Hand & Machine Cutting



- 18 fine splines for faster preheat Chrome plated for longer shell life
 Stainless Cutting Oxygen Insert for high speed Hand or Machine Cutting
- Up to 6+ inches stand-off distance while cutting with reduced Kerf width.
- 3 to 5 times longer tip life.

Ripper reduces smoke, cuts faster, lasts longer



 Corse splines for faster preheat timesEasily cleaned Stainless insert. 3 to 6" standoff rips thru scrap steel, paint, rust, with narrow kerf width

- Excellent for beveling
- Used with Propylene. Reduced smoke and fume levels
- · Environmentally friendly, reduced fuel costs

Multipurpose Gouger



 Performs as 3 different gougers simply by changing the oxygen pressure.



 Heating Head BTU output ranges from 120,000 to 1.2 million BTUs THE SAFE, PROVEN AND PRODUCTIVE FUEL

Propylene is a dominant fuel gas used in the U.S metal working market. It is the most efficient fuel being used for cutting, heating, gouging, brazing, flame hardening, and metalizing.

WHY?

Because Propylene provides slag free cuts, faster preheat, reduced flashback, less handling, more productive cutting speeds and it costs less than acetylene! Increased safety, increased production, increased quality cuts, at a substantial cost savings.

FASTER

- Faster Cutting Speeds And Heating Times
- Quality Cuts = Less Grinding
- 80% Less Cylinder Change Outs

SAFER

- Lower Explosive Limits Than Acetylene
- Does Not Become Unstable At Higher PSI
- 50% Reduction In Psi Compared To Propane

CHEAPER

- 50% Reduction In Cost Compared To Acetylene
- Increase In Production = Lower Cost To Cut Per Linear Foot

18005 E. Highway 225, LaPorte, Texas 77571 Tel: 281.471.2200 gasinnovations.com

GAS INNOVATIONS

CALL YOUR LOCAL WELDING DISTRIBUTOR FOR A DEMO AND SEE THE DIFFERENCE

PROPYLENE THE INNOVATIVE FUEL

REDUCED FLASHBACKS

INCREASE SAFETY

FASTER PREHEATS

SLAG FREE CUTS

MORE PRODUCTIVE CUTTING SPEEDS

GAS INNOVATIONS

PROPYLENE IS FASTER

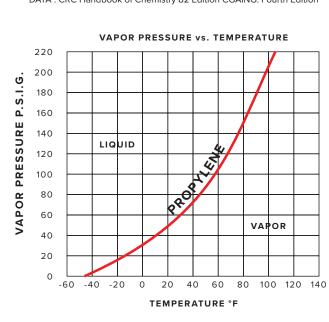
PROPYLENE IS CHEAPER

Increased cutting speed is money. In a comparison of physical constants Propylene's values surpass those of Acetylene and Natural Gas, making Propylene the fastest.

Physical Constants*

	Propylene	Acetylene	Natural Gas	
UN Number	1077	1001	1971	
Flame Temp °F	5312	5589	4460	
Secondary Flame °F	1938	963	989	
Heat of Combustion	2372	1436	910.7	
Heat Value BTU/Ib	21,111	20,822	21,494	
Lbs/Gas Liquid	4.35		3.552	
Explosive Limits in Air %	1.9-11.1	2.5-100	5.0-15	
Max Usable Pressure @ 70°F	133 psig	15 psig Compresso		
Carbon Bond	Double	Triple	Single	
Tendency to Flashback	Very Low	Extreme Low		

* DATA : CRC Handbook of Chemistry 82 Edition CGAING: Fourth Edition





Temperature °F							
Cyl. Size	-5	10+	20+	40+	60+		
27 lbs	8	16	21	32	42		
63 lbs	15	29	39	58	78		
105 lbs	20	40	53	80	106		
435 lbs	44	89	119	178	238		
1,000 gal	205	338	533	791	1190		
40% Full - Multiply by 0.8			20% Full - Multiply by 0.6				

PROPYLENE IS SAFER

Propylene is 20 times more stable than acetylene, contains no asbestos filler inside the cylinder like acetylene and has a much lower tendency to flashback than acetylene. Because of Propylene's stability it can be used at full cylinder pressure. Acetylene's maximum usable pressure is limited to 15 PSIG.*

Cylinders are lighter and a comparable size cylinder will do the work of 5 acetylene cylinders. This allows for easier handling with less change out frequency, reduced storage space, & reduced rental charges.

One Propylene Cylinder does the work of 5 Acetylene Cylinders



(1) 105 lbs Propylene Cylinder 105 lbs. of product/cyl.

(5) 360 cu. ft Acetylene Cylinder 20 lbs. of product/cyl.

Cost Evaluation

Acetylene @			per 100 cu. ft.
	x	3.3	_ (330 cu. ft./cyl)
	=\$		_per cylinder
	x	5	_ cylinders



Propylene @ _____ per lbs.

x <u>105</u> lbs.

=\$

Your Savings

=\$ _____

GAS INNOVATIONS®