

## Guide For Heavy & Medium Duty Tips

### Heavy Duty SC Series Tips

ACETYLENE	PROPYLENE	PROPANE	NAT. GAS
SC12	SC60	SC46	
SC56*		SC40	
		SC50*	

**NOTE:** Last digit in tip part number indicates tip size. i.e. - SC12-3 has Size 3 cutting orifice.

**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.

Tips

### Medium Duty MC Series Tips

MC12	MC60	MC40
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**ONE  
PIECE**

\* Heavy Duty Preheat  
\*\* High Speed Cutting

TIP SERIES	APPLICATIONS AND CHARACTERISTICS
SC12, MC12	General cutting operations, medium preheat.
SC46	Dirty, heavily coated metals. Rugged use (scrapping, heavy construction). Used where excessive reflected heat is present.
SC56	Dirty, coated metal. Heavy preheat for faster starts. CAUTION: Manifolding may be necessary for large tips with acetylene.
SC50	Coated metals. Heavy preheat for faster starts. Excellent for scrapping operations.
SC40, 60 MC40, 60	General cutting operations, medium preheat.

#### TIP CHART INFORMATION

**PRESSURE AND FLOW DATA:** Cutting data charts are intended as a guide for quality cutting. The data was gathered under ideal shop conditions and on new, clean steel using three-hose machine cutting torches mounted on a portable cutting machine. All pressure settings are flowing pressures. Unless noted otherwise data is based on 25' (7.6m) of 1/4" (6mm) I.D. hose. Pressure must be increased if longer or smaller I.D. hose is used. Preheat flow will normally yield 4-6 second edge starts and 15-20 second pierce starts on 1" (25.4mm) material for SC series cutting tips, and on 1/2" (13mm) material for MC series tips.

**HOSES:** Do not use excessively long hoses or hoses with many hose unions, either will restrict gas flow and pressure causing lower cutting efficiency and possibly leading to dangerous operating conditions.

**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 Acetylene must not be withdrawn at more than 1/7 of the cylinder capacity (47 SCFH for a 330 cu.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.

**AVAILABILITY:** Some tips included in Technical Data may no longer be available. Non-current tips have been included in this section for cross reference purposes.

#### 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

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