# **Heating Tips**

Quick **Specs** 

### **Typical Applications**

Farm and ranch Metal fabrication Construction and demolition Maintenance and repair DIY/home hobbyist

### **Oxy-Fuel Processes**

Heating Brazing Soldering

#### **Fuel Gases**

Acetylene Propane Natural gas Propylene

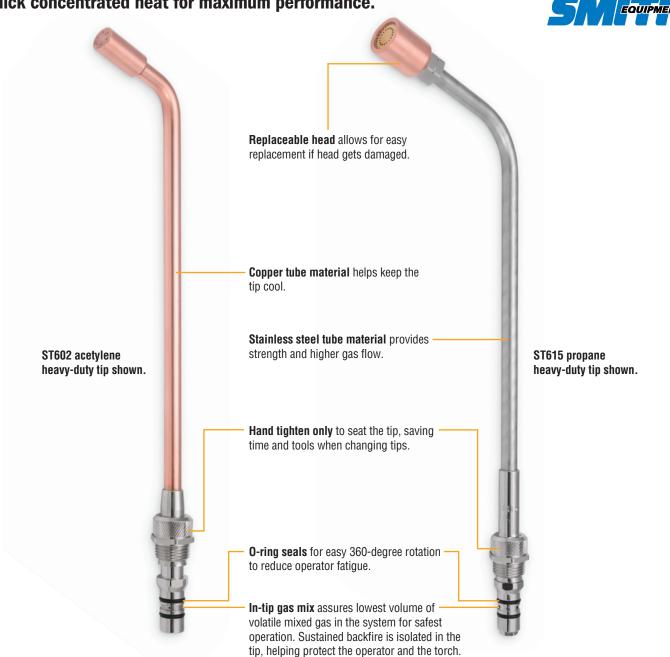
### **Tip Types**

Specialty Heavy-duty Medium-duty Standard-duty

### **Gas Mixing**

In the tip

Quick concentrated heat for maximum performance.





Miller Electric Mfg. LLC

An ITW Welding Company 1635 West Spencer Street P.O. Box 1079 Appleton, WI 54912-1079 USA

### **Equipment Sales US and Canada**

Phone: 866-931-9730 FAX: 800-637-2315

International Phone: 920-735-4554 International FAX: 920-735-4125



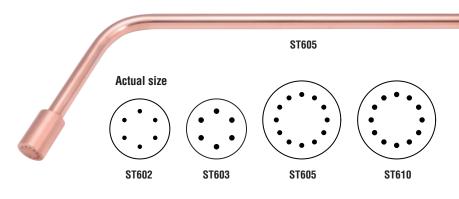








### ST600 Series Heavy-Duty Heating Tips (Acetylene)



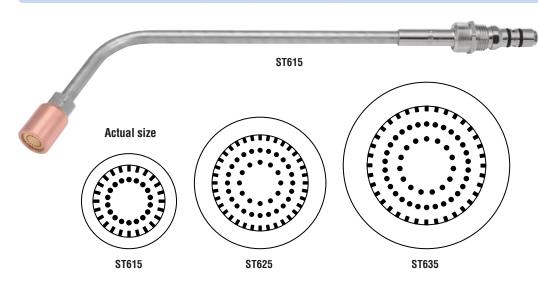
### For use with WH200A heavy-duty torch handle.

### Materials of construction

- Head: copperTube: copper
- Nut: nickel-plated brass
- Mixing section: nickel-plated brass
- O-rings: Buna-N

		Average	Pressure (psig)		Gas Consumption (scfh)				350 Cubic Foot Fuel
Gas Service	Stock No.	Btu/Hour	Oxygen	Acetylene	Oxygen	Acetylene	Drill Size	Overall Length	Cylinders Required
Acetylene	ST602	40,125	15	15	31	28	64	16 in. (406 mm)	1
	ST603	71,750	15	5 15		50	56	16 in. (406 mm)	1
	ST605	124,670	15	15	96	87	57	19 in. (483 mm)	2
	ST610	194,890	15	15	150	136	54	19 in. (483 mm)	3

