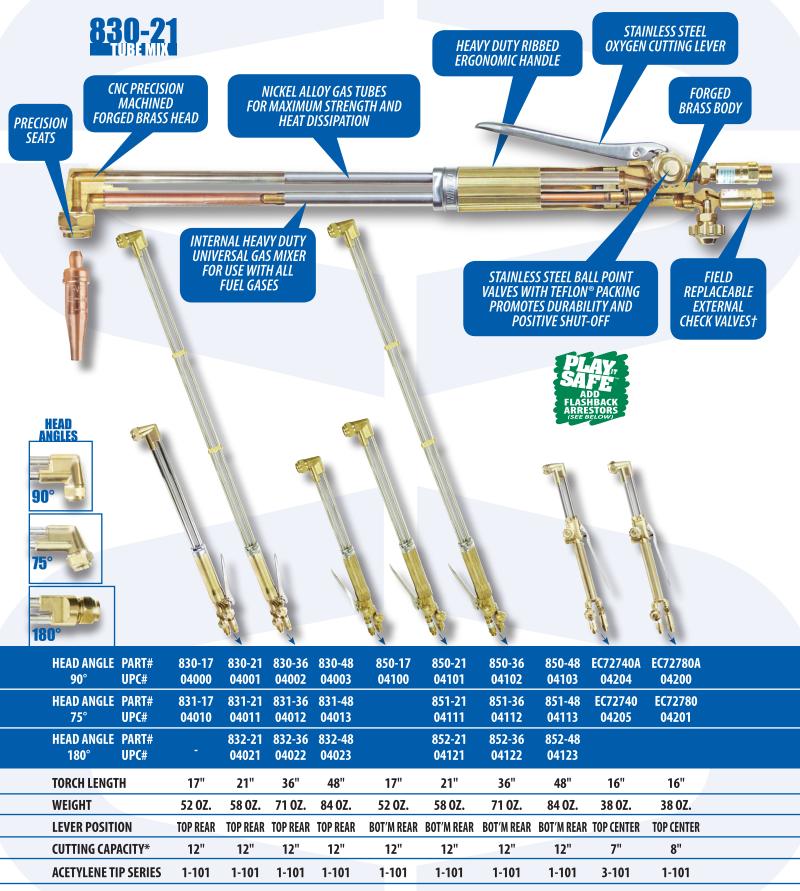
| PART#<br>UPC#                        | WH360<br>00150   | WH360L<br>00151  | 72L9**<br>00350  | 72L11**<br>00351   | WH350<br>00100 | WH250<br>00001                         | WH550<br>00550                         | 71**<br>00300                           |
|--------------------------------------|--|--|--|--|----------------|--|--|---|
| LENGTH                               | 9"   | 11"  | 8-3/4"   | 11"  | 8-1/2"         | 8-1/2"                                 | 8-1/2"                                 | 6"                                      |
| WEIGHT                               | 18 <b>0Z</b> .   | 24 OZ.   | 18 <b>0Z</b> .   | 23 OZ.   | 12 <b>0Z</b> . | 12 OZ.                                 | 11 OZ.                                 | 8 OZ.                                   |
| HOSE CONNECTION                      |  |  | "B" 9/16"-   | 18 THREAD  |                |  | "A" 3/8"-2                             | 4 THREAD                                |
| †FLASHBACK ARRESTO                   | RS   |  | "B" FLASH  | BACK ARRESTO   | RS             |  | "A" FLASHB                             | ACK ARRESTORS                           |
| WELDING CAPACITY*                    | 3"   | 3"   | 3"   | 3"   | 1-1/4"         | 1/4"                                   | 1/4"                                   | 1/4"                                    |
| COMPATIBLE<br>CUTTING<br>ATTACHMENTS | 780A(90°)<br>3-780A(90°)<br>780(75°)<br>3-780(75°)<br>780B(180°) | 780A(90°)<br>3-780A(90°)<br>780(75°)<br>3-780(75°)<br>780B(180°) | 780A(90°)<br>3-780A(90°)<br>780(75°)<br>3-780(75°)<br>780B(180°) | 780A(90°)<br>3-780A(90°)<br>780(75°)<br>3-780(75°)<br>780B(180°) | CA350(90°)     | CA250(90°)<br>CA550(90°)<br>CA100(90°) | CA550(90°)<br>CA250(90°)<br>CA100(90°) | CA550(90°)<br>CA250(90°)<br>CA100 (90°) |

\*\* HAVE TWO SILVER BRAZED TUBES INSIDE A VENTED BRASS HANDLE \*SEE PAGES 26-31 FOR WELDING, BRAZING, HEATING TIPS and MIXER INFORMATION. †Add (FB) to Part# to include U.L. Listed Flashback Arrestors on the Welding Handle. [See pg. 104]

#### V-STYLE TUBE MIX

## HAND CUTTING TORCHES







REAMED

**SEATS** 

## TORCHES MACHINE CUTTING

67 & 67F SERIES

**HEAVY DUTY BRASS** STANDARD 1-3/8" BARREL

**FOUR POSITION RACK** ADJUSTMENT 90° APART **QUICK OPENING OXYGEN CUTTING VALVE** 



### 67-TRL PRECISION CAM ACTION 67-6 VALVE

67-6TRV

### STAINLESS STEEL BALL POINT PREHEAT VALVES

The Uniweld adjustable head Bevel **Cutting Adaptor with calibrated dial** lets you set angles from 0° to 90° to cut bevels without tilting the Machine Torch. Use with optional Preheat Adaptor: Part#15AR (acetylene), 15PR (propane)

67F-6

67F

67F-6R

#6700BA

67F-R

#### 67 SERIES FOR ACETYLENE ONLY

| PART#<br>UPC#                                    |               | 7-6<br>301      | 67<br>04304      | 67-6R<br>04302 | 67-R<br>04305   |
|--|---------------|-----------------|------------------|----------------|-----------------|
| BARREL LENGTH                                    | (             | 6"              | 10"              | 6"             | 10"             |
| TWO HOSE WITH CAM ACTION OXYG CUTTING VALVE      | EN Y          | 'ES             | YES              | YES            | YES             |
| RACKING LENGTH                                   | N             | I/A             | N/A              | 5"             | 9"              |
| CUTTING CAPACITY                                 | <b>/</b> *    | 8"              | 8"               | 8"             | 8"              |
| PART#<br>UPC#                                    | 67-T<br>04306 | 67-TL<br>04308  |                  | 67-TR<br>04307 | 67-TRL<br>04309 |
| BARREL LENGTH                                    | 10"           | 18"             | 6"               | 10"            | 18"             |
| THREE HOSE WITH<br>QUICK OPENING<br>OXYGEN VALVE | YES           | YES             | YES              | YES            | YES             |
| RACKING LENGTH                                   | N/A           | N/A             | 5"               | 9"             | 17"             |
| CUTTING CAPACITY*                                | 12"           | 12"             | 12"              | 12"            | 12"             |
| PART#<br>UPC#                                    |               | 67-6TV<br>04320 | 67-6TRV<br>04300 |                |                 |
| BARREL LENG                                      | GTH           | 6"              | 6"               |                |                 |
| THREE HOSE<br>VALVELESS                          |               | YES             | YES              |                |                 |
| RACKING LEN                                      | IGTH          | N/A             | 5"               |                |                 |
| CUTTING CAP                                      | ACITY*        | 12"             | 12"              |                |                 |

#### 67F SERIES FOR FUEL GAS ONLY

PART#

|       | UPC#  | 04311            | 043             | 14 04            | 312           | 04315                |  |
|-------|---|------------------|-----------------|------------------|---------------|----------------------|--|
|       | BARREL LENGTH                                 | 6"               | 10'             | ıı .             | 6"            | 10"                  |  |
|       | TWO HOSE WITH CAM ACTION OXYGEN CUTTING VALVE | YES              | YES             | S Y              | 'ES           | YES                  |  |
|       | RACKING LENGTH                                | N/A              | N/A             | <b>A</b> .       | 5"            | 9"                   |  |
|       | CUTTING CAPACITY*                             | 8"               | 8"              |                  | 8"            | 8"                   |  |
|       | PART#<br>UPC#                                 | 67F-T<br>04316   | 67F-TL<br>04318 | 67F-6TR<br>04313 | 67F-T<br>0431 | R 67F-TRL<br>7 04319 |  |
|       | BARREL LENGTH                                 | 10"              | 18"             | 6"               | 10"           | 18"                  |  |
|       | THREE HOSE WITH QUICK OPENING OXYGEN VALVE    | YES              | YES             | YES              | YES           | YES                  |  |
|       | RACKING LENGTH                                | N/A              | N/A             | 5"               | 9"            | 17"                  |  |
|       | CUTTING CAPACITY*                             | 12"              | 12"             | 12"              | 12"           | 12"                  |  |
|       | PART#<br>UPC#                                 | 67F-6TV<br>04321 | 67F-0<br>043    |                  |               |                      |  |
|       | BARREL LENGTH                                 | 6"               | 6               | "                |               |                      |  |
|       | THREE HOSE<br>VALVELESS                       | YES              | YE              | S                |               |                      |  |
|       | RACKING LENGTH                                | N/A              | 5               | "                |               |                      |  |
|       | CUTTING CAPACITY*                             | 12"              | 12              | 2"               |               |                      |  |
| tch ( | (10.12 teeth/inch). 24 p                      | itch (7.6        | 5 teeth/i       | inch) ava        | ilable (      | on reauest.          |  |

Hose connections: "B" 9/16"-18. Racks [R] supplied with standard 32 pitch (10.12 teeth/inch). 24 pitch (7.65 teeth/inch) available on request. \*SEE PAGES 14-24 FOR ALL GASES CUTTING TIPS.

## CUTTING TIPS UNIWELD



|  | W |  | ١ - |
|--|---|--|-----|
|  |   |  |     |

| AGI                                     | 4014        |                    |             |                          |                        |                       |                |                    |          |               |                 |                     |  |
|---|-------------|--------------------|-------------|--------------------------|------------------------|-----------------------|----------------|--------------------|----------|---------------|-----------------|---------------------|--|
|   | E WITH SERI |                    |             | TIP STYLE                |                        |                       | ONE I          | PIECE              |          |               |                 |                     |  |
|   | HAND        | MACHINE            |             | III SIIILL               |                        |                       |                | TING               |          |               |                 |                     |  |
| CUTTING                                 | CUTTING     | CUTTING            | APPLICATION |                          | CUT METAL              | CUT OXY               |                | /GEN               | ACETY    | YLENE         | SPEED           | KERF                |  |
| ATTACHMENT                              |             | TORCHES            | ALLECATION  | PART#                    | THICKNESS              | DRILL SIZE            | PSIG           | SCFH               |          | SCFH          | I.P.M.          | WIDTH               |  |
| 711710111111111111111111111111111111111 | TOTAL       | TORCHES            |             |                          |                        |                       | . 5.0          | <b>54.1.</b>       |          | J             |                 |                     |  |
| 780                                     | 830, 850    | 67                 | GENERAL     | 1-101-000                | 1/8"                   | 71                    | 20/25          | 20/25              | 5        | 5             | 28/32           | .04                 |  |
|   | EC72780     | SERIES             | PURPOSE     | 1-101-00                 | 1/4"                   | 67                    | 20/25          | 30/35              | 5        | 6             | 27/30           | .05                 |  |
|   |             |                    | CUTTING     | T1-101-0                 | 3/8"                   | 60                    | 25/30          | 55/60              | 5        | 8             | 24/28           | .06                 |  |
|   |             |                    | MACHINE     | L1-101-0                 | 1/2"                   | 60                    | 30/35          | 60/65              | 5        | 10            | 20/24           | .06                 |  |
|   |             |                    | CUTTING     | 1-101-1                  | 3/4"                   | 56                    | 30/35          | 80/85              | 5        | 13            | 17/21           | .07                 |  |
|   |             |                    | Corring     | 1-101-2                  | 1"                     | 53                    | 35/40          | 140/150            | 6        | 16            | 15/19           | .09                 |  |
| 420                                     |             | Section 1          |             | 1-101-2                  | 1-1/2"                 | 53                    | 40/45          | 150/160            | 7        | 18            | 13/17           | .09                 |  |
| 683                                     |             | Ample)             |             | 1-101-3                  | 2"                     | 50                    | 40/45          | 210/225            | 9        | 22            | 12/15           | .11                 |  |
|   |             |                    |             | L1-101-3<br>1-101-4      | 2-1/2"<br>3"           | 50<br>45              | 45/50<br>40/50 | 225/240<br>270/320 | 10<br>10 | 26<br>30      | 10/13<br>9/12   | .11 <u>.</u><br>.12 |  |
|   |             | -101               |             | T1-101-4                 | 4"                     | 39                    | 45/55          | 390/425            | 12       | 34            | 8/11            | .15                 |  |
|   |             | E PIECE]           |             | 1-101-5                  | 5"                     | 39                    | 50/55          | 425/450            | 13       | 38            | 7/9             | .15                 |  |
|   |             |                    |             | T1-101-6                 | 6"                     | 31                    | 45/55          | 500/600            | 13       | 44            | 6/8             | .18                 |  |
|   |             |                    |             | 1-101-6                  | 8"                     | 31                    | 50/80          | 500/600            | 14       | 50            | 5/6             | .19                 |  |
|   |             |                    |             | 1-101-7                  | 10"                    | 28                    | 50/80          | 700/850            | 15       | 56            | 4/5             | .34                 |  |
|   |             |                    |             | 1-101-8                  | 12"                    | 20                    | 55/85          | 900/1000           | 15       | 62            | 3/5             | .41                 |  |
|   |             |                    |             |                          |                        |                       |                |                    |          |               |                 |                     |  |
| US                                      | E WITH SERI | IES                |             | TIP STYLE                |                        |                       | ONE F          | PIECE              |          |               |                 |                     |  |
|   | HAND        | MACHINE            | APPLICATION |                          |                        |                       |                | TING               |          |               |                 |                     |  |
| CUTTING                                 | CUTTING     | CUTTING            |             |                          | <b>CUT METAL</b>       | <b>CUT OXY</b>        |                | GEN .              | ACET'    | YLENE         | SPEED           | KERF                |  |
| ATTACHMENT                              | TORCHES     | TORCHES            |             | PART#                    | THICKNESS              | <b>DRILL SIZE</b>     | PSIG           | SCFH               | PSIG     | SCFH          | I.P.M.          | WIDTH               |  |
|   |             |                    |             | E4 404 20 0              | 2 (011                 |                       | 25/20          | FF/60              | _        | 0             | 24/20           | 067                 |  |
| 780                                     | 830, 850    | 67                 | GENERAL     | 1-101-30-0               | 3/8"<br>1/2"           | 60                    | 25/30          | 55/60<br>60/65     | 5        | 8             | 24/28           | .06                 |  |
|   | EC72780     | SERIES             | CUTTING     | 1-101-30-0<br>1-101-30-1 | 3/4"                   | 60<br>56              | 30/35<br>30/35 | 80/85              | <u>5</u> | 10<br>13      | 20/24<br>17/21  | .06<br>.07          |  |
| 49                                      | 8/          |                    | CLOSE       | T1-101-30-1              |                        | 53                    | 35/40          | 140/150            | 6        | 16            | 15/19           | .07                 |  |
|   | 1000        |                    | QUARTERS    | 1-101-30-2               | 1-1/2"                 | 53                    | 40/45          | 150/160            | 7        | 18            | 13/17           | .09                 |  |
|   | 404.00      |                    | HAND AND    |                          |                        |                       |                |                    |          |               |                 |                     |  |
| 1-                                      |             | D (30°)            | MACHINE     | TECH                     |                        | se the prop           |                |                    |          |               |                 |                     |  |
|   | [ONE P      | IECE]              | CUTTING     | TIP                      |                        | en cut the            |                |                    |          |               |                 |                     |  |
|   |             |                    |             | - ""                     | i nis may              | cause tip a           | iamage         | e, overnea         | ting, t  | раскпг        | e ana m         | asnback.            |  |
| IIC                                     | E WITH SERI | IEC                |             |                          |                        |                       | ONE            | NEGE               |          |               |                 |                     |  |
| 03                                      |             |                    |             | TIP STYLE                |                        |                       |                | PIECE              |          |               |                 |                     |  |
| CUTTING                                 | HAND        | MACHINE            | ADDITION    |                          |                        |                       |                | TING               |          |               |                 | WEDE                |  |
| CUTTING<br>ATTACHMENT                   | CUTTING     | CUTTING<br>TORCHES | APPLICATION | PART #                   | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE | PSIG           | GEN<br>SCFH        |          | YLENE<br>SCFH | SPEED<br>I.P.M. | KERF<br>WIDTH       |  |
| ATTACHMENT                              | IUNCHES     | IUNCHES            |             | PANI#                    | ITICKNESS              | DRILL SIZE            | Polu           | эсгп               | roid     | JCFII         | I.F.IVI.        | WIDIN               |  |
| CA250                                   | EC72740     | N/A                | GENERAL     | 3-101-000                | 1/8"                   | 71                    | 20/25          | 20/25              | 5        | 5             | 28/32           | .04                 |  |
| CA350                                   |             |                    | PURPOSE     | 3-101-00                 | 1/4"                   | 67                    | 20/25          | 30/35              | 5        | 6             | 27/30           | .05                 |  |
| 3-780                                   |             |                    | CUTTING     | 3-101-0                  | 3/8"                   | 60                    | 25/30          | 55/60              | 5        | 8             | 24/28           | .06                 |  |
|   |             |                    |             | L3-101-0                 | 1/2"                   | 60                    | 30/35          | 60/65              | 5        | 10            | 20/24           | .06                 |  |
|   | all income  |                    | A.          | 3-101-1                  | 3/4"                   | 56                    | 30/35          | 80/85              | 5        | 13            | 17/21           | .07                 |  |
| <b>6.5</b>                              |             |                    |             | 3-101-2                  | 1"                     | 53                    | 35/40          | 140/150            | 6        | 16            | 15/19           | .09                 |  |
|   |             | 101                |             | L3-101-2                 | 1-1/2"                 | 53                    | 40/45          | 150/160            | 7        | 18            | 13/17           | .09                 |  |
|   | Į.          | 3-101<br>IE PIECE  |             | 3-101-3                  | 2"<br>2 1/2"           | 50<br>50              | 40/45          | 210/225            | 9        | 22            | 12/15           | .11                 |  |
|   | LUN         | E PIECE            |             | L3-101-3<br>3-101-4      | 2-1/2"<br>3"           | 50<br>45              | 45/50<br>40/50 | 225/240<br>270/320 | 10<br>10 | 26<br>30      | 10/13<br>9/12   | .11 <u>.</u><br>.12 |  |
|   |             |                    |             | 3-101-4<br>              | 4"                     | 39                    | 45/55          | 390/425            | 12       | 34            | 8/11            | .12                 |  |
|   |             |                    |             | J 101 J                  | -                      |                       |                | J / V/ TL J        | 14       | JT            | 1//             |                     |  |
|   |             |                    |             | 3-101-5                  | 5"                     | 39                    | 50/55          | 425/450            | 13       | 38            | 7/9             | .15                 |  |



