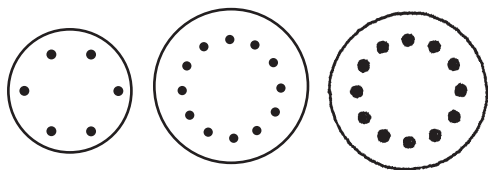


## Actual Size Tips



ST603

ST605

ST610

Heating tips provide significant cost savings in many applications. By providing great amounts of quick, concentrated heat, heating tips do the job faster and cut labor time to a minimum. For proper performance, use the recommended pressures for each tip and with an adequate gas supply. Manifolding of cylinders is essential for safe and efficient operation of large size heating tips. Acetylene multi-flame heating tips are designed to provide large volumes of concentrated heat for bending, straightening, shrinking, forming and many other applications. Smaller sizes are often used for bronze welding or for applying hard facing metal to large areas.

## Heavy Duty / Oxy-Acetylene



ST605

### Heating Tips Used in Welding Handles

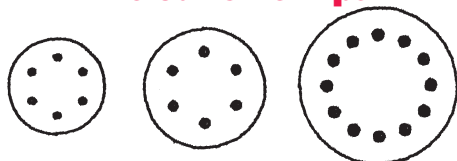
**WARNING! MANIFOLDING CYLINDERS:** When required flows (cubic feet per hour - SCFH) exceed the recommended withdrawal rate from one cylinder then additional cylinders must be manifolded to provide safe and efficient operation. Acetylene must not be withdrawn at more than 1/7 of the cylinder capacity (50 SCFH for a 350 cu. ft. cylinder). Consult your gas supplier for manifolding instructions for the gases and cylinders supplied to you. Refer to Technical Data on website.

Tips

Stock No.	No. of Flames	Drill Size	Pressures (PSIG)		Consumption (SCFH)		Average BTU	Fuel ** Cylinders Required	Overall Length Inches/mm
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			
ST602	6	#64	10	10	31	28	40,125	1	16" / 406
ST603	6	#56	15	15	55	50	71,750	1	16" / 406
ST605	12	#57	15	15	96	87	124,670	2	19" / 483
ST610	12	#54	15	15	150	136	194,890	3	19" / 483

\*\*NOTE: 350 cubic foot minimum cylinder size @ 70° F. / **USED IN:** Torch Handles - SW1A, SW1B & WH200.

## Actual Size Tips



MT603

MT605

MT610

## Medium Duty / Oxy-Acetylene

Versatile multi-flame heating tips for the popular medium duty torch handles. Used for general heating of metals, brazing, hard surfacing, etc. Heads are manufactured from solid copper.

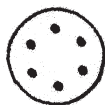


**USED IN:** Torch Handles - WH100, MW5A & CW5A. **MT605**

Stock No.	No. of Flames	Drill Size	Pressures (PSIG)		Consumption (SCFH)		Average BTU	Fuel Cylinders Required	Overall Length Inches/mm
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			
MT603	6	#64	10	15	31	28	40,125	1	10" / 254
MT605	6	#56	10	15	57	51	73,085	**1	16" / 406
MT610	12	#57	10	15	100	90	128,970	**2	18" / 457

\*\*NOTE: 350 cubic foot minimum cylinder @ 70° F. **NOTE:** Tips may also be used with oxygen/hydrogen.

## Actual Size Tip



Handy light duty multi-flame tip for heating, brazing and applying hard facing metals. Uses medium pressure acetylene and oxygen.

**USED IN:** Torch Handles - AW1A & AW10A.

## Standard Duty Acetylene



AT605

Stock No.	No. of Flames	Drill Size	Pressures (PSIG)		Consumption (SCFH)		Average BTU	Fuel * Cylinders Required	Overall Length Inches/mm
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			
AT605	6	#64	10	15	32	29	41,550	1	10" / 254

**NOTE:** Tips may also be used with oxygen/hydrogen.

\* Require minimum 200 cu. ft. acetylene cylinder size.

**CAUTION:** Heating tips must be used in conjunction with high flow flashback arrestors. It may be necessary to increase outlet pressures to compensate for flow restrictions that may be created by flashback arrestors.