### **ST600 Series Heavy-Duty Heating Tips** (Propane/Natural Gas)



### For use with WH200A heavy-duty torch handle.

#### **Materials of construction**

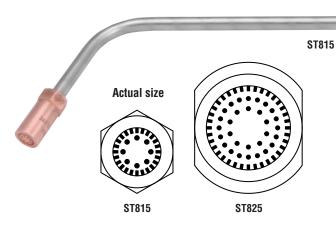
- · Head shell: copper
- · Head insert: brass
- Head nut: nickel-plated brass
- Tube: stainless steel
- · Nut: nickel-plated brass
- · Mixing section: nickel-plated brass
- O-rings: Buna-N

		Average	Pressure (	osig)	Gas Consump	tion (scfh)		Head	
Gas Service	ce Stock No. Btu/Hour Oxygen Fuel		Fuel Gas	Oxygen	Fuel Gas	Overall Length	Number		
Propane/	ST615	<b>T615</b> 244,000 23–65 10–28 (propane)		10-28 (propane)	225-535	70-160 (propane)	15.5 in. (394 mm)	1495	
natural gas		155,145	55,145 18-55 10-28 (natural ga		175-450	92-267 (natural gas)			
	ST625	455,000	50-110	17-28 (propane)	480-1,000 140-280 (propane)		31.5 in. (800 mm)	1504	
		313,950	43-80	18-28 (natural gas)	390-785	200-450 (natural gas)			
	ST635*	614,195	70-115	18-40 (propane)	670-1,580	185-480 (propane)	31.5 in. (800 mm)	1499	

<sup>\*</sup>ST635 requires 3/8 inch (10 mm) I.D. hose and 40-50-510 propane cylinder regulator.



### **ST800 Series Heavy-Duty Heating Tips** (Propylene)



#### For use with WH200A heavy-duty torch handle.

#### **Materials of construction**

· Head: copper

• Tube: stainless steel

· Nut: nickel-plated brass

• Mixing section: nickel-plated brass

• O-rings: Buna-N

			Average	Pressure (psig)		Gas Consumption (scfh)			
Gas Servi	ce	Stock No.	Btu/Hour	Oxygen	Propylene	Oxygen	Propylene	Overall Length	Torch Head Number
Propylene		ST815	273,000	37-77	13-37	390-655	120-235	16 in. (406 mm)	4642
		ST825	830,000	60-110	20-35	580-1,500	225-525	16 in. (406 mm)	4639

### SC Series Heavy-Duty Special-Purpose Tips (Acetylene or Propane)

### **Actual size**









#### SC83 materials of construction

- Body: tellurium copper
- Seat: graphite
- Seat collar: brass

### SC112 materials of construction

- Insert: brass
- Sleeve: brass
- · Shell: nickel-plated tellurium copper
- Seat: graphite
- Seat collar: brass

### For use with the following torches:

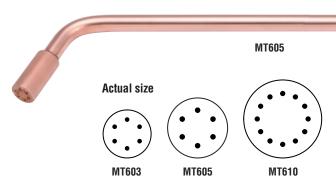
**Cutting torches:** SC220, SC225, SC229, SC229S, SC360, SC365, SC369, SC925, SC929, SC930, SC935, SC939, SC940, SC945, SC949, SC960, SC965, SC969

Machine torches: SC770, SC772A

		Average	Pressure (	psig)	Gas Consumption (scfh)				
Gas Service	Stock No.	Btu/Hour	Oxygen	Fuel Gas	Oxygen	Fuel Gas	Drill Size	Overall Length	Fuel Cylinders Required
Acetylene	SC83	83,000	15	10 (acetylene)	58	52 (acetylene)	56	3.5 in. (89 mm)	2 (350 cu. ft. cylinders)
Propane	SC112	289,000	60	25 (propane)	495	125 (propane)	Slots	3.5 in. (89 mm)	2 (100 lb. cylinders)