|  |   |  |  |  |   |  | ı                           | CE  | TYL   | ENE   |  |
|--|---|--|--|--|---|--|-----------------------------|---|---|---|--|
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES         | APPLICATION   | TIP STYLE PART #   | CUT METAL<br>THICKNESS                                     | CUT OXY<br>DRILL SIZE                  |   | PIECE<br>TING<br>'GEN<br>SCFH  | ACET                        | YLENE<br>SCFH                               | SPEED<br>I.P.M.   | KERF<br>WIDTH                                 |  |
| CA550 N/A N/A  5-101 [ONE PIECE]   | GENERAL<br>PURPOSE<br>CUTTING                             | 5-101-00<br>5-101-0<br>5-101-0<br>5-101-1<br>5-101-2<br>5-101-2                      | 1/4" 3/8" 1/2" 3/4" 1" 1-1/2"                              | 67<br>60<br>60<br>56<br>53<br>53       | 20/25<br>25/30<br>30/35<br>30/35<br>35/40<br>40/45          | 30/35<br>55/60<br>60/65<br>80/85<br>140/150<br>150/160                         | 5<br>5<br>5<br>5<br>6<br>7  | 6<br>8<br>10<br>13<br>16<br>18              | 27/30<br>24/28<br>20/24<br>17/21<br>15/19<br>13/17                  | .05<br>.06<br>.06<br>.07<br>.09               |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES         | APPLICATION   | TIP STYLE  | CUT METAL<br>THICKNESS                                     | CUT OXY<br>DRILL SIZE                  |   | PIECE<br>TING<br>YGEN<br>SCFH  |                             | YLENE<br>SCFH                               | SPEED<br>I.P.M.   | KERF<br>WIDTH                                 |  |
| 780 830, 850 67 EC72780 SERIES  1-108 [ONE PIECE]                        | REMOVING<br>BOILER TUBES<br>WORK IN<br>CONFINED<br>SPACES | 1-108-0<br>1-108-0<br>1-108-1<br>1-108-2<br>1-108-2<br>1-108-3<br>1-108-3<br>1-108-4 | 3/8"<br>1/2"<br>3/4"<br>1"<br>1-1/2"<br>2"<br>2-1/2"<br>3" | 60<br>60<br>56<br>53<br>53<br>50<br>50 | 25/30<br>30/35<br>30/35<br>35/40<br>40/45<br>40/45<br>45/50 | 55/60<br>60/65<br>80/85<br>140/150<br>150/160<br>210/225<br>225/240<br>270/320 | 5<br>5<br>6<br>7<br>9<br>10 | 8<br>10<br>13<br>16<br>18<br>22<br>26<br>30 | 24/28<br>20/24<br>17/21<br>15/19<br>13/17<br>12/15<br>10/13<br>9/12 | .06<br>.06<br>.07<br>.09<br>.09<br>.11<br>.11 |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES         | APPLICATION   | TIP STYLE  | CUT METAL<br>THICKNESS                                     | CUT OXY<br>DRILL SIZE                  | ONE F   | PIECE<br>TING<br>YGEN<br>SCFH  |                             | YLENE<br>SCFH                               | SPEED<br>I.P.M.   | KERF<br>WIDTH                                 |  |
| CA250, CA350 EC72740 N/A 3-780  3-108 [ONE PIECE]                        | REMOVING<br>BOILER TUBES<br>TIGHT SPACES                  |  | 1"<br>1-1/2"<br>The prehea<br>for the thic                 |  |   |  |                             |   |   |   |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING CUTTING ATTACHMENT TORCHES | APPLICATION   | TIP STYLE  | CUT METAL<br>THICKNESS                                     | CUT OXY<br>DRILL SIZE                  | ONE F<br>CUTT<br>OXY<br>PSIG                                | TING   | ACET<br>PSIG                | YLENE<br>SCFH                               | SPEED<br>I.P.M.   | KERF<br>WIDTH                                 |  |
| 780 830, 850 N/A<br>EC72780  | DRAG TYPE<br>FOR HAND<br>CUTTING AND                      | [1-110-0<br>1-110-0<br>[1-110-2  | 3/8"<br>1/2"<br>1"   | 60<br>60<br>53                         | 25/30<br>30/35<br>35/40                                     | 55/60<br>60/65<br>140/150  | 5<br>5<br>6                 | 8<br>10<br>16                               | 24/28<br>20/24<br>15/19   | .06<br>.06                                    |  |

TECH TIP

**1-110** [ONE PIECE]



**TRIMMING** 

1-110-2

**TECH** 

Cutting tips have a metal to metal seating, so be sure to tighten the tip nut at 9 lbs. of torque. Do not overtighten.

40/45 150/160

Cutting tips are precision machined copper-alloy parts of various

designs and sizes. They are held in the cutting torch by a tip nut.

18

13/17

.09

1-1/2"

53

## **CUTTING TIPS**



|   |   |   | TV | П |     |
|---|---|---|----|---|-----|
| A | G | П | Ш  | L | N E |

| ACETYLENE   |   |   |                                    |                               |   |   |                        |                           |  |                          |    |
|---|---|---|------------------------------------|-------------------------------|---|---|------------------------|---------------------------|--|--------------------------|----|
| USE WITH SERIES HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION                                     | TIP STYLE PART #                                      | CUT METAL<br>THICKNESS             | CUT OXY<br>DRILL SIZE         | ONE P<br>CUT<br>OXY<br>PSIG               | TING<br>YGEN<br>SCFH                            |                        | YLENE<br>SCFH             | SPEED<br>I.P.M.                          | KERF<br>WIDTH            |    |
| 780 830, 850 67 SERIES EC72780 1-112 [ONE PIECE]                        | RIVET HEADS TRIMMING CUTTING                    | [1-112-0<br>1-112-0<br>[1-112-2<br>1-112-2<br>1-112-4 | 3/8"<br>1/2"<br>1"<br>1-1/2"<br>3" | 60<br>60<br>53<br>53<br>45    | 25/30<br>30/35<br>35/40<br>40/45<br>40/50 | 55/60<br>60/65<br>140/150<br>150/160<br>270/320 | 5<br>5<br>6<br>7<br>10 | 8<br>10<br>16<br>18<br>30 | 24/28<br>20/24<br>15/19<br>13/17<br>9/12 | .06<br>.06<br>.09<br>.09 |    |
| USE WITH SERIES HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION                                     | TIP STYLE PART #                                      | CUT METAL<br>THICKNESS             | CUT OXY<br>DRILL SIZE         |   | TING<br>GEN<br>SCFH                             |                        | YLENE<br>SCFH             | SPEED<br>I.P.M.                          | KERF<br>WIDTH            |    |
| CA250 EC72740 N/A<br>CA350<br>3-780                                     | CUTTING<br>CLOSE TO<br>BULKHEADS<br>RIVET HEADS |   |                                    | 56<br>53<br>53<br>Iene cuttin |   |   | 5<br>6<br>7<br>y one p | 13<br>16<br>18<br>piece w | 17/21<br>15/19<br>13/17<br>vith drill    | .07<br>.09<br>.09        |    |
| 3-112 [ONE PIECE  |   |   | <b>p</b> and s                     | waged flai                    |   |   |                        |                           |  |                          |    |
| USE WITH SERIES HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION                                     | TIP STYLE PART #                                      | CUT METAL<br>THICKNESS             | CUT OXY<br>DRILL SIZE         | ONE P<br>CUT'<br>OXY<br>PSIG              | TING<br>GEN<br>SCFH                             |                        | YLENE<br>SCFH             | SPEED<br>I.P.M.                          | KERF<br>WIDTH            |    |
| 780 830, 850 N/A<br>EC72780   | GOUGING<br>REMOVING<br>WELDS                    | 1-118-0<br>1-118-0<br>[1-118-2<br>1-118-2             | 3/8"<br>1/2"<br>1"<br>1-1/2"       | 60<br>60<br>53<br>53          | 25/30<br>30/35<br>35/40<br>40/45          | 55/60<br>60/65<br>140/150<br>150/160            | 5<br>5<br>6<br>7       | 8<br>10<br>16<br>18       | 24/28<br>20/24<br>15/19<br>13/17         | .06<br>.06<br>.09        |    |
| 1-118 [ONE P  | PIECE]  | 1-118-4<br>[1-118-6<br>1-118-6<br>1-118-8             | 3"<br>6"<br>8"<br>12"              | 45<br>31<br>31<br>20          | 40/50<br>45/55<br>50/80<br>55/85          | 270/320<br>500/600<br>500/600<br>900/1000       | 10<br>13<br>14<br>15   | 30<br>44<br>50<br>62      | 9/12<br>6/8<br>5/6<br>3/5                | .12<br>.18<br>.19        |    |
| USE WITH SERIES HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION                                     | TIP STYLE   | CUT METAL<br>THICKNESS             | CUT OXY<br>DRILL SIZE         |   | TING<br>TING<br>GEN<br>SCFH                     |                        | YLENE<br>SCFH             | SPEED<br>I.P.M.                          | KERF<br>WIDTH            |    |
| CA250 EC72740 N/A<br>CA350<br>3-780                                     | GOUGING<br>RIVET<br>WASHING                     | 3-118-2<br>3-118-2<br><b>TECH</b>                     | 1"<br>1-1/2"<br>The torch cu       | 53<br>53<br>tting tip col     | 35/40<br>40/45<br>ntains a                | 140/150<br>150/160<br>number of                 | 6<br>7<br>prehed       | 16<br>18<br>at flame      | 15/19<br>13/17<br>e ports a              | .09<br>.09<br>nd a cent  | er |
| 3-118 [ONE PIECE  | WELD PREP                                       | TIP   | passage for<br>metal to a te       |                               |   |   |                        |                           |  |                          | ). |
| USE WITH SERIES HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES         | APPLICATION                                     | TIP STYLE   | CUT METAL<br>THICKNESS             | CUT OXY<br>DRILL SIZE         | ONE P<br>CUT<br>OXY<br>PSIG               | PIECE<br>TING<br>'GEN<br>SCFH                   |                        | YLENE<br>SCFH             | SPEED<br>I.P.M.                          | KERF<br>WIDTH            |    |
| 780A 830, 850 67<br>EC72780 SERIES                                      | GENERAL<br>CUTTING                              | 1-101L-4<br>1-101L-6                                  | 3"<br>8"                           | 45<br>31                      | 40/50<br>50/80                            | 270/320<br>500/600                              | 10<br>14               | 30<br>50                  | 9/12<br>5/6                              | .12<br>.19               |    |



