



# Bay State Surface Technologies, Inc.

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NO.  
CP-640

## PRODUCT DATA SHEET



### KEY FEATURES

- \* PLC w/Touch Screen Interface
- \* Tertiary Mixing Gas Operation
- \* Auto Start/Stop
- \* Robot/Remote Operator Pendant

### **CP-640** Series **PlasmaGun®** CONTROL CONSOLE

FOR THE  
80 KW  
PLASMAGUN SYSTEM



# PlasmaGun® Control Console

## CP-640 Series

The NEW CP-640 Control Console continues the tradition and time tested concepts of compact styling, simplified operation, and minimal maintenance available with the CP-620 while offering expanded controls and greater versatility for system operation utilizing touchscreen PLC interface allowing for manual or automated control. It incorporates many features required for today's demanding parameters and provides the opportunity to create the most advanced coatings. By virtue of longer, more accurate flowmeters, the CP-640 is able to achieve and maintain critical gas flow volumes including a wide variety of high energy/high velocity parameters. The optional H2 secondary gas module uses stainless steel plumbing to ensure the highest level of integrity for the hydrogen gas flow circuit.

Without sacrificing the compact styling that 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. A new added feature available on the CP-640 measures and displays both system and PlasmaGun voltage to assist in parameter development and recognition of maintenance requirements.

Other new features of the NEW CP-640 include:

- Positive pressure control cabinet purge to prevent dust during system operation.
- Capability of controlling 2 powder feeders simultaneously with choice of feed gas.
- Mixing gas valve with adjustable ramp opening allowing introduction of secondary gas at controlled rate up to preset level.
- Console allows direct integration with external automation controls (e.g. robotics, etc.).
- Console features safety interlocks preventing gun operation in the absence of cooling water or gas.
- Constructed to allow safe addition/integration of Hydrogen as secondary plasma gas (optional).
- Remote operation pendant is available as an option.

## Specifications

### Physical:

- Size 38" Wide 13" Deep 30"
- Weight 150 Lb (with H2 Module)

### Gas Requirements:

#### Supply

- Argon 400 SCFH @50
- He 260 SCFH @50 PSI
- H2 30 SCFH @ 50 PSI
- Air 3 CFM @ 30 PSI

#### Output\*

- Primary Gas 250 SCFH @ 50 PSI (Ar)
- Secondary Gas 130 SCFH @ 50 PSI (He)
- Secondary Gas 250 SCFH @ 50 PSI (H2)
- Feeder Gas 250 SCFH @ 50 PSI (Ar)

### Electrical Requirements:

- 115VAC 5 Amps (Supplied by Power Supply)

### Interlocks:

- Process cooling water
- Primary Gas flow
- Over current
- Ventilation (Optional)
- Robot/E-stop

\* Gas type and flow ranges can be changed per customer requirements. Flow meter accuracy is 2% of full scales standard, 1% full scales available.

