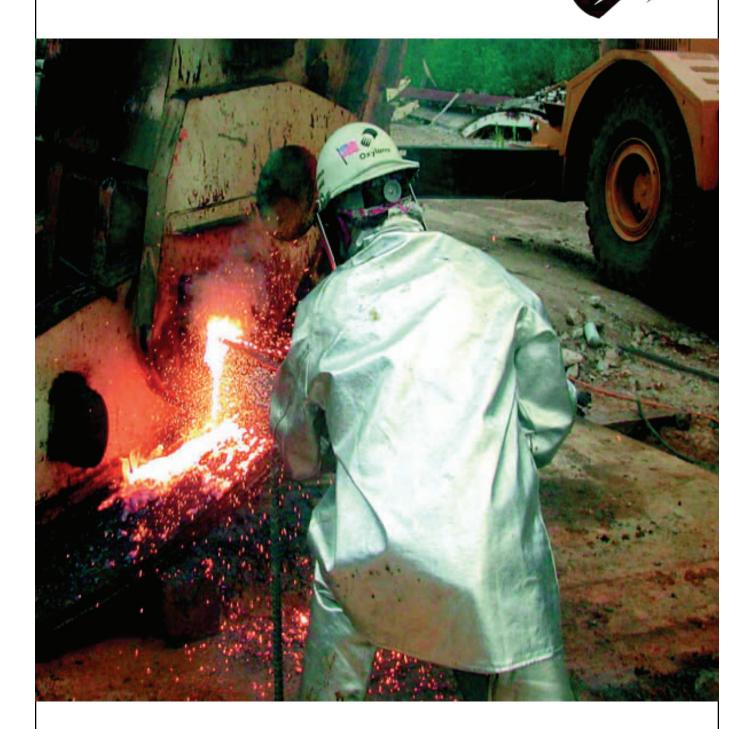
OXYLANCE BURNING BARS AND ACCESSORIES



Read All Safety Information Prior To Using Burning Bar Products!!

Burning Bar General Information

GENERIC TERMS: EXOTHERMIC TORCH- THERMIC TORCH - MAG ROD - MAG BAR -LANCE BAR - LANCE ROD - THERMIC LANCE

The Oxylance Burning Bar and Sure Cut rods are self consuming cutting tools used in a wide variety of industries for cutting most ferrous and nonferrous metals, refractory and concrete. Benefits over conventional cutting methods are faster cutting speeds and the ability to cut thick sections as well as rusty or corroded materials.

WHAT IS THE DIFFERENCE BETWEEN OXY-FUEL AND EXOTHERMIC CUTTING?

The Oxy-Fuel cutting torch uses a preheat flame to elevate the temperature of the material to be cut to 1500 to 1900 degrees F. When the steel becomes cherry red a high pressure jet of oxygen is directed at the pre-heated metal. The result is the metal is rapidly oxidized or it burns. This process works on material that will oxidize. If it will not rust it can not be readily cut with an oxy-fuel system.

The Exothermic process also utilizes oxidation. However; the exothermic process uses alloys in the material in the burning bar as the fuel and produces temperatures of 7200 degrees F. A Burning Bar consists of an outer steel tube filled with special alloy wire. The exothermic reaction (Oxidation) occurs when the tip of the rod is heated to its kindling temperature (2800 f) and pure oxygen is introduced through the bar. The chemical reaction will continue until the bar is consumed or the oxygen flow is turned off. The only gas required for this cutting operation is pure oxygen. Cutting steel with an exothermic torch requires no preheat or cleaning.

WHAT SIZES ARE AVAILABLE?

Oxylance manufactures a variety of Burning Bars, Sure Cut Rods and Underwater Cutting Rods. 10'6" Burning Bars are available in Pipe and Tube sizes from .540" O.D. up to 1.05" O.D. The smaller Sure Cut rods are available in Tube sizes of 1/4" and 3/8" O.D. in lengths of 24", 36" and 48 inches. All tubing is measured by outside diameter and pipe is measured by nominal inside diameter. Oxylance identifies both pipe and tubing by the outside diameter in order to identify the proper holder required for a particular size burning bar.

WHAT IS THE MOST IMPORTANT PART OF THE EQUIPMENT?