**ACETYLENE SPECIALTY HEATING ASSEMBLY USE WITH SERIES TIP STYLE** HAND **MACHINE PREHEAT APPLICATION CUTTING** CUTTING **CUTTING OXYGEN ACETYLENE SPECIALTY** PART# **BTUs** ATTACHMENT **TORCHES PSIG SCFH TORCHES PSIG SCFH HEATING TIP TURNS CUTTING** N/A 830,850 N/A **MULTI-FLAME** 70/80 20,500/58,800 1-126-6 15/44 12/15 14/40 EC72780 **HEATING TORCH INTO** 1-126-8 70/80 33/88 12/15 30/80 44,000/117,500 WITH MAX. **A MULTI FLAME** 1-126-10\* 12/15 70/80 40/110 40/100 58,800/147,000 **TORCH HEATING TIP** 1-126-12\* 70/80 66/165 12/15 60/150 88,200/220,500 PRESSURE 1-126

NOTE: Use sizes #6 and #8 with cutting attachment 780 and EC72780 only. Use sizes #10 and #12 with 830 and 850 series only. \*Use 3/8" hose only, Manifold Acetylene Cylinders

#### NATURAL GAS/PROPANE **USE WITH SERIES TIP STYLE** TWO PIECE HAND **MACHINE CUTTING CUTTING CUTTING CUTTING APPLICATION CUT METAL CUT OXY OXYGEN FUEL GAS SPEED KERF ATTACHMENT TORCHES TORCHES** PART# THICKNESS **DRILL SIZE PSIG SCFH PSIG SCFH** I.P.M. WIDTH 830,850 **GPN-000** 1/8" 20/25 12/15 5 5/6 24/28 .04 780 67F **GENERAL** 71 GPN-00 1/4" 22/26 21/25 **PURPOSE** 67 20/25 5 5/7 .05 EC72780 **SERIES GPN-0** 3/8" 25/30 45/55 5 8/10 20/24 60 .06 **MACHINE** GPN-0 1/2" 50/55 5 20/24 60 30/35 8/10 .06 **CUTTING GPN-1** 3/4" 56 30/35 70/80 6 10/12 15/20 .08 GPN-2 1" 115/125 53 35/40 8 12/15 14/18 .09 GPN-2 1-1/2" 53 40/45 125/135 9 12/15 12/16 .09 2" 14/18 10/14 **GPN-3** 50 40/45 150/175 9 .10 GPN-3 2-1/2" 50 45/50 175/200 10 14/18 9/12 .11 **GPN GPN-4** 3" 45 45/50 210/250 12 16/20 8/11 .12 [TWO PIECE] **GPN-5** 4" 39 45/55 300/360 20/30 7/10 .15 12 5" GPN-5 39 50/55 300/360 20/30 6/9 .15 12 6" **GPN-6** 31 45/55 400/500 25/35 5/7 .17 15 GPN-6 8" 450/500 25/35 31 55/65 15 4/6 .18 12" **GPN-8** 20 60/70 750/850 14 25/120 3/4 .41

TECH TIP

TWO PIECE

When a piece is cut by an oxygen cutting process, a narrow width of metal is progressively removed. The width of the cut is called a **Kerf**. Kerf width is a result of the type of tip used, the tip size, the flow rate of oxygen and preheating gases and the speed of cutting.

| USE WITH SERIES   |             | TIP STYLE TWO PIECE |                        |                       |       |                      |             |               |                 |               |  |
|---|-------------|---------------------|------------------------|-----------------------|-------|----------------------|-------------|---------------|-----------------|---------------|--|
| HAND MACHINE CUTTING CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION | PART#               | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE |       | TING<br>/GEN<br>SCFH | FUE<br>PSIG | L GAS<br>SCFH | SPEED<br>I.P.M. | KERF<br>WIDTH |  |
| CA250, CA350 EC72740 N/A  | GENERAL     | 3-GPN-00            | 1/4"                   | 67                    | 20/25 | 22/26                | 5           | 5/7           | 21/25           | .05           |  |
| 3-780   | PURPOSE     | 3-GPN-0             | 3/8"                   | 60                    | 25/30 | 45/55                | 5           | 8/10          | 20/24           | .06           |  |
|   | CUTTING     | 3-GPN-0             | 1/2"                   | 60                    | 30/35 | 50/55                | 5           | 8/10          | 20/24           | .06           |  |
|   |             | 3-GPN-1             | 3/4"                   | 56                    | 30/35 | 70/80                | 6           | 10/12         | 15/20           | .08           |  |
|   |             | 3-GPN-2             | 1"                     | 53                    | 35/40 | 115/125              | 8           | 12/15         | 14/18           | .09           |  |
| 3-GPN   |             | 3-GPN-2             | 1-1/2"                 | 53                    | 40/45 | 125/135              | 9           | 12/15         | 12/16           | .09           |  |
|   |             | 3-GPN-3             | 2"                     | 50                    | 40/45 | 150/175              | 9           | 14/18         | 10/14           | .10           |  |
| [TWO PIECE]   |             | 3-GPN-3             | 2-1/2"                 | 50                    | 45/50 | 175/200              | 10          | 14/18         | 9/12            | .11_          |  |
|   |             | 3-GPN-4             | 3"                     | 45                    | 45/50 | 210/250              | 12          | 16/20         | 8/11            | .12           |  |

## CUTTING TIPS CONVELDED



| NATURAL GA   | 3/PBIII   |   |   |  |  |  |  |  |   |   |  |
|--|---|---|---|--|--|--|--|--|---|---|--|
|  |   |   |   |  |  |  |  |  |   |   |  |
| USE WITH SERIES  |   | TIP STYLE   |   |  | [WU  | PIECE  |  |  |   |   |  |
| HAND MACHINI   |   |   |   |  |  | TING   |  |  |   |   |  |
| CUTTING CUTTING CUTTING  |   |   | CUT METAL   | CUT OXY  |  | YGEN   |  | L GAS  | SPEED   | KERF  |  |
| ATTACHMENT TORCHES TORCHES   |   | PART#   | THICKNESS   | DRILL SIZE   | PSIG   | SCFH   | PSIG   | SCFH   | I.P.M.  | WIDTH   |  |
|  |   | EMTUN 00  | 1 /411  | NI/A   | 05/00  | CO/75  | -  | <b>6</b> 5   | 20/20   | ٥٢٦   |  |
| N/A N/A 67F  | HIGH SPEED  | MTHN-00   | 1/4"  | N/A  | 85/98  | 68/75  | 5  | 65   | 20/30   | .05   |  |
| SERIES   | MACHINE   | MTHN-00 MTHN-0  | 3/8"<br>1/2"  | N/A<br>N/A   | 85/95<br>85/95   | 68/75<br>110/120   | 5  | 65<br>65   | 22/29<br>20/28  | .05   |  |
|  | CUTTING   | MTHN-0  | 3/4"  | N/A<br>N/A   | 85/95  | 110/120  | 5  | 65   | 18/26   | .06   |  |
|  | TO 10"  | MTHN-1  | 3/4<br>1"   | N/A  | 85/95  | 145/160  | 6  | 65   | 17/24   | .07   |  |
| F. I   |   | MTHN-1  | 1-1/2"  | N/A  | 85/95  | 145/160  | 7  | 65   | 12/16   | .07   |  |
|  |   | MTHN-2  | 2"  | N/A  | 85/95  | 230/250  | 9  | 65   | 12/15   | .09   |  |
|  |   | MTHN-2  | 2-1/2"  | N/A  | 85/95  | 230/250  | 10   | 65   | 10/13   | .09   |  |
|  |   | MTHN-2  | 3"  | N/A  | 85/95  | 230/250  | 10   | 65   | 9/12  | .09   |  |
| MTHN<br>[TWO PIECE]  | ATTEN A   | MTHN-3  | 4"  | N/A  | 85/95  | 285/320  | 12   | 65   | 7/10  | .117  |  |
| [TWO PIFCE]  |   | MTHN-3  | 5"  | N/A  | 85/95  | 285/320  | 13   | 65   | 6/8   | .11   |  |
|  |   | MTHN-3  | 6"  | N/A  | 85/95  | 285/320  | 13   | 65   | 5/7   | .11   |  |
|  |   | MTHN-4  | 8"  | N/A  | 85/95  | 390/450  | 14   | 65   | 4/6   | .14   |  |
|  |   | MTHN-5  | 10"   | N/A  | 85/95  | 670/720  | 15   | 65   | 3/5   | .18   |  |
| USE WITH SERIES  |   | TID CTVI F  |   |  |  | DIFOF  |  |  |   |   |  |
|  |   | TIP STYLE   |   |  |  | PIECE  |  |  |   |   |  |
| HAND MACHINE   |   |   |   | 411 A111   |  | TING   |  |  |   |   |  |
| CUTTING CUTTING CUTTING  |   | DADT #  | CUT METAL   | CUT OXY  |  | YGEN   |  | EL GAS   | SPEED   | KERF  |  |
| ATTACHMENT TORCHES TORCHES   |   | PART #  | THICKNESS   | DRILL SIZE   | PSIG   | SCFH   | PSIG   | SCFH   | I.P.M.  | WIDTH   |  |
| 780 830, 850 67F   | HEAVY   | HPN-1   | 3/4"  | 56   | 30/35  | 70/80  | 6  | 22/110   | 15/20   | .08   |  |
| EC72780 SERIES   |   |   |   |  |  |  |  |  |   |   |  |
|  | PKFHFAI   | HPN-2   | 1"  | 53   | 35/40  | 115/125  | 6  | 22/110   | 14/18   | .09   |  |
| EC/2/00 SERIES   | PREHEAT<br>SCRAP  | HPN-2<br>HPN-2  | 1"<br>1-1/2"  | 53<br>53   | 35/40<br>40/45   | 115/125<br>125/135   | 6<br>8   | 22/110<br>22/110   | 14/18<br>12/16  | .09<br>.09  |  |
| EC/2/60 SERIES   | SCRAP   |   | -   |  |  |  |  |  |   |   |  |
| EC/2/60 SERIES   | SCRAP<br>CUTTING  | HPN-2<br>HPN-3<br>HPN-3   | 1-1/2"<br>2"<br>2-1/2"  | 53<br>50<br>50   | 40/45  | 125/135  | 8  | 22/110<br>22/110<br>22/110   | 12/16<br>10/14<br>9/12  | .09<br>.10<br>.10   |  |
| EC/2/60 SERIES   | SCRAP<br>CUTTING<br>BEVELING  | HPN-2<br>THPN-3<br>HPN-4  | 1-1/2"<br>2"<br>2-1/2"<br>3"  | 53<br>50<br>50<br>45   | 40/45<br>40/45<br>45/50<br>45/50   | 125/135<br>150/175<br>175/240<br>210/250   | 8<br>8<br>9  | 22/110<br>22/110<br>22/110<br>22/110   | 12/16<br>10/14<br>9/12<br>8/11  | .09<br>.10<br>.10   |  |
| EC/2/60 SERIES   | SCRAP<br>CUTTING<br>BEVELING<br>AND   | HPN-2<br>HPN-3<br>HPN-4<br>HPN-5  | 1-1/2"<br>2"<br>2-1/2"<br>3"<br>4"  | 53<br>50<br>50<br>45<br>39   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360  | 8<br>8<br>9<br>9   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10  | .09<br>.10<br>.10<br>.12  |  |
| A Hart   | SCRAP<br>CUTTING<br>BEVELING  | HPN-2<br>HPN-3<br>HPN-4<br>HPN-5<br>HPN-5   | 1-1/2"<br>2"<br>2-1/2"<br>3"<br>4"<br>5"  | 53<br>50<br>50<br>45<br>39<br>39   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360   | 8<br>8<br>9<br>9<br>9  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9   | .09<br>.10<br>.10<br>.12<br>.14   |  |
| HPN  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2<br>HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>THPN-6   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6"  | 53<br>50<br>50<br>45<br>39<br>39   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500  | 8<br>8<br>9<br>9<br>9<br>10  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7  | .09<br>.10<br>.10<br>.12<br>.14<br>.14  |  |
| A Hart   | SCRAP<br>CUTTING<br>BEVELING<br>AND   | HPN-2<br>HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>HPN-6<br>HPN-6   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8"   | 53<br>50<br>50<br>45<br>39<br>39<br>31   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500   | 8<br>8<br>9<br>9<br>10<br>10   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6   | .09<br>.10<br>.10<br>.12<br>.14<br>.14<br>.17                                   |  |
| HPN  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2<br>[HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>HPN-6<br>HPN-6<br>HPN-8   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31   | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4  | .09<br>.10<br>.10<br>.12<br>.14<br>.14<br>.17<br>.18                            |  |
| HPN  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2 [HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10  | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200   | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4   | .09   |  |
| HPN  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2<br>[HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>HPN-6<br>HPN-6<br>HPN-8   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4  | .09<br>.10<br>.10<br>.12<br>.14<br>.14<br>.17<br>.18                            |  |
| HPN  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2 [HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10  | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4   | .09   |  |
| HPN [TWO PIECE]  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2<br>[HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>HPN-6<br>HPN-6<br>HPN-8<br>HPN-10<br>HPN-12   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20   | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4   | .09   |  |
| HPN [TWO PIECE]  USE WITH SERIES   | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2<br>[HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>HPN-6<br>HPN-6<br>HPN-8<br>HPN-10<br>HPN-12   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2  | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3  | .09   |  |
| HPN [TWO PIECE]  USE WITH SERIES HAND MACHINE  | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2<br>[HPN-3<br>HPN-4<br>HPN-5<br>HPN-5<br>HPN-6<br>HPN-6<br>HPN-8<br>HPN-10<br>HPN-12   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13   | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3  | .09 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A                                     |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING CUTTING ATTACHMENT TORCHES TORCHES                   | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2 [HPN-3 HPN-4 HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10 HPN-12 TIP STYLE  | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2  | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>UNE  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE   | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3  | .09   |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F                 | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING   | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10 HPN-12 TIP STYLE PART #  | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2  | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br><b>ONE</b><br>CUT<br>OX<br>PSIG  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TTING<br>YGEN<br>SCFH  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09   |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING CUTTING ATTACHMENT TORCHES TORCHES                   | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING  APPLICATION  GENERAL<br>PURPOSE                                  | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #  | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2  | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUT<br>OX<br>PSIG  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH   | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18   | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130<br>L GAS<br>SCFH  | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09   |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F                 | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING  APPLICATION  GENERAL<br>PURPOSE<br>AND MACHINE                   | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 [HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"  CUT METAL THICKNESS  | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2  | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUT<br>OX<br>PSIG<br>25/30<br>30/35   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130<br>EL GAS<br>SCFH   | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09   |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F                 | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING  APPLICATION  GENERAL<br>PURPOSE<br>AND MACHINE<br>CUTTING        | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 [HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #  [1-200-0 1-200-1   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"   | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2<br>CUT OXY<br>DRILL SIZE<br>60<br>60<br>60                               | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUT<br>OX<br>PSIG<br>25/30<br>30/35<br>30/35  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>30/130<br>8/10<br>8/10<br>10/12  | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09 .10 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A                                 |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F                 | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING  APPLICATION  GENERAL<br>PURPOSE<br>AND MACHINE<br>CUTTING  SCRAP | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #  [1-200-0 1-200-1 [1-200-2                                 | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"  CUT METAL THICKNESS  3/8" 1/2" 3/4"                        | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2<br>CUT OXY<br>DRILL SIZE<br>60<br>60<br>56                               | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUI<br>OX<br>PSIG<br>25/30<br>30/35<br>30/35<br>35/40                            | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH<br>45/55<br>50/55<br>70/80<br>115/125   | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>30/130<br>8/10<br>8/10<br>8/10<br>10/12  | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A                                     |  |
| USE WITH SERIES  HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F                 | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING  APPLICATION  GENERAL<br>PURPOSE<br>AND MACHINE<br>CUTTING        | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 [HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #  [1-200-0 1-200-1   | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"  CUT METAL THICKNESS  3/8" 1/2" 3/4"                        | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2<br>CUT OXY<br>DRILL SIZE<br>60<br>60<br>60                               | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUT<br>OX<br>PSIG<br>25/30<br>30/35<br>30/35  | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>30/130<br>8/10<br>8/10<br>10/12  | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09 .10 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A                                 |  |
| USE WITH SERIES  CUTTING CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F EC72780 SERIES       | SCRAP CUTTING BEVELING AND PIERCING  APPLICATION  GENERAL PURPOSE AND MACHINE CUTTING  SCRAP CUTTING              | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #  [1-200-0 1-200-0 1-200-1 [1-200-2 1-200-2                 | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"  CUT METAL THICKNESS  3/8" 1/2" 3/4" 1" 1-1/2"              | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2<br>CUT OXY<br>DRILL SIZE<br>60<br>60<br>56<br>53<br>53                   | 40/45<br>40/45<br>45/50<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUI<br>OX<br>PSIG<br>25/30<br>30/35<br>30/35<br>30/40<br>40/45                   | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH<br>45/55<br>50/55<br>70/80<br>115/125<br>125/135                                  | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>30/130<br>EL GAS<br>SCFH<br>8/10<br>8/10<br>10/12<br>12/15<br>12/15                    | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.   | .09 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A                                     |  |
| USE WITH SERIES  CUTTING CUTTING CUTTING ATTACHMENT TORCHES  780 830,850 67F EC72780 SERIES  1-200 | SCRAP CUTTING BEVELING AND PIERCING  APPLICATION  GENERAL PURPOSE AND MACHINE CUTTING  SCRAP CUTTING              | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-8 HPN-10 HPN-12  TIP STYLE  PART #  [1-200-0 1-200-0 1-200-1 [1-200-2 1-200-3 1-200-3 1-200-4 | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"  CUT METAL THICKNESS  3/8" 1/2" 3/4" 1" 1-1/2" 2" 2-1/2" 3" | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2<br>CUT OXY<br>DRILL SIZE<br>60<br>60<br>60<br>56<br>53<br>53             | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>45/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUI<br>OX<br>PSIG<br>25/30<br>30/35<br>30/35<br>30/40<br>40/45<br>40/45<br>45/50<br>45/50 | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH<br>45/55<br>50/55<br>70/80<br>115/125<br>125/135<br>150/175<br>175/200<br>210/250 | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG  | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130<br>8/10<br>8/10<br>10/12<br>12/15<br>12/15<br>14/18<br>14/18<br>16/20 | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.<br>20/24<br>18/22<br>15/20<br>14/18<br>12/16<br>10/14         | .09 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A N/A .06 .06 .08 .09 .09 .10 .11 .12 |  |
| USE WITH SERIES  CUTTING CUTTING CUTTING ATTACHMENT TORCHES  780 830, 850 67F EC72780 SERIES       | SCRAP<br>CUTTING<br>BEVELING<br>AND<br>PIERCING  APPLICATION  GENERAL<br>PURPOSE<br>AND MACHINE<br>CUTTING  SCRAP | HPN-2 [HPN-3 HPN-3 HPN-4 [HPN-5 HPN-5 HPN-6 HPN-6 HPN-10 HPN-12  TIP STYLE  PART #  [1-200-0 1-200-0 1-200-1 [1-200-2 1-200-2 1-200-3 1-200-3       | 1-1/2" 2" 2-1/2" 3" 4" 5" 6" 8" 12" 13" 14"  CUT METAL THICKNESS  3/8" 1/2" 3/4" 1" 1-1/2" 2" 2-1/2"    | 53<br>50<br>50<br>45<br>39<br>39<br>31<br>31<br>20<br>13<br>2<br>CUT OXY<br>DRILL SIZE<br>60<br>60<br>60<br>56<br>53<br>53<br>50<br>50 | 40/45<br>40/45<br>45/50<br>45/55<br>50/55<br>55/65<br>60/70<br>45/55<br>45/55<br>ONE<br>CUT<br>OX<br>PSIG<br>25/30<br>30/35<br>30/35<br>30/35<br>30/40<br>40/45<br>40/45<br>45/50          | 125/135<br>150/175<br>175/240<br>210/250<br>300/360<br>330/360<br>400/500<br>450/500<br>750/850<br>1000/1200<br>1150/1350<br>PIECE<br>TING<br>YGEN<br>SCFH<br>45/55<br>50/55<br>70/80<br>115/125<br>125/135<br>150/175<br>175/200            | 8<br>8<br>9<br>9<br>10<br>10<br>12<br>14<br>16<br>18<br>FUE<br>PSIG<br>5<br>5<br>6<br>8<br>9<br>10<br>11<br>12<br>14<br>16<br>18<br>18<br>18<br>19<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 | 22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>22/110<br>25/120<br>25/120<br>30/130<br>8/10<br>8/10<br>10/12<br>12/15<br>12/15<br>14/18<br>14/18<br>16/20 | 12/16<br>10/14<br>9/12<br>8/11<br>7/10<br>6/9<br>5/7<br>4/6<br>3/4<br>2/4<br>2/3<br>SPEED<br>I.P.M.<br>20/24<br>18/22<br>15/20<br>14/18<br>12/16<br>10/14<br>9/12 | .09 .10 .10 .12 .14 .14 .17 .18 .41 N/A N/A N/A .06 .06 .08 .09 .09 .10 .11     |  |



#### NATURAL GAS/PROPANE **USE WITH SERIES ONE PIECE TIP STYLE HAND MACHINE CUTTING CUTTING CUTTING CUTTING APPLICATION CUT OXY OXYGEN SPEED KERF CUT METAL FUEL GAS** PART# **SCFH PSIG SCFH ATTACHMENT TORCHES TORCHES** THICKNESS **DRILL SIZE PSIG** I.P.M. WIDTH 3/8" 45/55 5 8/10 5-200-0 60 25/30 20/24 .06 CA550 N/A N/A **GENERAL** 5-200-0 1/2" 30/35 5 8/10 **PURPOSE** 60 50/55 18/22 .06 3/4" 5-200-1 30/35 70/80 15/20 **CUTTING** 56 6 10/12 .08 A STREET, STRE 5-200-2 1" 53 35/40 115/125 8 12/15 14/18 .09 5-200-2 1-1/2" 53 40/45 9 12/15 125/135 12/16 .09 5-200 [ONE PIECE] TECH For proper combustion during cutting, propane (C3H3) requires 4 to 4-1/2 times its volume of preheat oxygen. TIP **USE WITH SERIES ONE PIECE TIP STYLE** HAND **MACHINE CUTTING CUTTING CUTTING CUTTING APPLICATION CUT METAL CUT OXY OXYGEN FUEL GAS SPEED** KERF **PSIG SCFH** ATTACHMENT **TORCHES TORCHES** PART# THICKNESS **DRILL SIZE PSIG** SCFH I.P.M. WIDTH 3" 1-207 #4 45 45/50 210/250 12 16/20 8/11 .12 780 830,850 67F **RIVET** REMOVAL EC72780 **SERIES** To start a cut on an edge, place the preheat flames halfway over the edge, holding the end HEATED TECH ZONE of the flame cones 1/8" above the surface of the OXYGEN TIP material to be cut. When the top corner reaches JET JUST a reddish yellow, the cutting oxygen valve is **1-207** [ONE PIECE] **CLEARS** opened and the cutting process begins. **SURFACE USE WITH SERIES TIP STYLE ONE PIECE** HAND **MACHINE CUTTING CUTTING CUTTING CUTTING APPLICATION CUT METAL CUT OXY OXYGEN FUEL GAS SPEED KERF ATTACHMENT TORCHES TORCHES** PART# **THICKNESS DRILL SIZE PSIG SCFH PSIG SCFH** I.P.M. **WIDTH** 1" 53 35/40 115/125 8 12/15 14/18 .09 1-212-2 780 67F **BULKHEADS** 830,850 1-1/2" 1-212-2 53 40/45 125/135 9 12/15 12/16 .09 EC72780 **SERIES RIVET HEADS Backfire** is the momentary retrogression of the flame into the torch that is usually signaled by a popping sound. The flame may either extinguish or re-ignite at the MACHINE TECH end of the tip. **Sustained backfire** (flashback) is the retrogression of flame into **CUTTING** 1-212 [ONE PIECE] TIP the torch with continued burning inside the torch. This event can be identified by an inital popping sound followed by a squealing or hissing sound caused by continued burning inside the torch. When it occurs, the torch oxygen valve should be turned off immediately; and then the fuel gas valve. **TIP STYLE** ONE PIECE **USE WITH SERIES CUTTING HAND MACHINE CUT METAL CUT OXY OXYGEN FUEL GAS SPEED KERF CUTTING CUTTING CUTTING APPLICATION** PART# THICKNESS **DRILL SIZE PSIG SCFH PSIG SCFH** I.P.M. **WIDTH TORCHES** ATTACHMENT **TORCHES** 1" 35/40 115/125 12/15 1-234-2 53 14/18 .09 **SCRAPING** 780 830,850 67F 1-234-2 1-1/2" 40/45 .09 53 125/135 9 12/15 12/16 EC72780 **SERIES GOUGING Flashback** is the return of the flame through the torch and into the hose and/or regulator and can potentially cause an explosion at WELD TECH any point in the system. It may also reach the cylinder. This event is **REMOVAL** TIP caused by oxygen and fuel mixing in one side of the oxy-fuel system and subsequently being ignited at the tip and by reverse flow of one ONE PIECE gas into the other side of the system. When it occurs, the torch oxygen

NOTE: Minimum oxygen requirement: 90 P.S.I.G.

valve should be turned off immediately; and then the fuel gas valve.

## CUTTING TIPS UNIWELD

#### **NATURAL GAS/PROPANE**

| US                    | E WITH SER                 | IES                           |              | TIP STYLE   |                        |                       | ONE   | PIECE                 |    |               |                 |               |
|-----------------------|----------------------------|-------------------------------|--------------|-------------|------------------------|-----------------------|-------|-----------------------|----|---------------|-----------------|---------------|
| CUTTING<br>ATTACHMENT | HAND<br>CUTTING<br>TORCHES | MACHINE<br>CUTTING<br>TORCHES | APPLICATION  | PART #      | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE |       | TTING<br>YGEN<br>SCFH |    | L GAS<br>SCFH | SPEED<br>I.P.M. | KERF<br>WIDTH |
| 780                   | 830, 850                   | 67F                           | GOUGING      | 1-218-4     | 3"                     | 45                    | 45/50 | 210/250               | 9  | 22/110        | 8/11            | .12           |
|                       | EC72780                    | SERIES                        |              | T1-218-6    | 6"                     | 31                    | 45/55 | 400/500               | 10 | 22/110        | 5/7             | .17           |
|                       |                            |                               | WELD         | 1-218-6     | 8"                     | 31                    | 55/65 | 450/500               | 12 | 22/110        | 4/6             | .18           |
|                       | -                          |                               | REMOVAL      | 1-218-8     | 12"                    | 20                    | 60/70 | 750/850               | 14 | 25/120        | 3/4             | .41           |
|                       |                            |                               | RIVET        | 1-218-10    | 13"                    | 13                    | 45/55 | 1000/1200             | 16 | 25/120        | 2/4             | -             |
| 1-2                   | <b>18</b> [ON              | IE PIECI                      | WASHING<br>E | TECH<br>TIP | Oxygen us<br>Lower pur |                       |       |                       |    |               |                 |               |



### TECH TIP

For a plate thickness of 1/2" or more, the cutting tip should be held perpendicular to the plate. When cutting a thinner plate, the tip can be tilted in the direction of the cut. Tilting increases the cutting speed and helps prevent slag from freezing across the kerf.

| USI<br>CUTTING<br>ATTACHMENT | E WITH SER<br>HAND<br>CUTTING<br>TORCHES | MACHINE<br>CUTTING<br>TORCHES | APPLICATION                                     |
|------------------------------|--|-------------------------------|---|
| N/A                          | 830, 850                                 | N/A                           | MULTIFLAME<br>HEATING<br>AT MAXIMUM<br>PRESSURE |
| (MFTN<br><b>1-20</b>         |  | IE PIECI                      |   |

**SPECIALTY HEATING ASSEMBLY TIP STYLE SPECIALTY HEATING TIP OXYGEN FUEL GAS TURNS CUTTING** PART# **PSIG PSIG TORCH INTO** A MULTI FLAME 1-209N-10 70/80 12/15 **HEATING TIP** 1-209N-12 70/80 12/15

NOTE: Not for use with cutting attachments



Natural gas produces a lower flame temperature and a lower heating efficiency. Specialty tips designed to provide a heavy preheat flame should be considered.

#### **PROPYLENE**

| PKU  | JPYL       | LNL_                          |             |           |                        |                       |            |                      |    |               |                 |               |  |
|--|------------|-------------------------------|-------------|-----------|------------------------|-----------------------|------------|----------------------|----|---------------|-----------------|---------------|--|
| US   | E WITH SER | IES                           |             | TIP STYLE |                        |                       | <b>TWO</b> | PIECE                |    |               |                 |               |  |
| CUTTING<br>ATTACHMENT  |            | MACHINE<br>CUTTING<br>TORCHES | APPLICATION | PART#     | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE |            | TING<br>'GEN<br>SCFH |    | L GAS<br>SCFH | SPEED<br>I.P.M. | KERF<br>WIDTH |  |
| 780  | 830, 850   | 67F                           | SCRAP       | HPP-1     | 3/4"                   | 56                    | 30/35      | 70/80                | 6  | 22/110        | 15/20           | .08           |  |
|  | EC72780    | SERIES                        | AND BEVEL   | HPP-2     | 1"                     | 53                    | 35/40      | 115/125              | 6  | 22/110        | 14/18           | .09           |  |
|  |            |                               | CUTTING     | HPP-2     | 1-1/2"                 | 53                    | 40/45      | 125/135              | 8  | 22/110        | 12/16           | .09           |  |
| Control of the Contro | Ø.         |                               |             | THPP-3    | 2"                     | 50                    | 40/45      | 150/175              | 8  | 22/110        | 10/14           | .10           |  |
|  | 8          |                               |             | HPP-3     | 2-1/2"                 | 50                    | 45/50      | 175/240              | 9  | 22/110        | 9/12            | .10           |  |
|  |            |                               | E MILLY     | HPP-4     | 3"                     | 45                    | 45/50      | 210/250              | 9  | 22/110        | 8/11            | .12           |  |
|  | NB F       |                               | _,          | HPP-5     | 4"                     | 39                    | 45/55      | 300/360              | 9  | 22/110        | 7/10            | .14           |  |
|  | PPLTW      | <b>10 PIEC</b>                |             | HPP-5     | 5"                     | 39                    | 50/55      | 330/360              | 10 | 22/110        | 6/9             | .14           |  |



|   |                        |                    |                        |                       |                |                      | PR            | OPI             | <b>(LER</b>     | IE .          |  |
|---|------------------------|--------------------|------------------------|-----------------------|----------------|----------------------|---------------|-----------------|-----------------|---------------|--|
| USE WITH SERIES   |                        | TIP STYLE          |                        |                       | TWO            | PIECE                |               |                 |                 |               |  |
| HAND MACHINE CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION            | PART #             | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE | CUT            | TING<br>/GEN<br>SCFH |               | L GAS<br>SCFH   | SPEED<br>I.P.M. | KERF<br>WIDTH |  |
| 780 830, 850 67F  | GENERAL                | GPP-000            | 1/8"                   | 71                    | 20/25          | 12/15                | 5             | 5/6             | 24/28           | .04           |  |
| EC72780 SERIES  | PURPOSE                | GPP-00             | 1/4"                   | 67                    | 20/25          | 22/26                | 5             | 5/7             | 21/25           | .05           |  |
|   | AND MACHINE            | GPP-0              | 3/8"                   | 60                    | 25/30          | 45/55                | 5             | 8/10            | 20/24           | .06           |  |
|   | CUTTING                | LGPP-0<br>GPP-1    | 1/2"<br>3/4"           | 60<br>56              | 30/35<br>30/35 | 50/55<br>70/80       | 5             | 8/10<br>10/12   | 20/24<br>15/20  | .06           |  |
|   |                        | GPP-2              |                        | 53                    | 35/40          | 115/125              | <u>6</u><br>8 | 12/15           | 14/18           | .08           |  |
|   |                        | GPP-2              | 1-1/2"                 | 53                    | 40/45          | 125/135              | 9             | 12/15           | 12/16           | .09           |  |
| Hama III  |                        | GPP-3              | 2"                     | 50                    | 40/45          | 150/175              | 9             | 14/18           | 10/14           | .10           |  |
|   |                        | GPP-3              | 2-1/2"                 | 50                    | 45/50          | 175/200              | 10            | 14/18           | 9/12            | .11           |  |
| <b>GPP</b>  |                        | GPP-4              | 3"                     | 45                    | 45/50          | 210/250              | 12            | 16/20           | 8/11            | .12           |  |
| GPP<br>[TWO PIECE]                                      |                        | GPP-5              | 4"                     | 39                    | 45/55          | 300/360              | 12            | 20/30           | 7/10            | .15           |  |
| [ I WU FIEGE]   | Emily .                | GPP-5              | 5"                     | 39                    | 50/55          | 300/360              | 12            | 20/30           | 6/9             | .15           |  |
|   |                        | GPP-6              | 6"                     | 31                    | 45/55          | 400/500              | 15            | 25/35           | 5/7             | .17           |  |
|   |                        | LGPP-6<br>GPP-8    | 8"<br>12"              | 31<br>20              | 55/65<br>60/70 | 450/500<br>750/850   | 15            | 25/35<br>25/120 | 4/6<br>3/4      | .18 .<br>.41  |  |
|   |                        | urr-o              | IZ                     |                       |                |                      | 14            | 25/120          | 3/4             | .41           |  |
| USE WITH SERIES   |                        | TIP STYLE          |                        |                       | TWO            | PIECE                |               |                 |                 |               |  |
| CUTTING HAND MACHINE ATTACHMENT CUTTING CUTTING         | APPLICATION            | PART#              | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE | CUT            | TING<br>/GEN<br>SCFH |               | L GAS<br>SCFH   | SPEED<br>I.P.M. | KERF<br>WIDTH |  |
| TORCHES TORCHES   |                        |                    |                        |                       |                | <b>J </b>            |               |                 |                 |               |  |
| 830, 850 67F  | GENERAL                | 3-GPP-00           | 1/4"                   | 67                    | 20/25          | 22/26                | 5             | 5/7             | 21/25           | .05           |  |
| 780 EC72780 SERIES                                      | PURPOSE                | 3-GPP-0            | 3/8"                   | 60                    | 25/30          | 45/55                | 5             | 8/10            | 20/24           | .06           |  |
|   | AND MACHINE            | L3-GPP-0           | 1/2"                   | 60                    | 30/35          | 50/55                | 5             | 8/10            | 20/24           | .06           |  |
|   | CUTTING                | 3-GPP-1<br>        | 3/4"<br>1"             | 56<br>53              | 30/35<br>35/40 | 70/80<br>115/125     | 6<br>8        | 10/12<br>12/15  | 15/20<br>14/18  | .08           |  |
|   |                        | 3-GPP-2            | 1-1/2"                 | 53                    | 40/45          | 125/135              | 9             | 12/15           | 12/16           | .09           |  |
| 3-GPP   |                        | [3-GPP-3           | 2"                     | 50                    | 40/45          | 150/175              | 9             | 14/18           | 10/14           | .10           |  |
| 3-GPP<br>[TWO PIECE]                                    | William I was a second | 3-GPP-3            | 2-1/2"                 | 50                    | 45/50          | 175/200              | 10            | 14/18           | 9/12            | .11           |  |
| [IWU FIEGE]   |                        | 3-GPP-4            | 3"                     | 45                    | 45/50          | 210/250              | 12            | 16/20           | 8/11            | .12           |  |
|   |                        | TID CTVI F         |                        |                       |                | DIEGE                |               |                 |                 |               |  |
| USE WITH SERIES   |                        | TIP STYLE          |                        |                       |                | PIECE                |               |                 |                 |               |  |
| HAND MACHINE  |                        |                    | CUT METAL              | CUT OVV               |                | TING<br>YGEN         | FILE          |                 | SPEED           | VEDE          |  |
| CUTTING CUTTING CUTTING                                 | APPLICATION            | PART #             | CUT METAL THICKNESS    | CUT OXY<br>DRILL SIZE | PSIG           | SCFH                 |               | L GAS<br>SCFH   | I.P.M.          | KERF<br>WIDTH |  |
| ATTACHMENT TORCHES TORCHES                              |                        | I AILI #           | IIICKILLIJ             | DINIEL SIZE           | 1 310          | 30111                | 1 510         | 30111           | 1.1             | WIDIII        |  |
| 780 830, 850 67F  | GENERAL                | MTHP-00            | 1/4"                   | N/A                   | 85/98          | 68/75                | 5             | 65              | 20/30           | .05           |  |
| EC72780 SERIES  | PURPOSE                | MTHP-00            | 3/8"                   | N/A                   | 85/95          | 68/75                | 5             | 65              | 22/29           | .05           |  |
| EC/2/00 SEMES   | AND MACHINE            | MTHP-0             | 1/2"                   | N/A                   | 85/95          | 110/120              | 5             | 65              | 20/28           | .06           |  |
|   | CUTTING                | LMTHP-0            | 3/4"                   | N/A                   | 85/95          | 110/120              | 5             | 65              | 18/26           | .06           |  |
|   |                        | MTHP-1             | 1"<br>1 1/2"           | N/A                   | 85/95          | 145/160              | 6             | 65<br>65        | 17/24           | .07           |  |
|   |                        | LMTHP-1<br>CMTHP-2 | 1-1/2"<br>2"           | N/A<br>N/A            | 85/95<br>85/95 | 145/160<br>230/250   | 7<br>9        | 65<br>65        | 12/16<br>12/15  | .07 <u> </u>  |  |
|   |                        | MTHP-2             | 2-1/2"                 | N/A<br>N/A            | 85/95          | 230/250              | 10            | 65              | 10/13           | .09           |  |
|   |                        | MTHP-2             | 3"                     | N/A                   | 85/95          | 230/250              | 10            | 65              | 9/12            | .09           |  |
| MTHP  |                        | MTHP-3             | 4"                     | N/A                   | 85/95          | 285/320              | 12            | 65              | 7/10            | .117          |  |
| MTHP<br>[TWO PIECE]                                     |                        | MTHP-3             | 5"                     | N/A                   | 85/95          | 285/320              | 13            | 65              | 6/8             | .11           |  |
| [IWU FIEGE]   |                        | LMTHP-3            | 6"                     | N/A                   | 85/95          | 285/320              | 13            | 65              | 5/7             | .11           |  |
|   |                        | MTHP-4             | 8"                     | N/A                   | 85/95          | 390/450              | 14            | 65              | 4/6             | .14           |  |
|   |                        | MTHP-5             | 10"                    | N/A                   | 85/95          | 670/720              | 15            | 65              | 3/5             | .18           |  |
|   |                        |                    |                        |                       |                |                      |               |                 |                 |               |  |

## **CUTTING TIPS**



#### MAPP®/PROPYLENE

| USI                   | USE WITH SERIES |                               |                    |  |  |  |  |  |  |
|-----------------------|-----------------|-------------------------------|--------------------|--|--|--|--|--|--|
| CUTTING<br>ATTACHMENT |                 | MACHINE<br>CUTTING<br>TORCHES | APPLICATION        |  |  |  |  |  |  |
| CA550                 | N/A             | N/A                           | GENERAL<br>PURPOSE |  |  |  |  |  |  |
|                       |                 | mare                          | CUTTING            |  |  |  |  |  |  |
| 5-200N                | / [NNF          | PIFCF                         |                    |  |  |  |  |  |  |

| TIP STYLE |           |                                  | ONE F | PIECE   |      |               |                 |   |  |
|-----------|-----------|----------------------------------|-------|---------|------|---------------|-----------------|---|--|
|           | CUT METAL | CUTTING CUT METAL CUT OXY OXYGEN |       |         |      |               | CDEED           | VEDE                                    |  |
| PART#     | THICKNESS | DRILL SIZE                       | PSIG  | SCFH    |      | L GAS<br>SCFH | SPEED<br>I.P.M. | KERF<br>WIDTH                           |  |
| 17111111  | memiless  | Ditte Size                       | 1310  | 30111   | 1310 | 30111         |                 | *************************************** |  |
| 5-200M-0  | 3/8"      | 60                               | 25/30 | 45/55   | 5    | 8/10          | 20/24           | .06                                     |  |
| L5-200M-0 | 1/2"      | 60                               | 30/35 | 50/55   | 5    | 8/10          | 18/22           | .06                                     |  |
| 5-200M-1  | 3/4"      | 56                               | 30/35 | 70/80   | 6    | 10/12         | 15/20           | .08                                     |  |
| 5-200M-2  | 1"        | 53                               | 35/40 | 115/125 | 8    | 12/15         | 14/18           | .09                                     |  |
| 5-200M-2  | 1-1/2"    | 53                               | 40/45 | 125/135 | 9    | 12/15         | 12/16           | .09                                     |  |
|           |           |                                  |       |         |      |               |                 |   |  |

TECH One volume of propylene requires 3.6 volumes of torch supplied oxygen for maximum flame temperature.

#### I INIIIN AIR®FIIFI CAC/MAPP®/PRAPVI FNE

|  |              |                               |             | W/M       |                        |                       |            |                      |             |               |                 |               |  |
|--|--------------|-------------------------------|-------------|-----------|------------------------|-----------------------|------------|----------------------|-------------|---------------|-----------------|---------------|--|
| US   | E WITH SER   | RIES                          |             | TIP STYLE |                        |                       | <b>TWO</b> | PIECE                |             |               |                 |               |  |
| CUTTING<br>ATTACHMENT  |              | MACHINE<br>CUTTING<br>TORCHES | APPLICATION | PART#     | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE | CUT        | TING<br>/GEN<br>SCFH | FUE<br>PSIG | L GAS<br>SCFH | SPEED<br>I.P.M. | KERF<br>WIDTH |  |
| 780  | 830, 850     | 67F                           | GENERAL     | GPM-000   | 1/8"                   | 71                    | 20/25      | 12/15                | 5           | 5/6           | 24/28           | .04           |  |
|  | EC72780      | SERIES                        | PURPOSE     | GPM-00    | 1/4"                   | 67                    | 20/25      | 22/26                | 5           | 5/7           | 21/25           | .05           |  |
|  |              |                               |             | GPM-0     | 3/8"                   | 60                    | 25/30      | 45/55                | 5           | 8/10          | 20/24           | .06           |  |
|  |              |                               | MACHINE     | GPM-0     | 1/2"                   | 60                    | 30/35      | 50/55                | 5           | 8/10          | 20/24           | .06           |  |
|  |              |                               | CUTTING     | GPM-1     | 3/4"                   | 56                    | 30/35      | 70/80                | 6           | 10/12         | 15/20           | .08           |  |
| A STATE OF THE PARTY OF THE PAR |              |                               |             | GPM-2     | 1"                     | 53                    | 35/40      | 115/125              | 8           | 12/15         | 14/18           | .09           |  |
|  |              |                               | 19399       | LGPM-2    | 1-1/2"                 | 53                    | 40/45      | 125/135              | 9           | 12/15         | 12/16           | .09           |  |
|  | 2000年        |                               |             | GPM-3     | 2"                     | 50                    | 40/45      | 150/175              | 9           | 14/18         | 10/14           | .10           |  |
|  |              |                               |             | LGPM-3    | 2-1/2"                 | 50                    | 45/50      | 175/200              | 10          | 14/18         | 9/12            | .11           |  |
|  | GPM          |                               |             | GPM-4     | 3"                     | 45                    | 45/50      | 210/250              | 12          | 16/20         | 8/11            | .12           |  |
| ſπ   | GPN<br>WO PI | ECE1                          |             | GPM-5     | 4"                     | 39                    | 45/55      | 300/360              | 12          | 20/30         | 7/10            | .15           |  |
|  | WU FI        | EUEJ                          | Emily .     | LGPM-5    | 5"                     | 39                    | 50/55      | 300/360              | 12          | 20/30         | 6/9             | .15           |  |
|  |              |                               |             | GPM-6     | 6"                     | 31                    | 45/55      | 400/500              | 15          | 25/35         | 5/7             | .17           |  |
|  |              |                               |             | LGPM-6    | 8"                     | 31                    | 55/65      | 450/500              | 15          | 25/35         | 4/6             | .18           |  |
|  |              |                               |             | GPM-8     | 12"                    | 20                    | 60/70      | 750/850              | 14          | 25/120        | 3/4             | .41           |  |

**TECH** 

The advantages of oxyfuel gas cutting include: Equipment is very portable and can be used in the field. Cutting direction can be changed rapidly on a small radius during operation. Large plates can be cut rapidly in place by moving the torch rather than the plate. Equipment costs are lower than machine tools.

gloves and protective clothing should always be used.

| USE WITH SERIES  HAND MACHINE CUTTING CUTTING CUTTING ATTACHMENT TORCHES TORCHES | APPLICATION                   | TIP STYLE  PART #              | CUT METAL<br>THICKNESS | CUT OXY        | CUT                     | PIECE<br>TING<br>(GEN<br>SCFH |             | EL GAS<br>SCFH          | SPEED<br>I.P.M.         | KERF<br>WIDTH     |  |
|--|-------------------------------|--------------------------------|------------------------|----------------|-------------------------|-------------------------------|-------------|-------------------------|-------------------------|-------------------|--|
| CA250, CA350 EC72740 N/A<br>3-780  | GENERAL<br>PURPOSE<br>CUTTING | 3-GPM-00<br>3-GPM-0<br>3-GPM-0 | 1/4"<br>3/8"<br>1/2"   | 67<br>60<br>60 | 20/25<br>25/30<br>30/35 | 22/26<br>45/55<br>50/55       | 5<br>5<br>5 | 5/7<br>8/10<br>8/10     | 21/25<br>20/24<br>20/24 | .05<br>.06<br>.06 |  |
| 2 CDM  |                               | 3-GPM-1<br>[3-GPM-2<br>3-GPM-2 | 3/4"<br>1"<br>1-1/2"   | 56<br>53<br>53 | 30/35<br>35/40<br>40/45 | 70/80<br>115/125<br>125/135   | 6<br>8<br>9 | 10/12<br>12/15<br>12/15 | 15/20<br>14/18<br>12/16 | .08<br>.09<br>.09 |  |
| 3-GPM<br>[TWO PIECE]   |                               | TECH                           | Safety firs            | t: Shade #:    |                         |                               |             |                         |                         | /cutting          |  |

NOTE: TO ORDER TIP ON DISPLAY CARD, ADD (-D) TO PART NUMBER.

.17

.18



|                      |                            |                               | LIOUI          | D AIR®                 | FUEL  | GAS/  | MA  | PP®/   | 'PR                                    | OPY  | /LER                                     | IE .                                |   |
|----------------------|----------------------------|-------------------------------|----------------|------------------------|---|---|---|--|--|--|--|-------------------------------------|---|
| US                   | E WITH SERI                | ES                            |                | TIP STYLE              |   |   |   | PIECE  |  |  |  |                                     |   |
| CUTTING<br>ITACHMENT | HAND<br>CUTTING<br>TORCHES | MACHINE<br>CUTTING<br>TORCHES | APPLICATION    | PART#                  | CUT METAL<br>THICKNESS                        | CUT OXY<br>DRILL SIZE   | CUT                                       | TING<br>/GEN<br>SCFH                                       |  | L GAS<br>SCFH                              | SPEED<br>I.P.M.                          | KERF<br>WIDTH                       |   |
| N/A                  | N/A                        | 67                            | HIGH SPEED     | MTHM-00                | 1/4"  | N/A   | 85/98                                     | 68/75  | 5                                      | 65   | 20/30                                    | .05                                 |   |
|                      |                            | SERIES                        | MACHINE        | LMTHM-00               | 3/8"  | N/A   | 85/95                                     | 68/75  | 5                                      | 65   | 22/29                                    | .05                                 |   |
|                      |                            |                               | CUTS TO 10"    | MTHM-0                 | 1/2"  | N/A   | 85/95                                     | 110/120  | 5                                      | 65   | 20/28                                    | .06                                 |   |
|                      |                            |                               |                | MTHM-0                 | 3/4"<br>1"                                    | N/A<br>N/A  | 85/95<br>85/95                            | 110/120<br>145/160   | <u>5</u>                               | 65<br>65                                   | 18/26<br>17/24                           | .06<br>.07                          |   |
|                      |                            |                               | all the second | MTHM-1                 | 1-1/2"  | N/A<br>N/A  | 85/95                                     | 145/160  | 7                                      | 65   | 12/16                                    | .07                                 |   |
| - Marie -            | THE RESIDENCE              |                               |                | MTHM-1                 | 2"  | N/A   | 85/95                                     | 230/250  | 9                                      | 65   | 12/15                                    | .09                                 |   |
| •                    |                            |                               |                | MTHM-2                 | 2-1/2"  | N/A   | 85/95                                     | 230/250  | 10                                     | 65   | 10/13                                    | .09                                 |   |
|                      |                            |                               |                | MTHM-2                 | 3"  | N/A   | 85/95                                     | 230/250  | 10                                     | 65   | 9/12                                     | .09                                 |   |
|                      | MTHN                       |                               |                | MTHM-3                 | 4"  | N/A   | 85/95                                     | 285/320  | 12                                     | 65   | 7/10                                     | .117                                |   |
|                      | <b>WO PIE</b>              | CEl (                         |                | MTHM-3                 | 5"  | N/A   | 85/95                                     | 285/320  | 13                                     | 65   | 6/8                                      | .11                                 |   |
|                      |                            |                               | Wants.         | MTHM-3                 | 6"  | N/A   | 85/95                                     | 285/320  | 13                                     | 65   | 5/7                                      | .11                                 |   |
|                      |                            |                               |                | MTHM-4                 | 8"  | N/A   | 85/95                                     | 390/450  | 14                                     | 65   | 4/6                                      | .14                                 |   |
|                      |                            |                               |                | MTHM-5                 | 10"   | N/A   | 85/95                                     | 670/720  | 15                                     | 65   | 3/5                                      | .18                                 |   |
|                      | E WITH SERI                |                               |                | TIP STYLE              |   | 1   |   | PIECE  |  |  |  |                                     |   |
| CUTTING<br>ITACHMENT | HAND<br>CUTTING<br>TORCHES | MACHINE<br>CUTTING<br>TORCHES | APPLICATION    | PART #                 | CUT METAL<br>THICKNESS                        | CUT OXY<br>DRILL SIZE   |   | TING<br>'GEN<br>SCFH                                       |  | L GAS<br>SCFH                              | SPEED<br>I.P.M.                          | KERF<br>WIDTH                       |   |
| 780                  | 830, 850                   | 67                            | SCRAP          | HPM-4                  | 3"  | 45  | 45/50                                     | 210/250  | 9                                      | 22/110                                     | 8/11                                     | .12                                 |   |
| 700                  | EC72780                    | SERIES                        | CUTTING        | HPM-6                  | 6"  | 31  | 45/55                                     | 400/500  | 10                                     | 22/110                                     | 5/7                                      | .17                                 |   |
|                      | 20/2/00                    | JEILLES                       |                | LHPM-6                 | 8"  | 31  | 55/65                                     | 450/500  |  | 22/110                                     | 4/6                                      | .18                                 |   |
|                      |                            |                               | BEVELING       | HPM-8                  | 12"   | 20  | 60/70                                     | 750/850  | 14                                     | 25/120                                     | 3/4                                      | .41                                 |   |
| [                    | HPN<br>TWO PI              |                               | PIERCING       | TECH<br>TIP            | on the<br><b>piercir</b><br>one us<br>up as t | ten necesso<br>edge of a p<br>ng. Piercing<br>ed for an e<br>he cutting<br>nary until t | oiece of<br>g requir<br>dge sta<br>oxyger | f metal. The<br>es a large<br>art. The tip<br>a valve is c | nis teci<br>er preh<br>o shou<br>opene | hnique<br>eat flai<br>ld be ai<br>d. The t | is knov<br>me thai<br>ngled a<br>orch is | vn as<br>n the<br>nd lifted<br>held | ł |
| US                   | E WITH SERI                | ES                            |                | TIP STYLE              |   |   | ONE                                       | PIECE  |  |  |  |                                     |   |
| CUTTING<br>TTACHMENT | HAND<br>CUTTING<br>TORCHES | MACHINE<br>CUTTING<br>TORCHES | APPLICATION    | PART #                 | CUT METAL<br>THICKNESS                        | CUT OXY<br>DRILL SIZE   | CUT                                       | TING<br>/GEN<br>SCFH                                       |  | L GAS<br>SCFH                              | SPEED<br>I.P.M.                          | KERF<br>WIDTH                       |   |
| 780                  | 830, 850                   | 67                            | GENERAL        | 1-303MP-0              |   | 67  | 20/25                                     | 22/26  | 5                                      | 5/7  | 21/25                                    | .05                                 |   |
|                      | EC72780                    | SERIES                        | PURPOSE        | 1-303MP-0              | 3/8"  | 60  | 25/30                                     | 45/55  | 5                                      | 8/10                                       | 20/24                                    | .06                                 |   |
|                      |                            |                               | CUTTING        | L1-303MP-0             | 1/2"  | 60  | 30/35                                     | 50/55  | 5                                      | 8/10                                       | 20/24                                    | .06                                 |   |
|                      |                            |                               |                | 1-303MP-1              | 3/4"  | 56  | 30/35                                     | 70/80  | 6                                      | 10/12                                      | 15/20                                    | .08                                 |   |
|                      |                            | AND THE REAL PROPERTY.        | Marie Control  | 1-303MP-2              | 1"  | 53  | 35/40                                     | 115/125  | 8                                      | 12/15                                      | 14/18                                    | .09                                 |   |
|                      |                            | 10                            |                | L1-303MP-2             | 1-1/2"  | 53  | 40/45                                     | 125/135  | 9                                      | 12/15                                      | 12/16                                    | .09                                 |   |
|                      |                            |                               |                | 1-303MP-3              | 2"  | 50<br>50  | 40/45                                     | 150/175  | 9                                      | 14/18                                      | 10/14                                    | .10                                 |   |
|                      | 1-303                      | MP                            | <b>6</b> 20    | 1 202MP-3              | 2-1/2"<br>3"                                  | 50  | 45/50                                     | 175/200  | 10                                     | 14/18                                      | 9/12                                     | .11_                                |   |
|                      | ONE PI                     | ECE]                          |                | 1-303MP-4<br>1-303MP-5 | 3<br>4"                                       | 45<br>39  | 45/50<br>45/55                            | 210/250<br>300/360   | 12<br>12                               | 16/20<br>20/30                             | 8/11<br>7/10                             | .12<br>.15                          |   |
|                      | TONE PI                    | LULI                          |                | 1-303MP-5              | <del>4</del><br>5"                            | 39  | 50/55                                     | 300/360  | 12                                     | 20/30                                      | 6/9                                      | .15                                 |   |
|                      |                            |                               |                | _ 1 JUJINI -J          | J   | 57  | 50/55                                     | 300/300  | 12                                     | 20,50                                      | - :-                                     |                                     |   |

6"

8"

1-303MP-6

L1-303MP-6

31

31

45/55

55/65

400/500

450/500

15

25/35

15 25/35

5/7

4/6

## **CUTTING TIPS**



**KERF** 

WIDTH

### LIOUID AIR®FUEL GAS/MAPP®/PROPYLENE

| USI                   | E WITH SER          | RIES                          |                                  |
|-----------------------|---------------------|-------------------------------|----------------------------------|
| CUTTING<br>ATTACHMENT |                     | MACHINE<br>CUTTING<br>TORCHES | APPLICATION                      |
| 780                   | 830, 850<br>EC72780 | N/A                           | CUTTING<br>CLOSE TO<br>BULKHEADS |
| ***                   |                     | 10.8                          | RIVET                            |
|                       | 1-3<br>[ON          | B12MP<br>E PIECE              |                                  |

| TIP STYLE |           |            | ONE P | PIEC |
|-----------|-----------|------------|-------|------|
|           |           |            | CUT   | TING |
|           | CUT METAL | CUT OXY    | OXY   | GEN  |
| PART #    | THICKNESS | DRILL SIZE | PSIG  | SCI  |

| 1-312MP-2<br>1-312MP-2 | 1"     | 53 | 35/40 | 115/125 | 8 | 12/15 | 14/18 | .09  |
|------------------------|--------|----|-------|---------|---|-------|-------|------|
| 1-312MP-2              | 1-1/2" | 53 | 40/45 | 125/135 | 9 | 12/15 | 12/16 | .09_ |

TECH TIP



The most widely accepted manner to light the torch is to open the fuel gas valve slightly and light the gas with a spark lighter. Adjust the gas until a stable flame is maintained at the end of the tip. Open the oxygen preheat valve slowly and increase the flow until the desired flame is achieved.

