



Plasma Spray System

DM 3100-PS PLASMA SPRAY SYSTEM INTRODUCTION

The DM 3100-PS Plasma Spray System is designed and built using the highest quality materials and the latest technology and production methods available for consistent high quality coatings, user friendly and safe operation; such as running safely with Hydrogen as the secondary gas. The DM 3100-PS features a built-in user-operated Safety Purge System that exceeds industry standards for the very best in safety. All of the components in the system are designed so that all electrical signals and power entering and leaving the DM 3100-PS console during purging are deactivated. This ensures that dangerous conditions prior to purging does not exist; thus the DM 3100-PS system is designed with safety and ease of use in mind. Using a PLC and touch screen control, the user can take advantage of the many features that aid in the plasma spray process. The console also offers optional interface features to incorporate customer-supplied devices, such as booth ventilation switches, external E-Stop devices and manipulation control. Hence the DM 3100-PS plasma spray system is an excellent choice for consistent high quality plasma coatings.

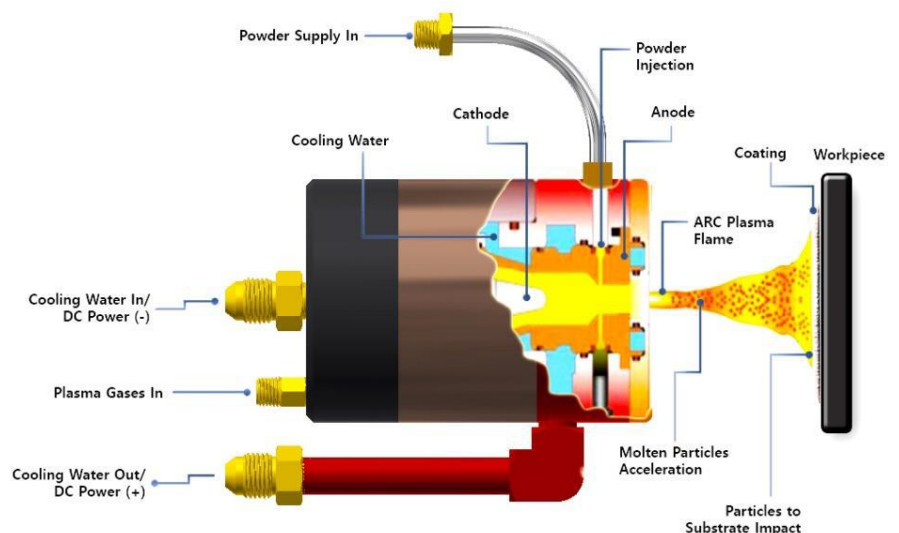
KEY FEATURES

- Power supply closed loop control
- RPM and Feed On control of Powder Feeder
- Solid state high frequency torch ignition
- Heat exchanger interface control
- Manual and Automatic start-up and shutdown sequencing
- User configurable preventative maintenance warning
- Displays real time digital pressure and flow Information
- Quick change orifice system
- Additional digital outputs for expanded control of external devices, such as, cooling wands, turntables, robots and other process related equipment.
- Main Screen Parameter adjustments with quick screen access.
- Alarm and Warning history retention



SYSTEM HIGHLIGHTS

- Touch screen control
- Safety purge system
- Mass flow readouts
- Automatic and Manual mode
- Critical orifice repeatability
- Maintenance screens alarm
- Auxiliary output control
- Series of built-in features to achieve high quality plasma coatings



TECHNICAL DATA

DM 3100-PS Power Supply

Electrical 230/460/575 VAC, 3 Phase, 60Hz (50Hz optional) 180/90/72 A

Overall Dimensions 23 x 38 x 30 inch (58.4 x 96.5 x 76.2 cm)

Crated Weight 273kg (600 lbs)

DM 3100-PS Arc Starter

Power Requirements Powered by DM 3100-PS Console. 115VAC, 1 Phase, 50/60Hz 1 A

Overall Dimensions 22 x 25 x 15 inch (58.9 x 63.5 x 38.1 cm)

Crated Weight 55kg (120 lbs)

DM 3100-PS Control Console

Electrical 110VAC, 1 Phase, 50/60Hz 15 A

Purge Air 65PSI, 10 SCFM Minimum

Primary Gas Argon: 300 PSI Maximum

Secondary Gas 300 PSI Maximum

Carrier Gas Argon: 300 PSI Maximum

Dimension (L x W x H) 46 x 30 x 74 inch (116.8 x 76.2 x 118.0 cm)

Weight 582.9 kg (625 lbs)

DM 3100-PS 10-ton Chiller

Electrical 460/380/230 VAC, 3 Phase, 60HZ (50 Hz optional) 35/38/70 A

Bow-Out Air 30 PSI Maximum

Overall Dimensions 44" x 35" x 81" High (111.8cm x 88.9cm x 205.8cm)

Crated Weight 453.6kg (1000 lbs)

DM 1200-PF Powder Feeder

Electrical 115 VAC or 230 VAC & 50 / 60 Hz capable

Pressure 90 PSI (6.2 bar) Maximum

Accuracy +/- 2 %

Weight 50.0 Kg (110 lbs)

For application specific guidance on proper spraying procedures and parameters, please contact us at tech.support@durametal-alloy.com