## Heavy Duty - Oxy-LP



Medium pressure oxy-propane or propane based heating tips provide high heating performance with low cost fuel gases including natural gas and propane based gases.

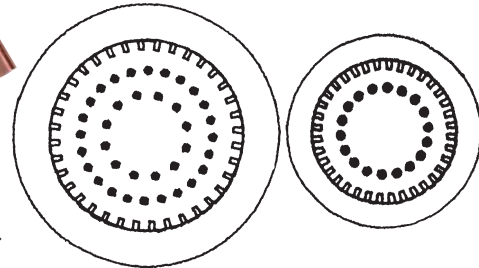
**USED IN:** Torch Handles - WH200 & SW1B.

**NOTE:** ST635 requires 3/8" I.D. (10mm) hose and HB1522B-510 propane cylinder regulator.

**CAUTION:** Heating tips must be used in conjunction with high flow flashback arrestors.

It may be necessary to increase outlet pressures to compensate for flow restrictions that may be created by flashback arrestors.

### Actual Size Tips



ST625  
ST628

ST615

Tips

Stock No.	No. of Flames	Uses	Pressures (PSIG)		Consumption (SCFH)		Average BTU	** Fuel Cylinders Required	Overall Length	Head PN
			Oxygen	Fuel Gas	Oxygen	Fuel Gas				
ST615	Fluted	Propane	23-65	10-28	225-535	70-160	244,000	1-2	15-3/4" (400mm)	1495
		Natural Gas	18-55	10-28	175-450	96-267	155,145	N/A		
		Propylene	20-60	10-28	235-430	100-160	280,000			
ST625	Fluted	Propane	50-110	17-28	480-1000	140-280	455,000	2-3	31-1/2" (800mm)	1504
		Natural Gas	43-80	18-28	390-785	200-450	313,950	N/A		
ST635	Fluted	Propane	70-115	18-40	670-1580	185-480	614,195	2-4	31-1/2" (800mm)	1499

**\*\*Note:** Continuous use with 100 lb. propane tanks @ 70° F.

## Head and Mixer Assemblies

**USED IN:** Torch Handles - WH200 & SW1B

Custom built heating tips for maximum versatility in heating operations. Make any length heating tip. All that is required is to add the desired length of pipe (with 1/4" NPT pipe thread on either end) and attach to the heating assemblies. Pipe is not supplied.

### Head and Mixer Assemblies ONLY



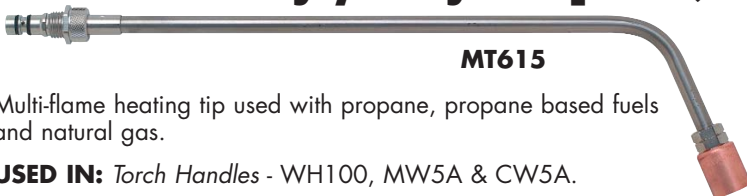
ST628 Any Length Pipe May Be Used

Stock No.	No. of Flames	Uses	Pressures (PSIG)		Consumption (SCFH)		Average BTU	**Fuel Cylinders Required	Head PN
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			
ST628*	Fluted	Propane	50-110	17-28	480-1000	140-280	455,000	2-3	1504
		Natural Gas	43-80	18-28	390-785	200-450	313,950		

\*Head and Mixer Assembly Only

**\*\*Note:** Continuous use with 100 lb. propane tanks @ 70° F.

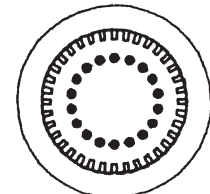
## Medium Duty / Oxy-Propane, Natural Gas



Multi-flame heating tip used with propane, propane based fuels and natural gas.

**USED IN:** Torch Handles - WH100, MW5A & CW5A.

### Actual Size Tip

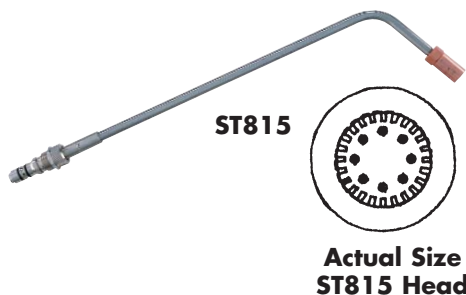


Stock No.	No. of Flames	Uses	Pressures (PSIG)		Consumption (SCFH)		Average BTU	**Fuel Cylinders Required	Overall Length	Head PN
			Oxygen	Fuel Gas	Oxygen	Fuel Gas				
MT615	Fluted	Propane	20-60	10-25	225-535	70-160	286,350	1-2	19" (483mm)	1495
		Natural Gas	15-50	10-25	175-450	96-267	181,500			

**\*\*Note:** Continuous use with 100 lb. propane tanks @ 70° F.

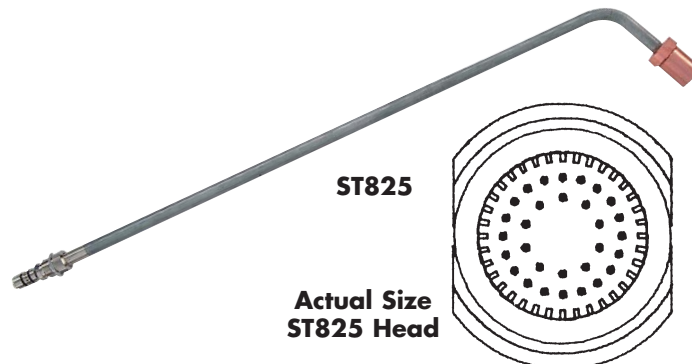


## Heavy Duty / Propylene



**ST815** - Medium capacity tip:  
Use in WH200 &  
SW1B handles.

**Torch Head Stock No. 4642**



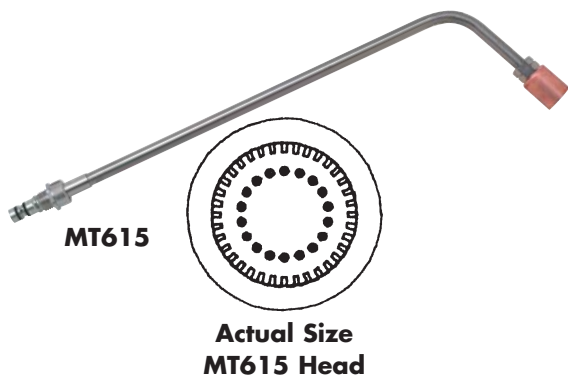
**ST825** - High capacity heating tip:  
Use in WH200 & SW1B torch handles  
with 3/8" (10mm) I.D. hoses.

**Torch Head Stock No. 4639**

Stock No.	No. of Flames	Uses	Pressures (PSIG)		Consumption (SCFH)		Average BTU	**Fuel Cylinders Required	Overall Length
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			
<b>ST815</b>	Fluted	Propylene	37-77	13-37	390-655	120-235	415,000	1-2	20-1/2" (521mm)
<b>ST825</b>			60-110	20-35	580-1500	225-525	830,000	2-5	31" (787mm)

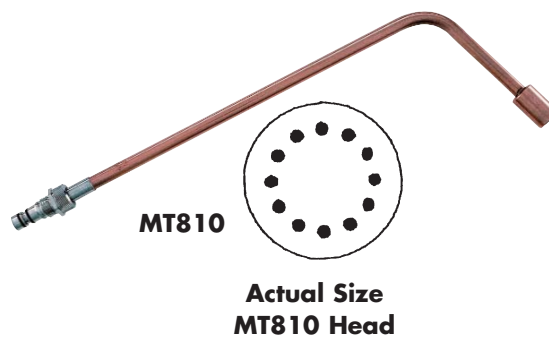
**\*\*Note:** Continuous use with 105 lb. propylene cylinders @ 70° F.

