



- SW** Heavy Duty Welding & Brazing Tips
- MW** Medium Duty Welding & Brazing Tips
- AW** Standard Duty Welding & Brazing Tips (Airline™)

SMITH "SOFT FLAME" - Makes Welding Easier

Smith welding tips are quality engineered to provide easy handling, high performance and added protection in welding, brazing and soldering operations.

- 1 "Soft Flame" - Makes Welding Easier**
 Smith "soft flame" welding tips provide concentrated heat for better "puddle" control — the turbulent-free flame eliminates puddle chasing. Soft flame provides deep, even penetration without burning through base metal for strong, dependable welds. Molten metal is protected from atmospheric oxidation by smooth, even flame envelope.
- 2 Slip-In Tips - Permit 360° Turn For Convenient Positioning**
 Tip may be rotated eliminating hose resistance during operation. "Slip-In" tips can be changed in just seconds. Hand tighten, no wrench needed. "O" rings provide gas tight seal. Keeps gases separate until they mix in the tip.
- 3 "O" Ring Seals - Highly Reliable Sealing**
 "O" rings provide gas tight seal with no metal seating surface to damage if dropped. Gases kept separate until entering the mixing chamber.
- 4 Heavy Wall Copper - Provides Longer Life**
 The heavy wall copper gives greater resistance to reflected heat, permits cooler operation, dissipates more heat than thin wall copper. Heat absorbing tips provide longer life, and the long straight-away design permits tip refacing after excessive wear or abuse.

100% TESTING - ASSURED PERFORMANCE

Each tip is individually tested on Smith designed automatic testing machines and must pass stringent requirements for flame characteristics, gas flow and resistance to backfire or flashback.

FUEL GAS CHART

Generic Name	Trade Name
Acetylene	—
Methylacetylene-Propadiene (MPS)	MAPP®
Propane, Propane-Based Mixtures	Propane-butane, Flamex, Acetogen, Chem-O-Lene, FL. Industrial Gas, Hy-Temp, Fuel Gas, I.G. Gas, Chem-Gas, Lingas, Chemtane
Propylene	HPG, Apachi, B-Plus, Gulf HP Gas, HEF, B.T.U., Liquifuel
Natural Gas (Methane)	Natural Gas, City Gas

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 Acetylene must not be withdrawn at more than 1/7 of the cylinder capacity (47 SCFH for a 330 cu. ft. cylinder). Consult your gas supplier for manifolding instructions for the gases and cylinders supplied to you.



Heavy Duty "SW" Series



SW209

SW200 Series

Oxy-Acetylene

The SW200 Series is for general and heavy welding and brazing. Swaged construction provides greater heat concentration for improved "puddle" control. Tips bent to 63-1/2° angle.

USE IN: Torch Handles - WH200 & SW1B.

FUEL GASES: These tips may also be used for brazing with MAPP®, Liquid Air Fuel-Gas or brazing with propylene base fuel gases. When using these gases, select a tip two sizes larger than recommended for the same work as acetylene.

Tip Number	Welding Range		Drill Size	Pressure Each Gas (PSIG) at Reg.	Consumption Each Gas (SCFH)
	Inches	mm			
SW201	1/32	.7	71	10	2.3
SW203	5/64	1.9	67	10	3.2
SW205	1/8	3	57	10	6
SW207	3/16	5	54	10	12
SW209	3/8	10	49	10	23
SW210	1/2	13	44	15	36

Replaceable "O" rings: LW15 (Pkg. of 25).

NOTE: Not recommended for use with Propane.

Consumption (SCFH: cubic feet per hour) figures shown, represent the average volumes of gases consumed when acetylene is added until sooty smoke just disappears from the acetylene flame prior to opening the oxygen valve and adjusting to a neutral flame.

Tips

Medium Duty "MW" Series



MW205

MW200 Series

Oxy-Acetylene

MW200 Series is for general purpose medium duty welding which features Smith "soft flame" for easier puddle control and better penetration. Tips are bent to 63-1/2° angle. Replaceable "O" rings: MW15 (Pkg. of 25).

USE IN: Torch Handles - WH100, MW5A & CW5A.

FUEL GASES: These tips may also be used for brazing with MAPP®, Liquid Air Fuel-Gas or brazing with propylene base fuel gases. When using these gases, select a tip two sizes larger than recommended for the same work as acetylene.

Tip Number	Welding Range		Drill Size	Pressure Each Gas (PSIG) at Reg.	Consumption Each Gas (SCFH)
	Inches	mm			
MW201	1/32	.7	71	10	2.3
MW203	5/64	1.9	67	10	3.2
MW205	1/8	3	57	10	6
MW207	3/16	5	54	10	12
MW209	3/8	10	49	10	23

NOTE: Not recommended for use with Propane.

Consumption (SCFH: cubic feet per hour) figures shown, represent the average volumes of gases consumed when acetylene is added until sooty smoke just disappears from the acetylene flame prior to opening the oxygen valve and adjusting to a neutral flame.

Medium Duty "MW" Series

MW400 Series

Oxy-Propane/Natural Gas

General purpose medium duty brazing tip designed specifically for use with propane or propane base mixture fuel gases with oxygen. Also used for melting Platinum, up to 2oz. Replaceable "O" rings: MW15 (Pkg. of 25).

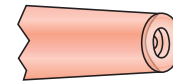
USE IN: Torch Handles - WH100, MW5A & CW5A.



MW411

Tips

Tip Number	Pressure (PSIG)		Consumption Each	
	Oxygen	Propane	Oxygen	Propane
MW411	11	11	51.9	13



Tip End Recessed For Propane or Natural Gas

Standard Duty "AW" Series

AW200 Airline™ Series

Oxy-Acetylene

General purpose standard duty welding/brazing tips. Shorter, lighter and easier to handle. Replaceable "O" rings: AW15 (Pkg. of 25).

USE IN: Torch Handles - AW1A & AW10A.

FUEL GASES: These tips may also be used for brazing with MAPP®, Liquid Air Fuel-Gas or brazing with propylene base fuel gases. When using these gases, select a tip two sizes larger than recommended for the same work as acetylene.

NOTE: Not recommended for use with Propane.



AW205

Tip Number	Welding Range		Drill Size	Pressure Each Gas (PSIG) at Reg.	Consumption Each Gas (SCFH)
	Inches	mm			
AW201	Very Light Metal up to 1/32	.7	71	10	2.3
AW203	5/64	1.9	67	10	3.2
AW205	1/8	3	57	10	6
AW207	3/16	5	54	10	12
AW209	3/8	10	49	10	23
AW210	1/2	13	44	11	36

Consumption (SCFH: cubic feet per hour) figures shown, represent the average volumes of gases consumed when acetylene is added until sooty smoke just disappears from the acetylene flame prior to opening the oxygen valve and adjusting to a neutral flame.

