

AMERARC™ PLASMA CUTTING EQUIPMENT



DESCRIPTION

The AMERARC XL PLUS Series Air/Nitrogen Plasma Cutting Systems is especially well suited for marine applications. The machine is based on inverter technology, providing an exceptional degree of reliability and low weight for portability. The 102XL Plus model is available, rated for cutting 25mm thick material under all conditions and 45mm under specific conditions (lower speed). The machine can be operated from any primary input from 208 to 460 vac +/- 10%, single or three phase, 50 or 60 Hz.

The AMERARC Plasma machine can be used to cut any metal that is electrically conductive. All steels, stainless steels, cast irons, aluminum, and copper alloys can be cut easily, quickly and cleanly. The combined effect of a high intensity arc and a hot, high velocity plasma gas results in a very clean, high speed cut. Most surfaces require only minimum cleanup and have sharp, well defined edges. Piercing, beveling and gouging can also be done with ease

XL PLUS FEATURES

- Two-Year Warranty - Assurance of high reliability.
- Increased Output - For rated cutting thickness at higher speeds.
- Improved Torch Design:
 - Torch Leads - Enclosed in a one-piece, heavy-duty flexible cable. This provides durability and handling ease.
 - ATC¹ cable connectors allow simple torch replacement, ability to add extensions up to 24 meters (70 feet).
 - Operator Friendly Handle - For ease and comfort, including trigger latch.
- Standards approval - Canadian Standards approval; certified to comply with standard CSA 22.2, No. 60.
- Tip Saver Circuit - Consumable parts last longer.
- Smart Start¹ (Auto Pilot) - Minimizes machine recycling, restarts quickly.
- Smart Logic¹ (Over Voltage Protection) - Will not power on unless correct input.
- Universal Input Power - Versatile - simple change, with proper cable and plug units can be used with 208-460, 1/3 phase, 50/60 Hz.
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- TRUE GUARD¹ roll bar provides easy transportation and protects the front and rear of the power supply for unmatched durability.
- Portable - Goes anywhere there's cutting to be done.



AMERARC™ P102XL PLUS (with 6.1M torch)
(PCN 0980145)

NOTE: Initial shipments of the AMERARC PLUS series of plasma cutting systems include the standard kit of consumable parts, plus a “Sea Stock” of parts for the special needs of ships stores. Contents of the kits, including a schematic, are illustrated on page 3.

- High quality air filter included. Helps promote maximum life of parts and good cut quality.
- IP-23C Protection Certified (Water Spray Test) - rugged, durable for marine use.
- 6.1M/15.2M+ Torch Leads - select package to suit needs.

+Optional longer length torch leads package

WHAT IS PLASMA CUTTING?

The plasma cutting process utilizes electrical power and clean, dry, compressed air (or nitrogen) to cut any metal. The combination of an electric arc and an extremely hot, high velocity jet of air, ionized by the arc, melt and remove a narrow section of the metal, producing a very sharp, clean, slag-free cut edge.

Plasma is sometimes called the “fourth state of matter”. When gas is heated to very high temperatures, it breaks down into charged particles called ions. This “ionized” gas is called a plasma. Lightning is a good example of plasma. In plasma cutting, a direct current, high voltage arc from the torch passes through a jet of ionized gas (air) to the workpiece.



Contact your Drew Marine representative for more information

APPLICATION

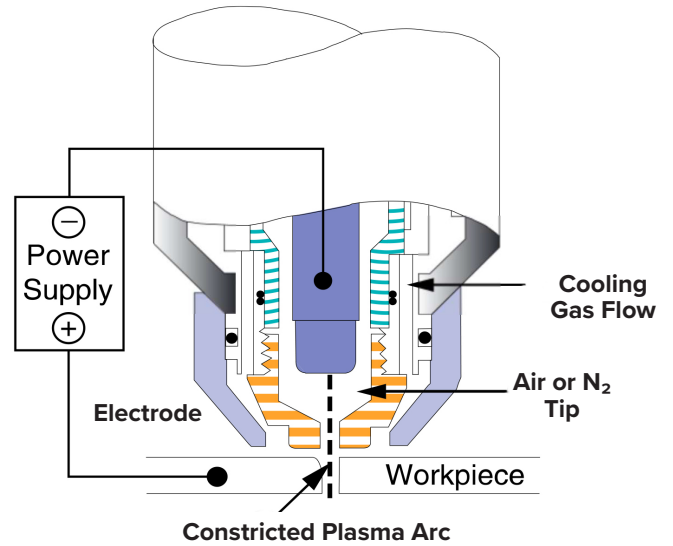
The plasma cutting process is especially recommended for:

- Routine maintenance onboard chemical carriers and other vessels that have stainless steel, aluminum or other alloys not easily cut by conventional oxy-acetylene process.
- Maintenance and repair on vessels where metal cutting must be carried out in areas having little or no ventilation, where acetylene fuel gas or oxygen leaks would present a major safety problem.
- Routine maintenance on vessels that are restricted by the charterer to only a few gas cylinders onboard.
- Major steel renewal programs on vessels operating in areas of the world where the supply of larger quantities of oxygen and acetylene cannot be assured.

