

Medium-Duty and Standard-Duty Tips

MC12 Series



Acetylene

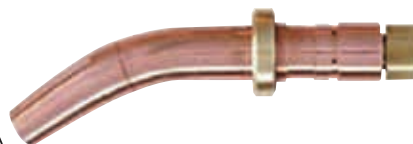
Slip-in cutting tips for general medium-duty hand cutting. Use with medium pressure acetylene and oxygen.

Compatible cutting attachments

- MC509, CC509P, DG109A, AC309 (AC309: maximum size MC12-4)

| Tip Number | Metal Thickness Inches (mm) | Consumption (SCFH) | | | Drill Size Cutting Jet |
|------------|-----------------------------|--------------------|---------|-------------------|------------------------|
| | | Oxygen | | Acetylene Preheat | |
| | | Cutting | Preheat | | |
| MC12-00 | 1/8 (3) | 30 | 7 | 6 | 68 |
| MC12-00 | 3/16 (5) | 30 | 7 | 6 | 68 |
| MC12-0 | 1/4 (6) | 40 | 7 | 6 | 62 |
| MC12-0 | 3/8 (10) | 46 | 7 | 6 | 62 |
| MC12-1 | 1/2 (13) | 75 | 9 | 7 | 55 |
| MC12-1 | 5/8 (16) | 81 | 9 | 7 | 55 |
| MC12-2 | 3/4 (19) | 107 | 11 | 9 | 54 |
| MC12-2 | 1 (25) | 118 | 11 | 9 | 54 |
| MC12-3 | 1-1/2 (38) | 170 | 12 | 10 | 51 |
| MC12-3 | 2 (51) | 181 | 12 | 10 | 51 |
| MC12-4 | 2-1/2 (64) | 249 | 14 | 12 | 45 |
| MC12-4 | 3 (76) | 267 | 14 | 12 | 45 |
| MC12-4 | 4 (102) | 320 | 15 | 13 | 45 |
| MC12-5 | 5 (127) | 420 | 15 | 13 | 41 |
| MC12-5 | 6 (152) | 485 | 15 | 13 | 41 |

MC13-3 Gouging



Acetylene

For edge preparation, removal of old welds or defects in steel. Heavy preheat.

Compatible cutting attachments

- MC505, MC509, CC509P, AC309 and DG109A

| Tip Number | Purpose | Capacity Inches (mm) | Consumption (SCFH) | |
|------------|---------|-------------------------------|--------------------|-----------|
| | | | Oxygen | Acetylene |
| MC13-3 | Gouging | 3/8 (10) wide 1/4 (6) deep | 115 | 24* |

*One 350-cu.-ft. cylinder required.

MC40 Series (Two-Piece)



Propane

Two-piece medium preheat cutting tips for hand cutting with propane and propane-based fuel gases.

Compatible cutting attachments

- MC505, MC509, CC509P, AC309 and DG109A

| Tip Number | Metal Thickness Inches (mm) | Consumption (SCFH) | | | Drill Size Cutting Jet |
|------------|-----------------------------|--------------------|---------|-----------------|------------------------|
| | | Oxygen | | Propane Preheat | |
| | | Cutting | Preheat | | |
| MC40-00 | 3/16 (5) | 24 | 35 | 7 | 68 |
| MC40-0 | 1/4 (6) | 40 | 35 | 7 | 62 |
| MC40-0 | 3/8 (10) | 46 | 35 | 7 | 62 |
| MC40-1 | 1/2 (13) | 75 | 35 | 7 | 55 |
| MC40-1 | 5/8 (16) | 81 | 35 | 7 | 55 |
| MC40-2 | 3/4 (19) | 107 | 35 | 7 | 54 |
| MC40-2 | 1 (25) | 118 | 35 | 7 | 54 |
| MC40-2 | 1-1/4 (32) | 133 | 35 | 7 | 54 |
| MC40-3 | 1-1/2 (38) | 170 | 35 | 7 | 51 |
| MC40-3 | 2 (51) | 181 | 35 | 7 | 51 |
| MC40-4 | 2-1/2 (64) | 249 | 35 | 7 | 51 |
| MC40-4 | 3 (76) | 267 | 35 | 7 | 51 |
| MC40-4 | 4 (102) | 320 | 35 | 7 | 51 |

See data note at right.

MC60 Series (Two-Piece)



Propylene

Two-piece medium preheat cutting tips for hand cutting with propylene or propylene-based fuel gases.

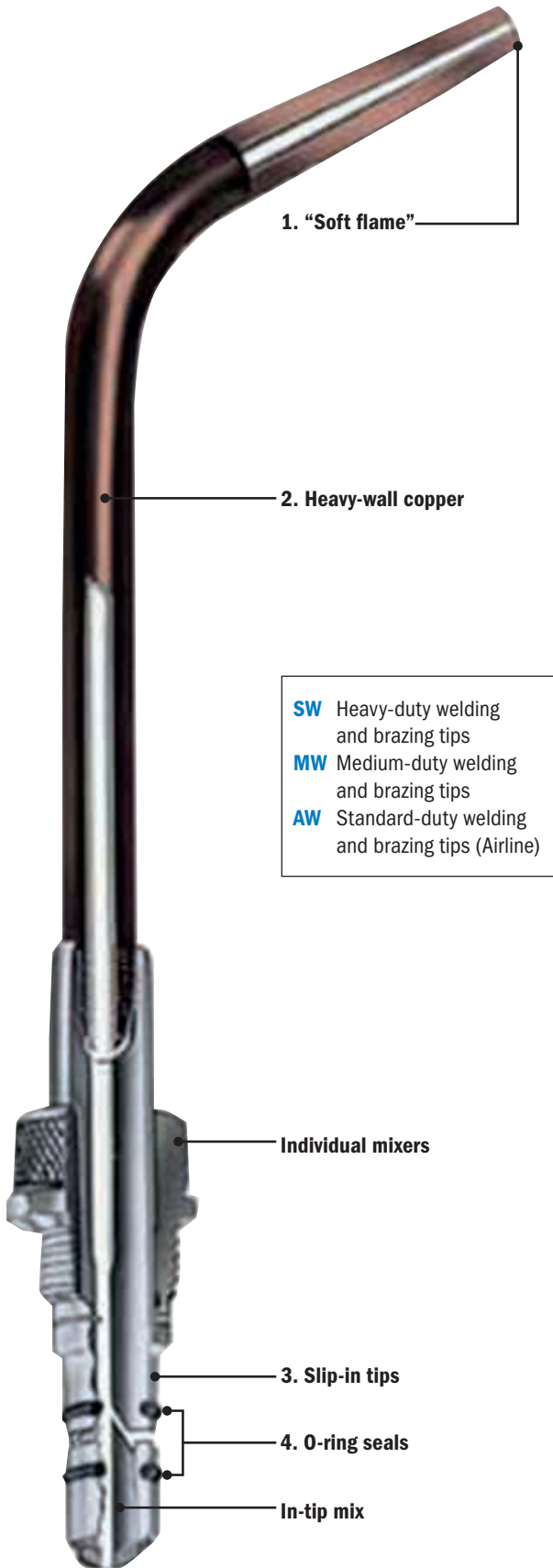
Compatible cutting attachments

- MC505, MC509, CC509P, AC309 and DG109A

| Tip Number | Metal Thickness Inches (mm) | Consumption (SCFH) | | | Drill Size Cutting Jet |
|------------|-----------------------------|--------------------|---------|-------------------|------------------------|
| | | Oxygen | | Propylene Preheat | |
| | | Cutting | Preheat | | |
| MC60-1 | 1/2 (13) | 75 | 26 | 7 | 55 |
| MC60-1 | 5/8 (16) | 81 | 26 | 7 | 55 |
| MC60-2 | 3/4 (19) | 107 | 26 | 7 | 54 |
| MC60-2 | 1 (25) | 118 | 26 | 7 | 54 |
| MC60-2 | 1-1/4 (32) | 133 | 26 | 7 | 54 |
| MC60-3 | 1-1/2 (38) | 170 | 42 | 11 | 51 |
| MC60-3 | 2 (51) | 181 | 42 | 11 | 51 |
| MC60-4 | 2-1/2 (64) | 249 | 42 | 11 | 45 |
| MC60-4 | 3 (76) | 267 | 42 | 11 | 45 |
| MC60-4 | 4 (102) | 320 | 42 | 11 | 45 |

Data based on 25-ft. (7.6 m) of 3/16-in. (5 mm) ID hose for cutting up to 1-1/2-inch (38 mm) steel and 25-ft. (7.6 m) of 1/4-in. (6 mm) ID hose for cutting 2-in. (51 mm) steel and above.

Welding Tips



Our “soft flame” welding tips are 100-percent tested and inspected, and make welding easier.

Our welding tips are quality engineered to provide easy handling, high performance and added protection in welding, brazing and soldering operations. Each tip is individually tested on our automatic testing machines and must pass stringent requirements for flame characteristics, gas flow and resistance to backfire or flashback.

Construction features

- 1 “Soft flame”**

Our “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 Heavy-wall copper**

Heavy-wall copper gives greater resistance to reflected heat, permits cooler operation, and 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.
- 3 Slip-in tips**

Tips may be rotated 360 degrees for convenient positioning, 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 keeping gases separate until they mix in the tip.
- 4 O-ring seals**

O-rings provide gas-tight seal with no metal seating surface to damage if dropped. Gases are kept separate until entering the mixing chamber.

Fuel Gas Chart

| Generic Name | Trade Name |
|------------------------------------|--|
| Acetylene | – |
| Propane and Propane-Based Mixtures | Propane-butane, Flamex, Acetogen, Chem-O-Lene, Florida Industrial Gas, Hy-Temp, Fuel Gas, I.G. Gas, Chem-Gas, Lingas, Chemtone |
| Propylene | HPG, Apache, B-Plus, Gulf HP Gas, HEF, Liquifuel, B.T.U. |
| Natural Gas (Methane) | Natural Gas, City Gas |

CAUTION: 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 per hour (50 SCFH for a 350 cu. ft. cylinder). Consult your gas supplier for manifolding instructions for the gases and cylinders supplied to you.