Other than proper fire proof clothing and eye protection, the most important part of the system is the Oxygen Supply, Oxygen Hose and Regulator. For most applications involving the large Burning Bars Oxylance recommends 1/2" hose and a High Flow Regulator with a 1/2" port on the output side. This eliminates the possibility of flow restriction and ensures proper volume of oxygen to the Burning Bar.

WHAT IS THE MOST CRITICAL PART OF THE PROCESS?

The exothermic process relies on **OXYGEN VOLUME** and **PRESSURE**. Without proper volume of oxygen the cutting process will not work and creates hazards to the operator. Minimum and maximum volumes and pressures are listed with each size Burning Bar. You **MUST** supply the minimum volume and pressure for safe efficient operation. For all of the large burning bars you **CAN NOT** operate them with a single liquid oxygen tank. Please refer to the section on oxygen for proper set up information if liquid Dewars are to be used.

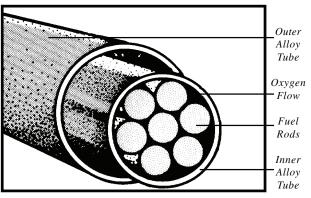
POWER PLANTS /	EMEDGENICY / DESCLIE
	EMERGENCY/RESCUE
REFINERIES	
Removing Boiler Tubes	Train derailments
Remove / Replace Precipitators	Breeching Operations
Removing frozen pins	Cutting Burglar Bars
Repair Large Rollers	Open doors w/ hardened deadbolts
Gouging cracks in thick material	Cutting collapsed structures
Cut / Pierce Concrete	Cutting Guardrails
Cut Laminated material Used by Farm	Medic teams
Cut steel underwater	Military / Police
	REFINERIESRemoving Boiler TubesRemove / Replace PrecipitatorsRemoving frozen pinsRepair Large RollersGouging cracks in thick materialCut / Pierce ConcreteCut Laminated material Used by Farm

APPLICATIONS

Oxylance Burning Bars

The **Oxylance Burning Bar** is a 10' 6" consumable thermal pipe designed to economically cut, sever or burn holes through all types of ferrous and non-ferrous metals and materials more efficiently and cleaner than any conventional bar on the market today. It effectively cuts through all types of metals and materials such as copper, slag, steel, cast steel, cast iron, concrete and refractories. The distinguishing feature of the *Oxylance Burning Bar* is the double wall construction with a core of mild steel rods. This unique structure allows oxygen to flow freely around and also through the intercore, giving the following advantages over competitive bars in the same price class:

- 25% more work accomplished per bar.
- Lasts 20% longer than conventional bars.
- Outer wall acts as a shroud, greatly reducing spread of flame and slash-back on operator.
- Uses less oxygen than conventional bars.



10' 6" Standard Burning Bar (Thermic Torch)

SIZE	/ PART #	.675" O.D. 3/8" pipe / 11/16" tube (Weight 10 lbs ea.)	OXYGEN FLOW	
.675"	CALDO-11/16	.675" X 10'6" Plain End		
	BBQC-675	.675" X 10'6" Quick Connect	90 psi 30 cfm	
X	BBTC-675	.675" X 10'6" Threaded on Holder End (3/8" npt)	150 psi 45 cfm	
3/8"	67B1050F	.675" X 10'6" Threaded Both Ends with 3/8" pipe collar	Burn Time 4.5 Min.	
SIZE	/ PART #	.625" O.D. 5/8" tube (Weight 9 lbs ea.)	OXYGEN FLOW	
005"	62B1050A	.625" X 10'6" Plain End		
.625"	62B1050C	.625" X 10'6" Quick Connect	90 psi 25 cfm	
Х		-	150 psi 40 cfm	
10'6"	.625" Burni	ng Bars not available with threads	Burn Time 4.5 Min.	
	•	-		
SIZE	/ PART #	.540" O.D. / 1/4" pipe (Weight 6.5 lbs.)	OXYGEN FLOW	

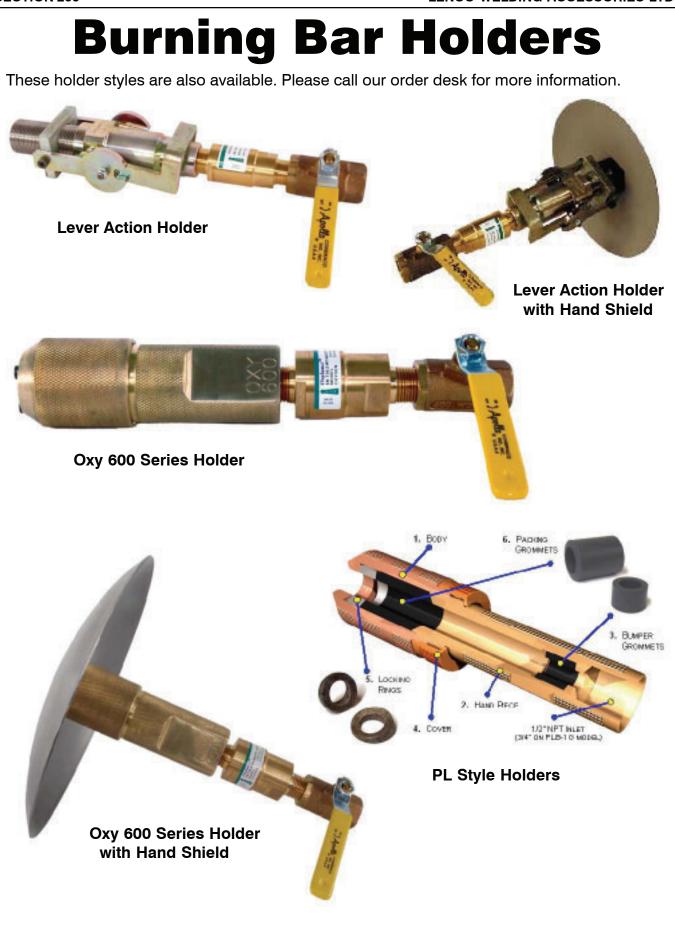
	SIZE	/ PART #	.540" O.D. / 1/4" pipe (Weight 6.5 lbs.)	OXYGEN FLOW
Γ	.540"	54B1050A	.540" X 10'6" Plain End	90 psi 20 cfm
	.540	54B1050C	.540" X 10'6" Quick Connect	
	X	54B1050D	.540" X 10'6" Threaded on Holder End (1/4" npt)	150 psi 30 cfm
	10'6"	54B1050F	.540" X 10'6" Threaded Both Ends with 1/4" pipe collar	Burn Time 4.5 Min.

Special Order Large Diameter 10' 6" Burning Bars

1.05'	1.05" O.D. tube or 3/4" pipe (Weight 25 lbs ea.)			
SIZE	/ PART #	DESCRIPTION	90 psi 80 cfm	
1.05" X 10'6"	10B1050A	1.05" X 10'6" Plain End	150 psi 9 5 cfm	
1.05 × 10 0	10B1050C	1.05" X 10'6" Quick Connect	Burn Time 4.5 Min.	

.922" O.D. tube (Weight 18 lbs ea.)		OXYGEN FLOW	
SIZ	ze / Part #	DESCRIPTION	90 psi 70 cfm
.922" X 10'6'	e,, 92B1050A	.922" X 10'6" Plain End	150 psi 85 cfm
.922 × 10	92B1050C	.922" X 10'6" Quick Connect	Burn Time 4.5 Min.

	.840" O.D. tube or 1/2" pipe (Weight 16 lbs ea.)		OXYGEN FLOW	
	SIZE	/ PART #	DESCRIPTION	90 psi 60 cfm
	.840" X 10'6"	84B1050A	.840" X 10'6" Plain End	150 psi 75 cfm
		84B1050C	.840" X 10'6" Quick Connect	Burn Time 4.5 Min.



SECTION 200



#97 Rubber Grommet

351 Sealing Ring

413 Sealing Ring

LP8-4

LP351-5

LP413-5

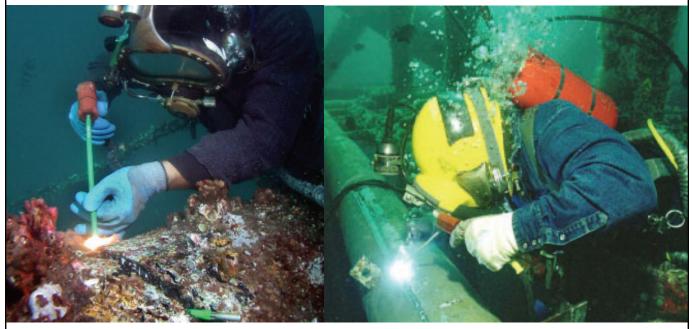
LP840VS

LP840FVS

.840" O.D. LP Holder w/ V-05 Valve

.840" O.D. LP Holder w/ V-05 Valve / Thermal Shutoff

Underwater Cutting & Welding Equipment



Cutting

Oxylance manufactures underwater cutting electrodes in both an Exothermic design, the Aqua EXO (top photo), and our Tubular Steel Aqualance. The Aqua EXO will burn without power after it is ignited. The Aqualance is an Oxy Arc rod that requires 300 amps of electricity to maintain the arc. All of our rods have a proprietary plating process that prevents the exterior of the rod from corrosion. We use a continuous heat shrink process for insulation that will not un-wrap or become brittle in cold water. Our rods can be used in other manufacturer's holders; however, the collet may have to be enlarged slightly due to our plating process. We have collets for other holders to match our rod diameters.

Welding

Oxylance manufactures a variety of Underwater Welding electrodes for carbon steel as well as stainless steel. All of our electrodes meet or exceed the requirements of ANSI/AWS D3.6 Specification for Underwater Welding. Oxylance is the sole source provider of Nickel Wet Welding Electrodes for the US Navy.

PART #	DESCRIPTION		
37BAQUAEXO	3/8" X 18" Exothermic Cutting ROD.		
31EAQUALANCE	5/16" X 16" Tubular Steel Underwater Cutting Rod		
UNDCRAFTCUT	Craftsweld (Aqua Air Industries) Cutting Rod Holder		
UNDTA2238	3/8" Collet for Craftsweld or Broco Holders		
UNDTA22516	UNDTA22516 5/16" Collet for Craftsweld or Broco Holder		
SUR1ELECTR	1/8" Mild Steel Wet Welding Electrode		
SUR2ELECTR	5/32" Mild Steel Wet Welding Electrode		
SURWELDNI	3/32" Nickel Wet Welding Electrode		
UW400	400 AMP Wet Welding Electrode Holder		
UW250	250 AMP Wet Welding Electrode Holder		

SECTION 200



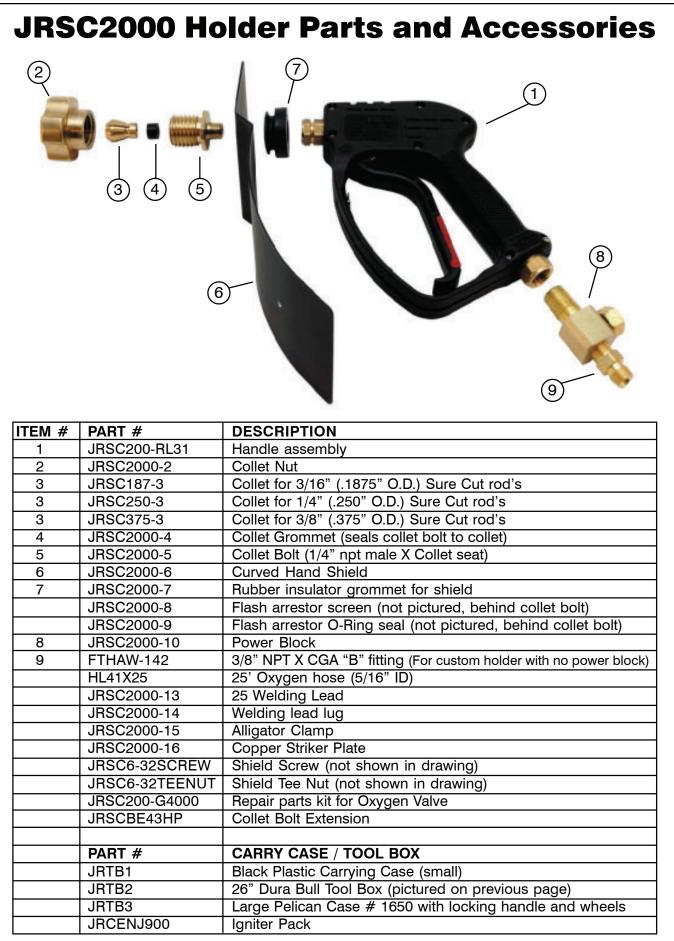
The Oxylance Sure Cut system will cut virtually any metal, both ferrous and non-ferrous, and is faster than conventional oxy-acetylene cutting or carbon arc gouging. The Sure Cut exothermic cutting rods don't require preheating or cleaning of the material prior to cutting. It is easy to use and is cost effective for most applications.

PART #	DESCRIPTION
JRSC2024S	Tool Box Kit with standard holder (WITH RODS) (Pictured Above)
JRSC2024S-REG	Tool Box Kit with high flow regulator (WITH RODS)
JRSC2000S	Standard Sure Cut standard holder (NO RODS)
JRSC2000S-REG	Standard Sure Cut holder with high flow regulator (NO RODS)

	_	
JRSC2024S INCLUDES		
Holder		
25' X 5/16" Oxygen Hose		
25' X #4 Power Lead		
25' X #4 Ground Lead w / Striker Plate		
1/4" and 3/8" Collet		
12 ea. 1/4" X 24" Sure Cut Rods		
12 ea. 3/8" X 24" Sure Cut Rods		
26" Tool Box]	
JRSC2024S-REG AND JRSC2000S-REG	CON	ИE

JRSC2000S INCLUDES
Holder
25' X 5/16" Oxygen Hose
25' X #4 Power Lead
25' X #4 Ground Lead w / Striker Plate
1/4" and 3/8" Collet
NO RODS
NO RODS
19" Carry Case
ES WITH HIGH FLOW REGULATOR

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SURE CUT Cutting Rods

1/4" O.D.

1/4 O.D.							
PART #	DESCRIPTION		WEIGHT				
		O2 FLOW / BURN TIME	25 pc box	50 pc box			
25B24	1/4" X 24" Sure Cut Rod (bare)	3 to 5 cfm / 1 Minute	7 lbs	14 lbs			
25B36	1/4" X 36" Sure Cut Rod (bare)	3 to 5 cfm / 1.5 Minutes	11 lbs	22 lbs			
25B48	1/4" X 48" Sure Cut Rod (bare)	3 to 5 cfm / 2 Minutes	14 lbs	28 lbs			
	1/4" O.D. QUICK CONNECT						
		O2 FLOW / BURN TIME	25 pc box	50 pc box			
25B24QC	1/4" X 24" Sure Cut Rod (bare)	3 to 5 cfm / 1 Minute	7 lbs	14 lbs			
25B36QC	1/4" X 36" Sure Cut Rod (bare)	3 to 5 cfm / 1.5 Minutes	11 lbs	22 lbs			
25B48QC	1/4" X 48" Sure Cut Rod (bare)	3 to 5 cfm / 2 Minutes	14 lbs	28 lbs			
	3/8" O.D.						
		O2 FLOW / BURN TIME	25 pc box	50 pc box			
37B24	3/8" X 24" Sure Cut Rod (bare)	5 to 8 cfm / 1 Minute	11 lbs	22 lbs			
37B36	3/8" X 36" Sure Cut Rod (bare)	5 to 8 cfm / 1.5 Minutes	17 lbs	34 lbs			
37B48	3/8" X 48" Sure Cut Rod (bare)	5 to 8 cfm / 2 Minutes	22 lbs	44 lbs			

3/8" O.D. QUICK CONNECT

		O2 FLOW / BURN TIME	25 pc box	50 pc box
37B24QC	3/8" X 24" Quick Connect Sure Cut Rod (bare)	5 to 8 cfm / 1 Minute	11 lbs	22 lbs
37B36QC	3/8" X 36" Quick Connect Sure Cut Rod (bare)	5 to 8 cfm / 1.5 Minutes	17 lbs	34 lbs
37B48QC	3/8" X 48" Quick Connect Sure Cut Rod (bare)	5 to 8 cfm / 2 Minutes	22 lbs	44 lbs

SURE CUT INSULATED RODS

Insulated Rods are only necessary when a continuous arc process is used.

1/	4"	0.[) .

PART # DESCRIPTION			WEIGHT	
		O2 FLOW / BURN TIME	25 pc box	50 pc box
25B24I	1/4" X 24" Sure Cut Insulated Rod (coated)	3 to 5 cfm / 1 Minute	8 lbs	16 lbs
25B36l	1/4" X 36" Sure Cut Insulated Rod (coated)	3 to 5 cfm / 1.5 Minutes	13 lbs	26 lbs
25B48I	1/4" X 48" Sure Cut Insulated Rod (coated)	3 to 5 cfm / 2 Minutes	16 lbs	32 lbs

1/4" O.D. QUICK CONNECT

25B24QCI 1/4" X 24" Sure Cut Rod (bare) 3 to 5 cfm / 1 Minute 7 lbs 14	1416-
	14 lbs
25B36QCI 1/4" X 36" Sure Cut Rod (bare) 3 to 5 cfm / 1.5 Minutes 11 lbs 22	22 lbs
25B48QCI 1/4" X 48" Sure Cut Rod (bare) 3 to 5 cfm / 2 Minutes 14 lbs 28	28 lbs

3/8" O.D.

		O2 FLOW / BURN TIME	25 pc box	50 pc box
37B24I	3/8" X 24" Sure Cut Insulated Rod (coated)	5 to 8 cfm / 1 Minute	13 lbs	26 lbs
37B36I	3/8" X 36" Sure Cut Insulated Rod (coated)	5 to 8 cfm / 1.5 Minutes	19 lbs	38 lbs
37B48l	3/8" X 48" Sure Cut Insulated Rod (coated)	5 to 8 cfm / 2 Minutes	24 lbs	48 lbs

3/8" O.D. QUICK CONNECT

		O2 FLOW / BURN TIME	25 pc box	50 pc box
37B24QCI	3/8" X 24" Quick Connect Insulated Rod (coated)	5 to 8 cfm / 1 Minute	13 lbs	26 lbs
37B36QCI	3/8" X 36" Quick Connect Insulated Rod (coated)	5 to 8 cfm / 1.5 Minutes	19 lbs	38 lbs
37B48QCI	3/8" X 48" Quick Connect Insulated Rod (coated)	5 to 8 cfm / 2 Minutes	24 lbs	48 lbs

Thermal Shutoffs (Anti Slag Device)

The Oxylance anti-slag safety device performs three (3) important safety functions which help protect the user and the equipment. These functions are as follows:

1. HIGH GAS VOLUME NON-RETURN VALVE: The high gas volume non-return valve prevents the reverse flow of oxygen into the hose.

2. THERMAL SHUT OFF DEVICE: The thermal shut off activates cutting off the oxygen flow instantly extinguishing the burning bar / oxygen lance pipe if the bar / pipe burns back into the holder, if slag enters the holder, and / or heating of the holder to the point of injuring the operator (i.e., 3 to 5 second internal heating to 160 C +/- 5 degrees).

3. ANTI-SLAG & BACKFIRE BARRIER: The combination antislag anti-back fire element provides several safety functions. The barrier prevents molten slag and backfires from igniting the oxygen hose. In addition, the barrier helps activate the thermal shut off stopping the flow of oxygen and extinguishing the fire.



PART #	DESCRIPTION
OXY0001	1/2" Male NPT Thermal Shutoff (Anti Slag Device)
OXY0003	3/4" Male NPT Thermal Shutoff (Anti Slag Device)
OXY0004	1" Male NPT Thermal Shutoff (Anti Slag Device)
OXY0005	1 1/4" Female NPT Thermal Shutoff (Anti Slag Device)

Oxygen Control Valves



Ball Valve



V-05 Valve

PART #	DESCRIPTION
VAL3/8BALL	3/8" Ball Valve
VAL1/2 BALL	1/2 " Ball Valve
VAL3/4 BALL	3/4 " Ball Valve
VAL1.25 BALL	1 1/4" Ball Valve
VAL-V-05	V-05 Dead Man Valve 1/2" npt Port In and Out
VAL-V-05-B	V-05 Dead Man Valve w / CGA "B" Fitting in the In Port
VAL-V-05-C	V-05 Dead Man Valve w / CGA "C" Fitting in the In Port
VAL-V-05LK	Replacement Lever and Pin #1 Lever # 8 Lever Pin
VAL-V-05VRK	Valve Repair Kit #2 Cap, #3 O-Ring, # 4 O-Ring, #5 Washer, # 6 Spring, # 7 Valve Stem

250 psi High Flow Regulator



Designed for heavy cutting applications, this two-stage regulator provides precise and constant delivery over a wide range of inlet pressures.

- Body and housing cap are machined for class "A" brass bar stock
- · Delrin cap bushing for smooth adjustments
- Self re-seating external safety pressure relief valve
- Stem type seat assembly for more reliable seating
- 2¹/₂" gauges for easy reading
- 2" and 31/4" diaphragms
- Weight: 7 lbs 6 oz

PART # DESCRIPTION

 250 PSI OUT
 250 PSI High Volume (10,000 cfh)

 G153TX-250
 250 psi Regulator with 9/16" x 18RH outlet

REGULATORS FOR UNDERWATER CUTTING

500 PSI OUT	500 PSI High Volume (10,000 cfh) 1/2" npt Outlet Port
REG-5-500	500 psi Regulator with 1/2" npt female outlet port (no outlet fitting)
REG-5-500 B	500 psi Regulator with CGA "B" fitting for high pressure 3/8" hose
REG-5-500 C	500 psi Regulator with CGA "C" fitting for high pressure 1/2" hose

Oxygen Hose

If 3/8" hose is used, it must be a single run of hose with no splices or connectors that will restrict the oxygen flow. Repairing 3/8" hose or joining two sections together will reduce the flow too much for the burning bar to operate properly. We will not be responsible for burning bar performance with 3/8" hose.

PART #	DESCRIPTION
HL1/2X50C	Lance Hose 1/2" id X 50 feet long with CGA "C" fittings
HL1/2X75C	Lance Hose 1/2" id X 75 feet long with CGA "C" fittings
HL1/2X100C	Lance Hose 1/2" id X 100 feet long with CGA "C" fittings
HL1/2X150C	Lance Hose 1/2" id X 150 feet long with CGA "C" fittings
HL3/4X50D	Lance Hose 3/4" id X 50 feet long with CGA "D" fittings
HL3/4X100D	Lance Hose 3/4" id X 100 feet long with CGA "D" fittings
HL3/4X125D	Lance Hose 3/4" id X 125 feet long with CGA "D" fittings

Oxylance Inc. recommends minimum of 1/2" hose for all burning bar applications.

PART #	DESCRIPTION
HL3/8X25B	Lance Hose 3/8" id X 25 feet long with CGA "B" fittings
HL3/8X50B	Lance Hose 3/8" id X 50 feet long with CGA "B" fittings
HL3/8X75B	Lance Hose 3/8" id X 75 feet long with CGA "B" fittings
HL3/8X100B	Lance Hose 3/8" id X 100 feet long with CGA "B" fittings
HL3/8X50C	Lance Hose 3/8" id X 50 feet long with CGA "C" fittings
HL3/8X75C	Lance Hose 3/8" id X 75 feet long with CGA "C" fittings
HL3/8X100C	Lance Hose 3/8" id X 100 feet long with CGA "C" fittings

Protective Clothing







For maximum protection from heat, slag and spatter during cutting operations we recommend Aluminized Kevlar protective clothing. This type of clothing offers greater protection than leathers or flame retardant materials. For Aluminized Jacket the last letter in the part number is the size i.e. ALKEVJACL is for the Large.

PART #	DESCRIPTION
ALKEVGLOV	Aluminized Kevlar Gloves (Aluminized back Kevlar palm)
ALKEVJACM	19 oz Aluminized Kevlar 30" Medium Jacket
ALKEVJACL	19 oz Aluminized Kevlar 30" Large Jacket
ALKEVJACXL	19 oz Aluminized Kevlar 30" Extra Large Jacket
ALKEVJACXXL	19 oz Aluminized Kevlar 30" Double X Jacket
ALKEVCHAPS	19 oz Aluminized Kevlar Chaps
ALKEVLEG	19 oz Aluminized Kevlar 15" Leggings (boot cover)
ALKEVHOOD	19 oz Aluminized Kevlar Hood