

Sure Cut



Oxylance



SURE CUT EXOTHERMIC CUTTING SYSTEM

The Sure Cut Exothermic Cutting System will cut virtually any metal, both ferrous and non-ferrous, and it is faster than conventional oxy-acetylene or carbon arc gouging. Exothermic cutting requires no preheating or cleaning the material prior to cutting. It is easy to use and is cost effective for most applications. Unlike carbon arc gouging, the Sure Cut System leaves no carbon residue on material being gouged.

For fire/rescue and demolition work, the Sure Cut System affords the operator the safety of standing out of harm's way while cutting material that is under tension and likely to move when cut. For example, when cutting a support column in a collapsed building, the operator can cut a window in one side of the beam and reach through to cut the backside while standing in a safe location. Using the 3/8" Quick Connect rods, the operator has the option of joining two rods together and being able to stay further away from the material being cut.

[PIERCING FROZEN PINS]

The Sure Cut System is ideal for removing frozen pins from heavy equipment. By piercing a hole through the center of the pin, you heat the pin from the inside and then by removing material from the center of the pin you give it room to shrink for easy removal.

[TIME WORK STUDY]

- Piercing a 1 1/4" rod x 12' pin using 1/4" x 24" rod. Initial hole through the length of the pin took 16 seconds.
- Removing 4" diameter x 12" long pin from crane took 3 each of the 3/8" x 36" Quick Connect rods. Initial pierce took 20 seconds. Increasing the hole in the center of the pin took additional 5 minutes. Cooling time and final removal took 25 minutes for a total of 30 minutes.
- Removing a 5" x 16" pin from a paper mill roller: 6 each 3/8" x 48" rods. Initial pierce took 35 seconds. Enlarging the hole enough for the pin to shrink took 15 minutes. Cooling time and removal took 30 minutes.
- Cutting steel plate; operators removing duct work from a coal fired power plant were able to cut up to 10 feet of 1/4" steel plate with one 3/8" x 48" Sure Cut rod in 2 minutes.
- Gouging a 3/4" fillet weld on 18" long welded joint took half of a 3/8" x 36" rod in less than 40 seconds. The 3/4" fillet was gouged to the root and the 2 pieces of plate were separated with 1 pass.
- Cutting stainless steel plate; 3/8" stainless steel plate 4' long cut in half in 2 minutes with 1 each 3/8" x 48" rod.
- Heat exchanger; 1/2" rod stainless steel tubes 3' in diameter. 3 each 3/8" x 48" Quick Connect rods. One complete cut through the heat exchanger took 6 minutes.
- Aluminum buss bars; 2" thick x 8" wide aluminum buss bars cut in half with 1 each 3/8" x 24" rod in 45 seconds.

[SURE CUT FEATURES]:

- Portable and easy to use.
- Requires only an ignition source and an oxygen cylinder.
- Works with any high flow oxygen regulator.

[EQUIPMENT REQUIRED]:

The Sure Cut System comes complete with 25' oxygen hose and welding leads.

- Sure Cut Rods
(sold separately)
- Standard Oxygen Regulator
(available as an option)
- Oxygen Cylinder
(not supplied by OxyLance)
- Ignition Source: 12/24 volt battery, Welding Machine or Oxy-Acetylene Torch.



Shown with OPTIONAL HIGH FLOW REGULATOR



[ROD SIZES AND OXYGEN FLOW REQUIREMENTS]

SURE CUT RODS AND END FINISH		WEIGHT PER BOX		FLOW RATE AND BURN TIME			
Part No.	Description	25 pc	50 pc	Oxygen Flow @ 50 psi		Oxygen Flow @ 100 psi	
25B24	1/4" x 24" Plain End	7 lbs	14 lbs	3 to 4 cfm	1 minute	6 to 10 cfm	50 seconds
25B36	1/4" x 36" Plain End	11 lbs	22 lbs	3 to 4 cfm	1.5 minutes	6 to 10 cfm	1 min 30 seconds
25B48	1/4" x 48" Plain End	14 lbs	28 lbs	3 to 4 cfm	2 minutes	6 to 10 cfm	1 min 50 seconds
37B24	3/8" x 24" Plain End	11 lbs	22 lbs	4 to 7 cfm	1 minute	10 to 16 cfm	50 seconds
37B36	3/8" x 36" Plain End	17 lbs	34 lbs	4 to 7 cfm	1.5 minutes	10 to 16 cfm	1 min 30 seconds
37B48	3/8" x 48" Plain End	22 lbs	44 lbs	4 to 7 cfm	2 minutes	10 to 16 cfm	1 min 50 seconds
37B24QC	3/8" x 24" Quick Connect	11 lbs	22 lbs	4 to 7 cfm	1 minute	10 to 16 cfm	50 seconds
37B36QC	3/8" x 36" Quick Connect	17 lbs	34 lbs	4 to 7 cfm	1.5 minutes	10 to 16 cfm	1 min 30 seconds
37B48QC	3/8" x 48" Quick Connect	22 lbs	44 lbs	4 to 7 cfm	2 minutes	10 to 16 cfm	1 min 50 seconds

All Sure Cut holder kits come complete with 1/4" and 3/8" Collets, 25' of oxygen hose and 25' of welding lead and 25' of ground. Kits are available with a high volume oxygen regulator. **CUSTOM KITS AVAILABLE.**

JRSC2024S	Toolbox kit with no Regulator	12 each 1/4" and 12 each 3/8" Quick Connect x 24" rods
JRSC2024S-REG	Toolbox kit with Regulator	12 each 1/4" and 12 each 3/8" Quick Connect x 24" rods
JRSC2000S	Standard kit in Toolbox	NO RODS AND NO REGULATOR
JRSC2000S-REG	Standard kit in Toolbox	WITH REGULATOR AND NO RODS



SURE CUT SYSTEM CAN BE USED FOR:

When cutting down damaged structures, there is always a danger to the operator from falling debris or material moving while being cut. With the Sure Cut System, the operator can stand on one side of the material being cut. He will first cut an access hole in the pipe, then stick the rod through the access hole and cut the pipe from the inside.

This same method can be used for I beams and H piles.



DEMOLITION AND MAINTENANCE: in paper mills, power plants, chemical plants and refineries.

METAL FABRICATION: gouging welds, back gouging welds for full penetration requirements and piercing starter holes in thick plates for shape-cutting machines.



FOUNDRIES, STEEL MILLS AND SCRAP PROCESSORS: removing risers, opening tap holes cutting up scrap and equipment maintenance.

HEAVY EQUIPMENT: removing frozen pins and gouging welds.

FIRE/POLICE/MILITARY: ideal for breaching operations and rescue from collapsed structures.

RAILROADS: derailment operations and track and equipment maintenance.

OIL WELL FIRES: assists oil field companies in fighting oil well fires and blow outs.