PROVEN PERFORMANCE

Tip Saver - The current “fold back” circuit automatically adjusts the output current for drag cutting, or in the event of accidental touching of the metal, saving the tip from early failure. This reduces parts replacement costs.

Arc Stability - For quality performance, the machine circuitry maintains a highly stable arc, in contact with the plate, without wandering and diffusing. This provides a uniform kerf width and thus helps to achieve a quality cut.



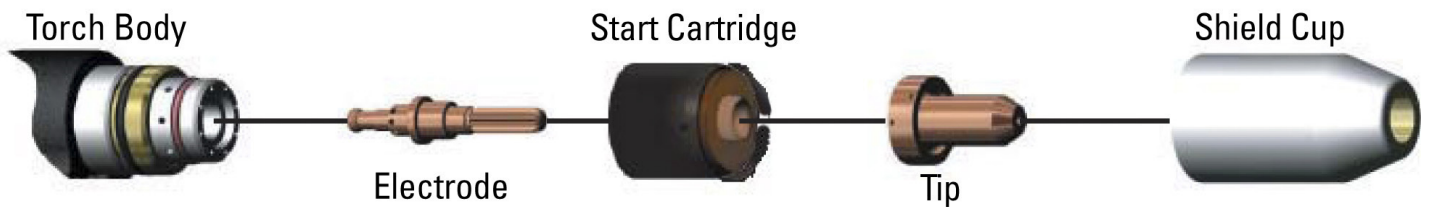
Auto Pilot-Restart - In the event of arc outage, the torch pilot automatically repilots, without machine recycling. This maintains high productivity, even beyond cutting expanded metal for most cutting and gouging operations.



Contact your Drew Marine representative for more information

CONTENTS OF SEA STOCK KIT

Description	PCN	Qty.
Electrode	0980178	25
Shield Cup	0980186	3
Tip - 100 Amp	0980160	50
Standoff Cutting Guide	0980202	1
Start Cartridge	0980194	3



SL-100 TORCH - Innovative Design/Patented Electrode Locking Mechanism

The new electrode is easy to install, no tools are required. The result is precise tip and electrode alignment, providing more efficient operation and improved parts life. This, together with the new trigger latching feature and extended tip for maximum viewing of cut, provides more on the job time for greater operating efficiency.

Torch Package	PCN
6.1 meter length	0980178
15.2 meter length	0931106

ADAPTER KITS

Adapter kits for the Model SL-100 Torch are available to convert many competitive as well as earlier Drew Marine cutting systems to the new torch design. The conversion is quite simple and results in an ideal way to gain the benefits of innovative torch design and lower cost consumables at reasonable cost.



Circle Cutting Kit (PCN 0931080)



Contact your Drew Marine representative for more information

HOW TO ORDER

AMERARC™ Plasma Cutting Systems

Description	102XL PLUS
With 6.1 M Torch & Leads Assembly	PCN 0980145
High quality cutting and gouging	25 mm
Severance Cutting	45 mm
Output Current, continuously variable	15-100 amps
Pilot:	CD Start/Pulsed DC
Duty Cycle	40 @ 100A, 100% @ 65A
Torch Model	SL-100
Plasma Gas	Air/Nitrogen
Gas Pressure	4.8 bar (70 psig)
Gas Flow	212 lpm (450 scfh)
Dimensions:	
Height	380 mm (15 in)
Width	305 mm (12 in)
Length	760 mm (30 in)
Weight	28 kg (62 lbs)

INPUT POWER: AMPS

208 - 460 VAC (+ 10%), 1/3 Phase, 50/60 Hz

HOW TO ORDER

AMERARC P102XL Plus

Description	P102XL PLUS
AMERARC P102XL PLUS	0980145
SL 100 Torch and Leads, 6.1 M	0931098
SL 100 Torch and Leads, 15.2 M	0931106
P102XL Sea Stock Kit	0980152
Plasma Cutting Guide Kit	0931080
P102XL Electrode (5)	0980178
P102XL Tip (5)	0980079
P102XL Start Cartridge	0980194
P102XL Shield Cup	0980186
P102XL Start Off Guide	0980202



Contact your Drew Marine representative for more information

Drew Marine maintains Safety Data Sheets on all of its products. These documents contain health and safety information for the development of appropriate product handling procedures to protect your employees. Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.



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