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NO.
CP-620

PRODUCT DATA SHEET



KEY FEATURES

- * Increased kW Capacity
- * Multiple Mixing Gas Operation
- * Solid State Digital Power Display
- * Automatic Audio/Visual Trouble-shooting Including Multiple Mode Circuits

CP-620 Series PlasmaGun CONTROL CONSOLE

FOR THE
80 KW
PLASMAGUN SYSTEM



PlasmaGun Control Console

CP-620 Series

The CP-620 Control Console features the time tested concepts of compact styling, simplified operation, and minimal maintenance. It incorporates many features required for today's operation and provides the opportunity to create tomorrow's technology. By virtue of increased gas volume capability and multiple mixing gas capability, a wide variety of high energy/high velocity parameters may be achieved. Without sacrificing the compact styling which allows the plasma console to be positioned as close to the workplace as possible, many new features have been added. Included are controls of some of the more distant auxiliary equipment such as power supply cooling and water control circuits. In addition, the operation of all required utility functions are controlled and monitored at the workplace. In critical areas, audio as well as visual indications are given.

Another feature of the new control console is a mode switch allowing for operation of a single selected utility circuit. This feature allows simplified trouble shooting without the interference and expense of operating other utilities. The above functions allow constant monitoring of the spray operation and greater ease in trouble shooting without sacrificing the ease of operation traditional with Bay State equipment. The CP-620 incorporates new features to control and monitor plasma gases. The system monitors both pressure and flow of any of the plasma forming gas or gas mixtures, and provides the ability to operate with multiple mixing gases. Using percentage meters and charts, a single meter can be used to set all gas flows in English or Metric units. Included is a protective circuit that eliminates flowmeter breakage caused by high-pressure gas surges.

Featured in the electrical control and monitoring circuits is a new and highly accurate digital readout for both voltage and current. At a glance, voltage and current can be monitored or controlled at the point of operation. Control of water cooling system, essential to protection and efficient operation of a plasma spray gun is provided by circuitry in the control console. By interconnecting with a flow switch kit or booster pump or heat exchanger, circuitry is provided to automatically shutdown the PlasmaGun operation should the water system fail. The monitoring system provides both visual and audio indicators. This is down without the need for water to flow through the control console itself. The CP-620 Control Console provides simplified operation of every aspect of the plasma spraying operation. By virtue of gas, electrical, and water control and monitoring, all important spray parameters can be maximized. The simplified trouble shooting circuits enable the spray operator to quickly determine the source of operational problems. It puts ease and simplicity into the operation of plasma spraying.

Electrical Inputs to Control Circuits:	110-VAC-60 HZ Supplied from Power Supply
Auxiliary Functions:	Automatically controls and monitors: 1) Water cooling systems 2) D.C. Power Supply
Safety Interlock:	Automatic shutdown at system overload
Gas: Flow	225 SCFH Argon @ 50 PSI 290 SCFH Argon @ 100 PSI
Inputs:	1) primary, mixing gas #1, mixing gas # 2
Outputs:	2) to PlasmaGun, to Powder Feeder
Maximum output capacities: (Based on a specific gravity of 1.0)	Primary -350 SCFH @ 100 PSI = 2.75 @ 60 KPA Powder -64 SCFH @ 100 PSI = .5 SLS @ 60 KPA Mixing Gas -#1-8 SCFH @ 50 PSI =.06 SLS @ 345 KPA Mixing Gas #2-112 SCFH @ 100 PSI =.9 SLS @ 690 KPA
Control:	Independent metering of plasma, mixing and both mixing gases
Safety Interlock:	Automatic shutdown at low gas pressure
Water: Input:	Tap water @ 3 to 5 GPM @ 80 to100 PSI
Control:	Interconnection provided with water flow switch/booster pump or heat exchanger
Safety Interlock:	Automatic shutdown at low water flow
Powder Feed Control:	Controls powder feed carrier gas
Dimensions: 22" wide (560 mm) x 7" deep (178 mm) x 18" high (457 mm)	Weight: 48 pounds (22 kg)