### MT600 Series Medium-Duty Heating Tips (Acetylene)



### For use with WH100 medium-duty torch handle.

#### **Materials of construction**

Head: copperTube: copper

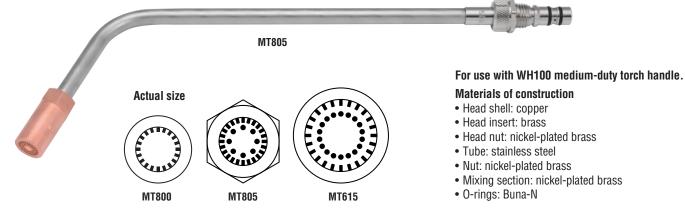
Nut: nickel-plated brass

· Mixing section: nickel-plated brass

• O-rings: Buna-N

			Average	Pressure (p	Pressure (psig)		Gas Consumption (scfh)			350 Cubic Foot Fuel
Gas S	ervice	Stock No.	Btu/Hour	Oxygen	Acetylene	Oxygen	Acetylene	Drill Size	Overall Length	Cylinders Required
Acetyl	lene	MT603	40,125	15	15	31	28	64	10 in. (254 mm)	1
		MT605	73,085	15	15	57	51	56	16 in. (406 mm)	1
		MT610	128,970	15	15	100	90	57	18 in. (457 mm)	2

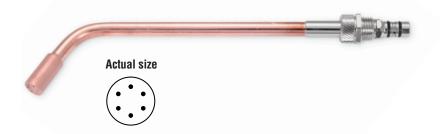
### MT805 and MT615 Medium-Duty Heating Tips (Propane/Natural Gas/Propylene)



		Average	Pressure (	psig)	Gas Consump	tion (scfh)		Head	
Gas Service	Stock No.	Btu/Hour	Oxygen	Fuel Gas	Oxygen	Fuel Gas	Overall Length	Number	
Propane/	MT805	208,000	50-60	20-25 (propane)	206-230	80-100 (propane)	14 in. (356 mm)	4642	
natural gas	MT615	269,000	20-60	\(\frac{1}{2}\)		70-160 (propane)	14 in. (356 mm)	1495	
		182,000	15-50	10-25 (natural gas)	175-450	96-267 (natural gas)			
Propylene	MT805	280,000	50-60	10-25 (propylene)	242-270	120-135 (propylene)	14 in. (356 mm)	4642	
	MT615	280,000	20-60	10-25 (propylene)	235-430	100-160 (propylene)	14 in. (356 mm)	1495	



### AT605 Standard-Duty Heating Tip (Acetylene)



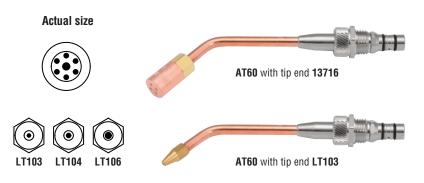
### For use with AW1A standard-duty torch handle.

#### **Materials of construction**

- · Head: copper
- · Tube: copper
- Nut: nickel-plated brass
- . Mixing section: nickel-plated brass
- O-rings: Buna-N

		Average	Pressure (p	osig)	Gas Consumption (scfh)				200 Cubic Foot Fuel
Gas Service	Stock No.	Btu/Hour	Oxygen	Acetylene	Oxygen	Acetylene	Drill Size	Overall Length	Cylinders Required
Acetylene	AT605	41,550	15	15	32	29	64	10 in. (254 mm)	1

### AT60 Standard-Duty Heating Tip (Acetylene)



### For use with AW1A standard-duty torch handle.

#### AT60 materials of construction

- Tube: copper
- Nut: nickel-plated brass
- · Mixing section: nickel-plated brass
- O-rings: Buna-N

#### 13716 materials of construction

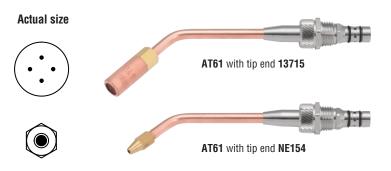
- · Outer sheel: copper
- · Insert: brass

#### LT100 series materials of construction

Brass

				Average	Pressure (psig)		Gas Consumption (scfh)		Overall Length	
Gas Ser	rvice	Stock No.		Btu/Hour	Oxygen	Acetylene	Oxygen	Acetylene	(not including tip end)	
Acetylen	пе	AT60	13716	16,080	17	17	17	17	5.6 in. (142 mm)	
			LT103	6,300	10	10	4.3	4.3		
			LT104	13,200	10	10	9	9		
			LT106	25,000	10	10	17	17		