**SPEED** 

**FUEL GAS** 

PSIG SCFH I.P.M.

| ATTACHMEN | T TORCHES | TORCHES           |                  |
|-----------|-----------|-------------------|------------------|
| 780       | 830, 850  | 67                | GOUGING          |
|           | EC72780   | SERIES            | SCARFING         |
|           |           |                   | RIVET<br>CUTTING |
|           |           | 113               |                  |
|           | 1-3       | 18MP<br>E PIECE   |                  |
|           | ION       | ## 12   12   H ## |                  |

HAND MACHINE

**USE WITH SERIES** 

**CUTTING CUTTING CUTTING** 

| TIP STYLE PART # | CUT METAL CUT OXY |     |       | ONE PIECE CUTTING OXYGEN PSIG SCFH P |     |       | SPEED<br>I.P.M. | KERF<br>WIDTH |  |
|------------------|-------------------|-----|-------|--------------------------------------|-----|-------|-----------------|---------------|--|
| 1-318MP-4        | 3"                | 45  | 45/50 | 210/250                              | 12  | 16/20 | 8/11            | .12           |  |
| 1-318MP-6        | 6"                | 31  | 45/55 | 400/500                              | 15  | 25/35 | 5/7             | .17           |  |
| 1-318MP-8        | 8"                | N/A | N/A   | N/A                                  | N/A | N/A   | N/A             | N/A           |  |

TECH TIP Propane is used regularly for oxygen cutting in a number of plants because of its availability and its much higher total heat value (MJ/m³) than natural gas. For proper combustion during cutting, propane requires 4 to 4-1/2 times its volume of preheat oxygen. This requirement is offset somewhat by its higher heat value. It is stored in liquid form and easily transported to the work site.

| 031                   |                |                               |  |
|-----------------------|----------------|-------------------------------|--|
| CUTTING<br>ATTACHMENT | <b>CUTTING</b> | MACHINE<br>CUTTING<br>TORCHES |  |
| CA250, CA350<br>3-780 | EC72740        | N/A                           |  |
|                       | 51 6<br>8<br>0 |                               |  |
| 3-318M                | IP [ON         | E PIECE                       |  |

**USE WITH SERIES** 

APPLICATION

GOUGING SCARFING

RIVET CUTTING

**APPLICATION** 

TECH TIP

| TIP STYLE              | ONE PIECE              |                       |                |                      |        |                |                 |               |  |  |
|------------------------|------------------------|-----------------------|----------------|----------------------|--------|----------------|-----------------|---------------|--|--|
| PART#                  | CUT METAL<br>THICKNESS | CUT OXY<br>DRILL SIZE |                | TING<br>/GEN<br>SCFH |        | L GAS<br>SCFH  | SPEED<br>I.P.M. | KERF<br>WIDTH |  |  |
| 3-318MP-2<br>3-318MP-2 | 1"<br>1-1/2"           | 53<br>53              | 35/40<br>40/45 | 115/125<br>125/135   | 8<br>9 | 12/15<br>12/15 | 14/18<br>12/16  | .09           |  |  |
| 3-318MP-4              | 3"                     | 45                    | 45/50          | 210/250              | 12     | 16/20          | 8/11            | .12           |  |  |

A backfire is the momentary retrogression of the flame into the torch tip followed by immediate reappearance or complete extinguishing of the flame. If this condition continues, the torch or the tips, or both, should be removed from service for cleaning or possible repair.



## TIPS WELDING/HEATING

### OXYACETYLENE/HYDROGEN/MAPP®/PROPANE/NAT. GAS

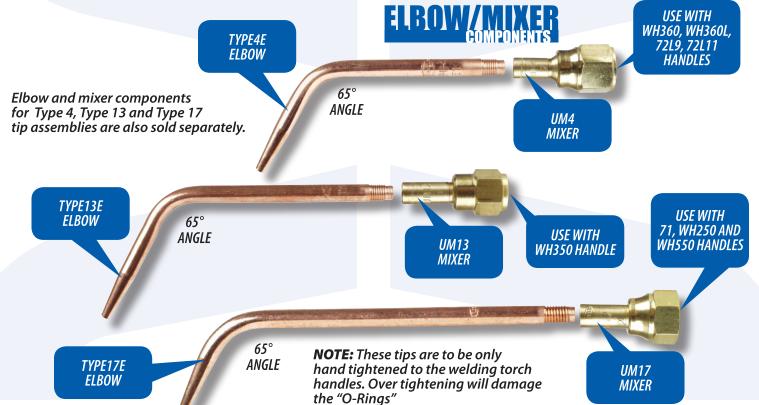
|   |  | ТІР ТҮРЕ | COMPLETE<br>ASSEMBLY<br>PART# | TIP END<br>ONLY | MIXER<br>ONLY | ELBOW<br>TO MIXER<br>THREAD SPEC | WELD<br>METAL<br>THICKNESS | OXYGEN<br>(PSIG) | ACETYLENE<br>FUEL GAS<br>(PSIG) | ACETYLENE<br>FUEL GAS<br>(SCFH) | USE WITH<br>WELDING<br>HANDLE # |
|---|--|----------|-------------------------------|-----------------|---------------|----------------------------------|----------------------------|------------------|---------------------------------|---------------------------------|---------------------------------|
|   | APPLICATION  | (RTE)    | TYPE1-00                      | TYPE1TE-00      | N/A           | 5/16"-27(M,F)                    | 1/64"- 3/64"               | 5                | 5                               | 2.5                             |                                 |
|   | WELDING  |          | TYPE1-0                       | TYPE1TE-0       | N/A           | 5/16"-27(M,F)                    | 1/32"- 5/64"               | 5                | 5                               | 4                               |                                 |
|   | HEATING  | 1        | TYPE1-1                       | TYPE1TE-1       | N/A           | 5/16"-27(M,F)                    | 3/64"-3/32"                | 5                | 5                               | 6                               | WH360                           |
|   | BRAZING  |          | TYPE1-2                       | TYPE1TE-2       | N/A           | 5/16"-27(M,F)                    | 1/16"- 1/8"                | 5                | 5                               | 10                              | WH360L                          |
|   | SOLDERING  |          | TYPE1-3                       | TYPE1TE-3       | N/A           | 3/8"-27(M,F)                     | 1/8"- 3/16"                | 7                | 6                               | 18                              | 72L9                            |
|   |  |          | TYPE1-4                       | TYPE1TE-4       | N/A           | 3/8"-27(M,F)                     | 3/16"- 1/4"                | 10               | 7                               | 28                              | 72L11                           |
|   |  |          | TYPE1-5                       | TYPE1TE-5       | N/A           | 7/16"-27(M,F)                    | 1/4"- 1/2"                 | 12               | 8                               | 40                              |                                 |
|   |  |          | TYPE1-6                       | TYPE1TE-6       | N/A           | 7/16"-27(M,F)                    | 1/2"- 3/4"                 | 14               | 9                               | 52                              |                                 |
|   |  | TIP TYPE | COMPLETE<br>ASSEMBLY<br>PART# | ELBOW<br>ONLY   | MIXER<br>ONLY | ELBOW<br>TO MIXER<br>THREAD SPEC | WELD<br>METAL<br>THICKNESS | OXYGEN<br>(PSIG) | ACETYLENE<br>FUEL GAS<br>(PSIG) | ACETYLENE<br>FUEL GAS<br>(SCFH) | USE WITH<br>WELDING<br>HANDLE # |
|   | ADDLICATION  |          | TYPE4-000                     | TYPE4E-000      | UM4-0         | 5/16"-27(M,F)                    | UP TO 1/32"                | 5                | 5                               | 1.5                             |                                 |
|   | APPLICATION  | (W)      | TYPE4-00                      | TYPE4E-00       | UM4-0         | 5/16"-27(M,F)                    | 1/64"- 3/64"               | 5                | 5                               | 2.5                             |                                 |
|   | WELDING  |          | TYPE4-0                       | TYPE4E-0        | UM4-0         | 5/16"-27(M,F)                    | 1/32"- 5/64"               | 5                | 5                               | 4                               |                                 |
|   | HEATING  | /        | TYPE4-1                       | TYPE4E-1        | UM4-1         | 5/16"-27(M,F)                    | 3/64"-3/32"                | 5                | 5                               | 6                               | WH360                           |
|   | BRAZING  | 4        | TYPE4-2                       | TYPE4E-2        | UM4-1         | 5/16"-27(M,F)                    | 1/16"- 1/8"                | 5                | 5                               | 10                              | WH360L                          |
|   | SOLDERING  |          | TYPE4-3                       | TYPE4E-3        | UM4-3         | 3/8"-27(M,F)                     | 1/8"- 3/16"                | 7                | 6                               | 18                              | 72L9                            |
|   |  |          | TYPE4-4                       | TYPE4E-4        | UM4-4         | 3/8"-27(M,F)                     | 3/16"- 1/4"                | 10               | 7                               | 28                              | 72L11                           |
| - |  |          | TYPE4-5                       | TYPE4E-5        | UM4-5         | 7/16"-20(M,F)                    | 1/4"- 1/2"                 | 12               | 8                               | 40                              |                                 |
|   |  |          | TYPE4-6                       | TYPE4E-6        | UM4-5         | 7/16"-20(M,F)                    | 1/2"- 3/4"                 | 14               | 9                               | 52                              |                                 |
|   |  |          | TYPE4-7                       | TYPE4E-7        | UM4-7         | 7/16"-20(M,F)                    | 3/4"- 13/4"                | 16               | 10                              | 66                              |                                 |
|   |  |          | TYPE4-8                       | TYPE4E-8        | UM4-7         | 7/16"-20(M,F)                    | <b>1</b> 1/2"- <b>2</b>    | 19               | 12                              | 82                              |                                 |
|   |  | TIP TYPE | COMPLETE<br>ASSEMBLY<br>PART# | ELBOW<br>ONLY   | MIXE          |                                  | WELD<br>METAL<br>THICKNE   | (PSIG            |                                 |                                 | USE WITH<br>WELDING<br>HANDLE#  |
|   | APPLICATION  |          | TYPE13-000                    | TYPE13E-00      |               | 0 5/16"-27(M,I                   | -                          | 2" 5             | 5                               | 1.5                             |                                 |
|   |  | (W-1)    | TYPE13-00                     | TYPE13E-00      |               | ·0 5/16"-27(M,I                  |                            |                  | 5                               | 2.5                             |                                 |
|   | WELDING<br>HEATING   |          | TYPE13-0                      | TYPE13E-0       |               | ·0 5/16"-27(M,I                  |                            |                  | 5                               | 4                               |                                 |
|   | BRAZING  | 13       | TYPE13-1                      | TYPE13E-1       |               | ·1 5/16"-27(M,I                  |                            |                  | 5                               | 6                               | WH350                           |
|   | SOLDERING  |          | TYPE13-2                      | TYPE13E-2       |               | ·2 5/16"-27(M,I                  |                            |                  | 5                               | 10                              |                                 |
|   | Annual State of State |          | TYPE13-3                      | TYPE13E-3       |               | 3 5/16"-27(M,I                   |                            |                  | 6                               | 18                              |                                 |
|   |  |          | TYPE13-4                      | TYPE13E-4       |               | 4 5/16"-27(M,I                   |                            |                  | 7                               | 28                              |                                 |
|   |  |          | TYPE13-5                      | TYPE13E-5       | UM13-         |                                  |                            |                  | 8                               | 40                              |                                 |
|   |  | 1        | TYPE13-6                      | TYPE13E-6       | UM13-         |                                  |                            |                  | 9                               | 52                              |                                 |
|   |  |          | TYPE13-7                      | TYPE13E-7       | UM13          | ·5 3/8"-24(M,F                   | ) 3/4"- 13/2               | ı" 16            | 10                              | 66                              |                                 |
|   |  |          |                               |                 |               |                                  |                            |                  |                                 |                                 |                                 |

## WELDING/HEATING TIPS



### OXYACETYLENE/HYDROGEN/MAPP®/PROPANE/NAT. GAS

|             | ТІР ТҮРЕ | COMPLETE<br>ASSEMBLY<br>PART# | ELBOW<br>ONLY | MIXER<br>ONLY | ELBOW<br>TO MIXER<br>THREAD SPEC | WELD<br>METAL<br>THICKNESS | (PSIG) | ACETYLENE<br>FUEL GAS<br>(PSIG) | ACETYLENE<br>FUEL GAS<br>(SCFH) | USE WITH<br>WELDING<br>HANDLE # |  |
|-------------|----------|-------------------------------|---------------|---------------|----------------------------------|----------------------------|--------|---------------------------------|---------------------------------|---------------------------------|--|
| APPLICATION |          | TYPE17-000                    | TYPE17E-000   | UM17-000      | 1/4"-27(M,F)                     | UP TO 1/32"                | 5      | 5                               | 1.5                             |                                 |  |
| WELDING     | (W-J)    | TYPE17-00                     | TYPE17E-00    | UM17-00       | 1/4"-27(M,F)                     | 1/64"- 3/64"               | 5      | 5                               | 2.5                             |                                 |  |
| HEATING     |          | TYPE17-0                      | TYPE17E-0     | UM17-0        | 1/4"-27(M,F)                     | 1/32"- 5/64"               | 5      | 5                               | 4                               |                                 |  |
| BRAZING     | 17       | TYPE17-1                      | TYPE17E-1     | UM17-1        | 1/4"-27(M,F)                     | 3/64"- 3/32"               | ' 5    | 5                               | 6                               | 71                              |  |
| SOLDERING   |          | TYPE17-2                      | TYPE17E-2     | UM17-2        | 1/4"-27(M,F)                     | 1/16"- 1/8"                | 5      | 5                               | 10                              | WH250                           |  |
|             |          | TYPE17-3                      | TYPE17E-3     | UM17-3        | 1/4"-27(M,F)                     | 1/8"- 3/16"                | 7      | 6                               | 18                              | WH550                           |  |
|             |          | TYPE17-4                      | TYPE17E-4     | UM17-4        | 1/4"-27(M,F)                     | 3/16"- 1/4"                | 10     | 7                               | 28                              |                                 |  |
|             |          | TYPE17-5                      | TYPE17E-5     | UM17-5        | 5/16"-27(M,F)                    | 1/4"-1/2"                  | 12     | 8                               | 40                              |                                 |  |
|             |          | TYPE17-6                      | TYPE17E-6     | UM17-5        | 5/16"-27(M,F)                    | 1/2"- 3/4"                 | 14     | 9                               | 52                              |                                 |  |
|             |          | TYPE17-7                      | TYPE17E-7     | UM17-5        | 5/16"-27(M,F)                    | 3/4"- 11/4"                | 16     | 10                              | 66                              |                                 |  |
|             |          |                               |               |               | FIR                              | NW/I                       | ИІХІ   | FR                              |                                 | USE WITH                        |  |



TECH TIP Uniweld welding/heating tips are available in a variety of sizes, shapes and constructions. There are two methods of combining tips and mixers. 1. A special tip elbow may be used for each size of mixer or... 2. One or more mixers can cover the entire range of tip sizes. In the latter method, the tip elbow unscrews from its mixer; each size of mixer has a particular thread size to prevent improper coupling of a tip elbow and mixer.

Remember: Tips should be periodically cleaned using Uniweld tip cleaners. Tip elbow and mixer threads and all sealing surfaces must be kept clean. A poor seal can result in leaks and a backfire or flashback may result.



## TIPS BRAZING/HEATING

#### OXYACETYLENE/HYDROGEN/MAPP®/PROPANE/NAT. GAS

**TIP TYPE** 

**COMPLETE ASSEMBLY** PART#

**ELBOW ONLY** 

**MIXER ONLY** 

**ELBOW TO MIXER** THREAD SPEC THICKNESS

WELD METAL

**OXYGEN ACETYLENE ACETYLENE** (PSIG) **FUEL GAS** 

**FUEL GAS** (PSIG) (SCFH)

**USE WITH** WELDING **HANDLE#** 

**APPLICATION HEATING BRAZING SOLDERING** 

#### **FLEXIBLE TIPS**

**TYPE17-9** TYPE17E-9 UM17-5 5/16"-27(M,F) 1/32"-5/64" 5 5 4

**UM17-5** 17E-9

71 WH250 WH550

TYPE13-8VM TYPE13E-8 UM17-5

5/16"-27(M,F)

10-20 N/A

8-12

71 WH250

UM13-4

UM17-5

**REPLACEMENT** 

TYPE13E-8

**BRAZING** 

15-30

**USE WITH** WELDING

WH550

**TIP TYPE** 

PART#

**ACETYLENE CONSUMPTION PRESSURE SCFH** 

**OXYGEN** (PSIG)

**ACETYLENE/FUEL PRESSURE** (PSIG)

**OVERALL** LENGTH

**MIXER AND NUT**  **COPPER TUBING** 

**HANDLE**#

**REMOVE HEAT PUMP REVERSING VALVES** 





TYPE17TFT 5-10 pump reversing valve at once and remove and install the valve without altering the original copper tube and fittings.

**UM17-5** 

The Tuning Fork™ Tip lets you heat up all the fittings of a heat

71 WH250 WH550

**TIP TYPE** 

PART#

**ACETYLENE** CONSUMPTION **SCFH** 

**OXYGEN PRESSURE** (PSIG)

**ACETYLENE/FUEL PRESSURE** (PSIG)

7

**OVERALL LENGTH** 

8"

WELDING METAL **THICKNESS**  **BRAZING COPPER TUBING** 

7/8"

**USE WITH** WELDING **HANDLE**#

**APPLICATION** WELDING **HEATING BRAZING SOLDERING** 

#### MICRO 6000® TIPS

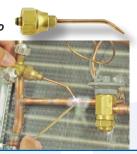
High performance oxyacetylene brazing tips that provide precise concentrated heat up to 6000°F.

| MTW-1 | 2-3 | 5 | 5 | 3" | 3/64" | 1/2"  |
|-------|-----|---|---|----|-------|-------|
| MTW-2 | 2-4 | 5 | 5 | 3" | 5/64" | 1"    |
| MTT   | 4-6 | 5 | 5 | 4" | N/A   | 1"    |
| MTR   | 4-8 | 5 | 5 | 4" | N/A   | 11/2" |

71 WH250 WH550











## BRAZING/HEATING TIPS



### OXYACETYLENE/HYDROGEN/MAPP®/PROPANE/NAT. GAS

**TIP TYPE** 

ACETYLENE CONSUMPTION PART# SCFH

OXYGEN ACETYLENE/FUEL PRESSURE (PSIG) (PSIG)

OVERALL LENGTH BRAZING COPPER TUBING USE WITH WELDING HANDLE #

71

VH250 VH550

71 WH250 WH550

APPLICATION
BRAZING
HEATING

## MTF



### **CAP'N HOOK** B High performance OXYACETYLENE brazing tips that provide precise concentrated heat up to 6000°F.

| MTF-2 | 3-5  | 5  | 5 | 5-1/ <sub>2</sub> " | 7/8"   |   |
|-------|------|----|---|---------------------|--------|---|
| MTF-3 | 4-6  | 5  | 5 | 8-1/ <sub>2</sub> " | 1-5/8" | W |
| MTF-4 | 5-10 | 10 | 7 | 11"                 | 2-5/8" | W |

MAPP®/PROPANE OXYGEN MAPP®/PROPANE **BRAZING USE WITH** WELDING CONSUMPTION **PRESSURE PRESSURE OVERALL COPPER** PART# **LENGTH HANDLE**# **SCFH** (PSIG) (PSIG) **TUBING** 

#### **CAP'N HOOK®**

High performance MAPP®OR PROPANE/OXYGEN brazing tips that provide precise concentrated heat up to 6000°F.

| MTFM-2 | 3-6  | 8  | 5 | 5-1/2"              | 7/8"   |
|--------|------|----|---|---------------------|--------|
| MTFM-3 | 4-8  | 8  | 5 | 5-1/ <sub>2</sub> " | 1-5/8" |
| MTFM-4 | 5-12 | 10 | 7 | 11"                 | 2-5/8" |

The patented Uniweld Cap'n Hook® high performance tip transfers high heat directly onto your work area and away from nearby sensitive areas. Stainless steel construction provides a stable flame time after time while holding its shape. Cap'n Hook® tips provide rapid, even heat distribution for excellent brazing and flow of alloy.









## TIPS BRAZING/HEATING

#### OXYACETYLENE/HYDROGEN/MAPP®/PROPANE/NAT. GAS

**TIP TYPE** 

COMPLETE **ASSEMBLY** PART#

**ELBOW ONLY** 

**MIXER** ONLY

**ELBOW TO MIXER** THREAD SPEC **OXYGEN** (PSIG)

**ACETYLENE FUEL GAS** (PSIG)

**ACETYLENE FUEL GAS** (SCFH)

**USE WITH** WELDING **HANDLE#** 

**APPLICATION** 

**HEATING BRAZING SOLDERING**  (UN-J)

NG TIPS: COMPLETE with Tip End

**TYPE17-15** N/A N/A 1/4"-27(M,F) 10-20 8-12 15-30 TYPE17-30 N/A N/A 1/4"-27(M,F) 10-20 8-12 15-30

71 WH250 WH550



COMPLETE

**ASSEMBLY** 

PART#

**TIP END** ONLY

MIXER **ONLY** 

**ELBOW TO MIXER THREAD SPEC**  **OXYGEN** (PSIG)

**ACETYLENE ACETYLENE FUEL GAS FUEL GAS** (PSIG) (SCFH)

**USE WITH** WELDING **HANDLE#** 

> 71 WH250 WH550

**APPLICATION** 

(MFA-J)

TIP TYPE

**PRE-HEATING STRAIGHTENING**  **HEATING TIPS: COMPLETE** with Tip End

| TYPE28-2 | TYPE28TE-2 | N/A | 5/16"-27(M,F) | 5-8   | 5-7   | 3-9   |
|----------|------------|-----|---------------|-------|-------|-------|
| TYPE28-4 | TYPE28TE-4 | N/A | 5/16"-27(M,F) | 8-12  | 5-7   | 7-20  |
| TYPE28-6 | TYPE28TE-6 | N/A | 5/16"-27(M,F) | 10-15 | 8-12  | 14-40 |
| TYPE28-8 | TYPE28TE-8 | N/A | 5/16"-27(M,F) | 20-30 | 10-15 | 30-80 |

**INDUSTRY TERM: ROSEBUD** 







#4



#6



**TIP TYPE** PART#

**COMPLETE ASSEMBLY** 

**TIP END ONLY** 

**MIXER ONLY** 

**ELBOW TO MIXER THREAD SPEC**  **OXYGEN** (PSIG)

**ACETYLENE FUEL GAS** (PSIG)

**ACETYLENE FUEL GAS** (SCFH)

#8

**USE WITH** WELDING **HANDLE#** 

WH350

**APPLICATION** 

(MFA-1)

PRE-HEATING **STRAIGHTENING**  **HEATING TIPS: COMPLETE** with Tip End

| TYPE29-2 | TYPE28TE-2 | N/A | 5/16"-27(M,F) | 5-8   | 5-7   | 3-9   |
|----------|------------|-----|---------------|-------|-------|-------|
| TYPE29-4 | TYPE28TE-4 | N/A | 5/16"-27(M,F) | 8-12  | 5-7   | 7-20  |
| TYPE29-6 | TYPE28TE-6 | N/A | 5/16"-27(M,F) | 10-15 | 8-12  | 14-40 |
| TYPE29-8 | TYPE28TE-8 | N/A | 5/16"-27(M,F) | 20-30 | 10-15 | 30-80 |

**INDUSTRY TERM: ROSEBUD** 









#6



#2 #4



#### OXYACETYLENE

**TIP TYPE** 

**COMPLETE ASSEMBLY** PART#

**TIP END** ONLY

MIXER PART#

**ELBOW TO MIXER THREAD SPEC**  **OXYGEN** (PSIG)

**ACETYLENE ACETYLENE FUEL GAS FUEL GAS** (PSIG) (SCFH)

6-20

**USE WITH** WELDING HANDLE#

**WH360** 

**WH360L** 

72L9

72L11

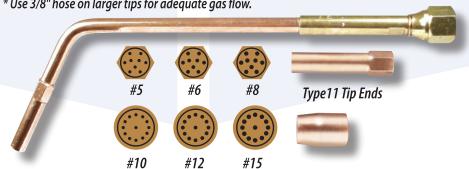
**APPLICATION PREHEATING STRAIGHTENING** 

(MFA)

HEATING TIPS: COMPLETE with Tip End **TYPE11-5** TYPE11TE-5 7/16"-27(M,F) **UM11** 10-15 7-10

**TYPE11-6** TYPE11TE-6 **UM11** 7/16"-27(M,F) 10-15 7-10 14-40 **UM11 TYPE11-8** TYPE11TE-8 7/16"-27(M,F) 20-30 10-15 30-80 25-40 **TYPE11-10\*** TYPE11TE-10 UM11-1 1/2"-27(M,F) 12-15 40-100 TYPE11-12\* TYPE11TE-12 UM11-1 1/2"-27(M,F) 40-60 12-15 60-150 TYPE11-15\* TYPE11TE-15 UM11-1 90-220 1/2"-27(M,F) 40-60 12-15

\* Use 3/8" hose on larger tips for adequate gas flow.



**INDUSTRY TERM: ROSEBUD** 

#### OXY/MAPP®/PROPANE/NATURAL GAS

**TIP TYPE** 

COMPLETE **ASSEMBLY** PART#

**TIP END** ONLY

MIXER PART#

**ELBOW** TO MIXER **THREAD SPEC**  **OXYGEN** (PSIG)

**ACETYLENE ACETYLENE FUEL GAS FUEL GAS** (PSIG) (SCFH)

**USE WITH** WELDING HANDLE#

WH360

**WH360L** 

72L9 72L11

**APPLICATION PREHEATING STRAIGHTENING** 

(MFN) 12 **HEATING TIPS: COMPLETE** with Tip End

| TYPE12-8   | TYPE12TE-8  | UM12   | 7/16"-27(M,F) | 20-30 | 10-20 | 10-35  |
|------------|-------------|--------|---------------|-------|-------|--------|
| TYPE12-10* | TYPE12TE-10 | UM12-1 | 1/2"-27(M,F)  | 25-40 | 10-20 | 20-80  |
| TYPE12-12* | TYPE12TE-12 | UM12-1 | 1/2"-27(M,F)  | 40-60 | 10-25 | 30-160 |
| TYPE12-15* | TYPE12TE-15 | UM12-1 | 1/2"-27(M,F)  | 40-60 | 15-25 | 50-200 |
| TYPE12-20* | TYPE12TE-20 | UM12-1 | 1/2"-27(M,F)  | 40-80 | 15-25 | 75-250 |

\* Use 3/8" hose on larger tips for adequate gas flow.



**INDUSTRY TERM: ROSEBUD** 



### **OXY/FUEL GAS ONLY (Do not use with Acetylene)**

**ELBOW TYPE** 

**ELBOW** ONLY PART#

**LENGTH** 

**ELBOW TIP END THREAD SPEC**  **MIXER** ONLY PART#

**ELBOW MIXER END THREAD SPEC**  **USE WITH** WELDING **HANDLE**#

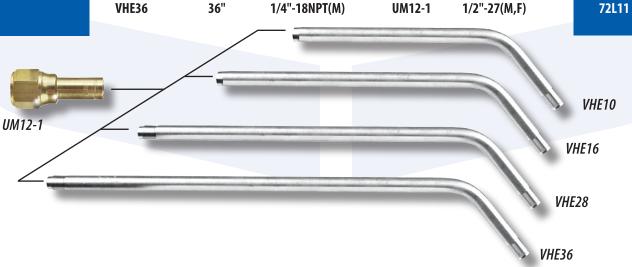
WH360

**WH360L** 72L9

### **HEATING COMPONENTS**

VHE

| VHE10 | 10" | 1/4"-18NPT(M) | UM12-1 | 1/2"-27(M,F) |  |
|-------|-----|---------------|--------|--------------|--|
| VHE16 | 16" | 1/4"-18NPT(M) | UM12-1 | 1/2"-27(M,F) |  |
| VHE28 | 28" | 1/4"-18NPT(M) | UM12-1 | 1/2"-27(M,F) |  |
| VHE36 | 36" | 1/4"-18NPT(M) | UM12-1 | 1/2"-27(M,F) |  |



**TIP END TYPE** 

TIP **END** PART# **TIP END THREAD SPEC** 

**OXYGEN** (PSIG)

DO NOT USE ACETYLENE FLOW PROPANE (SCFH)

FLOW (PSIG) (SCFH) **HEAT OUTPUT** (BTU/HR)

### **HEATING TIPS (Fuel Gas only)**



| VH1  | 1/4"-18NPT(F) | 10-25  | 160-320  | 4-12  | 40-80   |  |
|------|---------------|--------|----------|-------|---------|--|
| VH2  | 1/4"-18NPT(F) | 15-45  | 220-520  | 7-22  | 55-130  |  |
| VH3  | 1/4"-18NPT(F) | 25-70  | 340-920  | 8-25  | 85-230  |  |
| VH4* | 1/4"-18NPT(F) | 50-110 | 640-1300 | 10-30 | 160-325 |  |
| VH5* | 1/4"-18NPT(F) | 60-135 | 720-1600 | 14-40 | 180-400 |  |

100,000-200,000 140,000-330,000 215,000-580,000 400,000-820,000 450,000-1,000,000

**NOTE:** 

To calculate heat

output for propylene, use

2400 BTU/cu. ft. X flow CFH

#### **NOTE:**

On continuous duty withdrawal, manifolding of cylinders may be required.















Use 3/8" hose on larger tips for adequate gas flow