## Medium Duty / Propylene



**MT615 & MT810** - Medium capacity tip: Use in WH100, MW5A & CW5A torch handles.

**MT615 Torch Head Stock No. 1495**



Stock No.	No. of Flames	Uses	Pressures (PSIG)		Consumption (SCFH)		Average BTU	**Fuel Cylinders Required	Overall Length
			Oxygen	Fuel Gas	Oxygen	Fuel Gas			
<b>MT615</b>	Fluted	Propylene	20-60	10-25	235-430	100-160	280,000	2	19" (483mm)
<b>MT810</b>	12		10-22	10-20	120-160	42-58	115,000	1	18" (457mm)

**\*\*Note:** Continuous use with 105 lb. propylene cylinders @ 70° F.

**CAUTION:** Heating tips must be used in conjunction with high flow flashback arrestors. It may be necessary to increase outlet pressures to compensate for flow restrictions that may be created by flashback arrestors.

Tips

## Special Heavy Duty Heating Tip

### JX16 Aluminum Extrusion Cutting Tip **Oxy-Propane or Natural Gas**

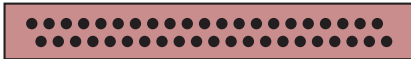
Used to "cut" aluminum extrusions - actually melts the aluminum rather than cutting it as a standard tip cuts steel for a straight edge cut. The JX16 is perfect for use in aluminum extrusion mills and in any other situation where similar cuts are needed. Can also be used as a heating tip. May also be used to texturize stone/brick. Uses LP Gas or Natural Gas with Oxygen.

The head of the JX16 contains 42 orifices, drill sizes #60.

**USED IN:** Torch Handle - SW1B & WH200.



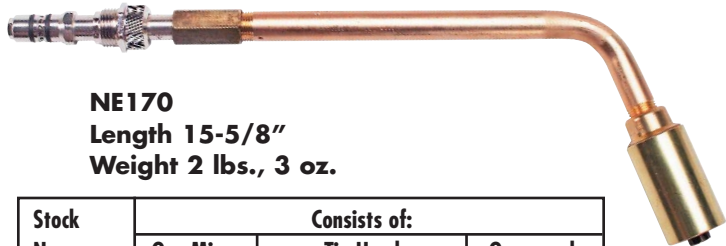
**JX16**  
 Length - 14-1/2" (368mm)  
 Head Size  
 1" X 3-9/16" X 1/2"  
 (25.4mm X 90mm X 13mm)



Tip End Illustration

Tips

Tip Number	Pressure (PSIG)				Propane Consumption (SCFH)		Heat Output BTU/Hour	
	Nat. Gas	Oxy.	Propane	Oxy.	Fuel	Oxy.	Propane	Nat. Gas
JX16	25	80	25	60	128	502	297,000	130,000



**NE170**  
 Length 15-5/8"  
 Weight 2 lbs., 3 oz.

Stock No.	Consists of:		
	Gas Mixer	Tip Head	Gooseneck
<b>NE170</b>	ST625B	NE171 86,000 BTU's/HR	NE171-1

## Heavy Duty / Oxy-LP

### NE170 Propane/Natural Gas Compressed Air Heating Tip

Produces concentrated flame not normally possible with low cost natural gas. Ideal for a wide range of heating applications including die casting. Produces temperatures of 3400°F with natural gas and 3500°F with propane. Operates on gas pressures of 2-10 PSIG and 10-100 PSIG compressed air. For maximum heat output, a minimum of 30 PSIG air is required. Fits WH200 handle.



**15674**  
**Thermite Heating Tip (Railroad)**

Five minute style heating tip for thermite rail welding.

#### Gas Pressures:

Oxygen .....65 PSIG  
 Propane .....15 PSIG

#### Gas Consumption:

Propane .....70 SCFH  
 Oxygen .....275 SCFH

**BTU Output:** .....150,000

Fits SW1A, SW1B or WH200 handles.  
 Overall length 15-1/2".

## Heavy Duty / Oxy-Propane

**CAUTION:** When using liquid oxygen, tips may require greater gas volume than a single cylinder is capable of producing. External evaporators or manifolding multiple cylinders may be necessary to supply sufficient gas flows.

### WARNING!

**MANIFOLDING CYLINDERS:** When required flows (cubic feet per hour - SCFH) exceed the recommended withdrawal rate from one cylinder then additional cylinders must be manifolded to provide safe and efficient operation.