### AT61 Standard-Duty Heating Tip (Propane/Natural Gas)



### For use with AW1A standard-duty torch handle.

#### AT61 materials of construction

- Tube: copper
- Nut: nickel-plated brass
- · Mixing section: nickel-plated brass
- O-rings: Buna-N

### 13715 materials of construction

- · Outer sheel: copper
- Insert: brass

#### NE154 materials of construction

Brass

			Average	Pressure (	Pressure (psig)		imption (scfh)	Overall Length
Gas Service	Stock No.	Tip End	Btu/Hour	Oxygen	Propane/Natural Gas	Oxygen	Propane/Natural Gas	(not including tip end)
Propane/natural gas	AT61	13715	16,600	38	12	38	12	5.6 in. (142 mm)
		NE154	27,500	10	10	38	11	



### AT600 and AT600X6 Standard-Duty Heating Tips (Acetylene/Propane/Natural Gas)



### **Actual size**











Γ106 NE154

AT600 and AT600X6 Heating Tips **Overall Length Gas Service** Stock No. with Tip Ends Tip Ends AT600 13.8 in. (351 mm) LT103, LT104, Acetylene LT106 AT600X6 9.8 in. (249 mm) AT600 NE154 Propane/ 13.8 in. (351 mm) natural gas AT600X6 9.8 in. (249 mm)

Note: Use LT100 series tip ends for acetylene (LT103 tip ends are included with AT600 and AT600X6) and NE154 tip ends for propane/natural gas (see chart below).

### For use with AW1A standard-duty torch handle. AT600 and AT600X6 materials of construction

- Tip nut: nickel-plated brass
- Tube: nickel-plated copper
- · Mixing section: nickel-plated brass
- O-rings: Buna-N

#### LT100 series and NE154 materials of construction

Brass

		Btu per	Pressure (	psig)	Gas Consumption (scfh)		Brazing Capacity	
Gas Service	Stock No.	Hour	Oxygen	Fuel Gas	Oxygen	Fuel Gas	Copper Pipe Diameter	Drill Size
Acetylene	LT103	12,600	10	10	8.6	8.6 (acetylene)	1/2-3/4 in. (12-19 mm)	63
	LT104	26,400	10	10	18	18 (acetylene)	5/8-1 in. (16-25 mm)	56
	LT106	50,000	10	10	34	34 (acetylene)	3/4-1-1/2 in. (19-38 mm)	52
Propane/ natural gas	NE154	55,000	10	10	76	22 (propane/natural gas)	7/8-1-5/8 in. (22-41 mm)	36



## **Notes**



# **Ordering Information**

Heating Tips	Stock No.	Description	Qty.	Price
Heavy-Duty Heating Tips				
ST600 Series Heating Tips (for use with WH200A torch handle)	\$T602 \$T603 \$T605 \$T610 \$T615 \$T625 \$T635	For acetylene, see page 2 For propane/natural gas, see page 2 For propane/natural gas, see page 2 For propane, see page 2 For propane, see page 2		
ST800 Series Heating Tips (for use with WH200A torch handle)	ST815 ST825 SC83	For propylene, see page 3 For propylene, see page 3		
SC Series Special-Purpose Tips (for use with cutting or machine torches)	SC83 SC112	For acetylene, see page 3 For propane, see page 3		
Medium-Duty Heating Tips MT600 Series Heating Tips (for use with WH100 torch handle)	MT603 MT605 MT610 MT615	For acetylene, see page 4 For acetylene, see page 4 For acetylene, see page 4 For propane/natural gas/propylene, see page 4		
MT805 Heating Tip (for use with WH100 torch handle)	MT805	For propane/natural gas/propylene, see page 4		
Standard-Duty Heating Tips				
AT Series Heating Tips (for use with AW1A torch handle)	AT605 AT60 AT61 AT600 AT600X6	For acetylene, see page 5 For acetylene, see page 5 For propane/natural gas, see page 5 For acetylene/propane/natural gas, see page 6 For acetylene/propane/natural gas, see page 6		
Replacement Parts				
Tip Ends	LT103 LT104 LT106 NE154	For acetylene, see page 6 For acetylene, see page 6 For acetylene, see page 6 For propane/natural gas, see page 6		

Date: Total Quoted Price:

Distributed by:

