



Bay State Surface Technologies, Inc.

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MODEL 400 TWIN WIRE ARC SYSTEM



- ✓ **Lightweight Gun Head**
- ✓ **Robust Push-Style Drive System**
- ✓ **Quick Change Wire Guides**
- ✓ **Higher Deposition Rates**
- ✓ **Rugged and Durable**
- ✓ **Automation-Capable**

Applications for Twin-Wire Arc Spray:

- **Build-Up**
- **Wear Resistance**
- **Abrasion Resistance**
- **Corrosion Protection**
- **Dimensional Restoration**
- **Anti-Skid Coatings**
- **Electrical Conductivity**

The Model 400, shown on the front with optional running gear, is a high performance wire arc spray system that brings flexibility, lower maintenance costs and reduced operator fatigue to your arc spray process. Driven by a reliable 400 amp, 3-phase Power Supply with SCR rectifiers, the system provides operating parameters from 18 – 40 Volts and 15 – 400 Amps at 100% duty cycle. All system functions are controlled from the Wire Feeder that is capable of being remotely controlled from up to 50 ft. away.

A key feature of the Wire Feeder lies in the quick-change four-drive roll per wire feed mechanism. Bypass air is metered into the drive housings and through to the coaxial cables. The air is used to blow dust or other foreign matter off the consumable feedstock prior to entering the cables. Faceplate controls include E-Stop, Power Reset, Wire Jog, Maintain Air and Purge Air. Power Supply controls consist of Voltage and Amperage with digital LED displays of each. Switches are environmentally sealed and all electronics are housed in NEMA 12 enclosure.

The Model 400 Arc Spray gun head is characterized by a patent-pending state-of-the-art quick change wire guide system that ***allows consumable wire guides to be replaced in less than 30 seconds using no tools.*** An on/off trigger switch is supplied on the detachable gun handle to control the wire feed, compressed air and power supply contactor. The gun head also provides several hard points for mounting to manipulators, robots and/or fixtures.

SYSTEM REQUIREMENTS

ELECTRICAL - 60 Hz model (50 Hz CE-model also available)

Volts	200	230	460	575
Input amps at rated output	72	63	32	25

COMPRESSED AIR

Pressure (PSI)	40	60	80	100
Cubic ft. per minute	38	53	68	83

FEEDSTOCK – Any electrically conductive material in wire form may be sprayed with the twin-wire arc spray process.

Typical Wire Sizes	14 gauge	.062"	1/16"	
	11 gauge	.091"	3/32"	

Dimensions (*As Shown*): 49" Height x 25" Width x 49" Depth, Weight: 595 Lbs.

Bay State stocks a complete line of Thermal Spray Wire:

- **Pure Metals**, such as Aluminum, Copper, Tin, Nickel, Molybdenum, and Zinc
- **Metal Alloys**, such as Stainless Steels, Nickel, Aluminum, Bronze, and Cobalt based materials
- **Cored Wires and Carbides**

