Recognize Quality

Specifications

AT-1000 Power Supply Requirements
• AT-1000 Electrical: 230 / 460 / 575VAC, 3 Phase, 60Hz (50Hz optional) 180 / 90 / 72 Amps
• Isolation Box: Unit is powered by AT-3000 Console
• 100kW Power Supply: Optional; See Power Supply Manual
• Overall dimensions: 23” x 38” x 30” high (58.4cm x 96.5cm x 76.2cm)
• Crated Weight: 600 lbs. (273kg)

AT-2000 Arc Starter
• No Requirements: Unit is powered by the AT-3000 Console. 115VAC, 1 Phase, 50/60Hz 1A
• Overall dimensions: 22” x 25” x 15” high (58.9cm x 63.5cm x 38.1cm)
• Crated Weight: 120 lbs. (55kg)

AT-3000 Console Requirements
• Electrical: 110VAC, 1 Phase, 50/60Hz 15A
• Purge Air: 85 PSI, 10 SCFM Minimum
• Argon: 250 PSI Supply Maximum
• Helium: 250 PSI Supply Maximum
• Hydrogen (optional): 200 PSI Supply Maximum
• Overall dimensions without cart: 46” x 18” x 39” high (116.8cm x 45.7cm x 99.0cm)
• With cart: 46” x 30” x 74” high (116.8cm x 76.2cm x 118.0cm)
• Crated Weight without cart: 650 lbs. (295kg)
• Crated Weight with cart: 850 lbs. (386kg)

AT-4000 Heat Exchanger Requirements
• Electrical: 460VAC, 3 Phase, 60Hz 28.1 Amps
• Blow-Out Air: 30 PSI Supply Maximum
• Overall dimensions: 33” x 68” x 81” high (83.8cm x 172.7cm x 205.7cm)
• Crated Weight: 2300 lbs. (1044kg)

AT-3000 Plasma Control System
Introducing the AT-3000 Plasma Control System from Thermach Inc. Designed for user-friendly and safe operation, the AT-3000 is an excellent choice for consistent plasma coatings. At the center of the system is the AT-3000 Console. CE-certified, this system offers many features, including touchscreen technology, automatic startup and shutdown sequences, an hour meter tied to an automated preventative maintenance system, and a series of built-in process alarms and warnings.

Thermach Inc. continues to provide the thermal spray industry with innovative, safe and powerful designs. Offering services such as in-house set-up, product support, and custom equipment and part design, count on Thermach Inc. for the very latest technology and production methods.
Safety, Reliability, Ease of Use

The AT-3000 Plasma Control System is designed with all considerations towards user-friendly and safe operation. Using PLC and Touchscreen control, the user can take advantage of many features that aid in the plasma process. The AT-1000 Power Supply’s amperage is closed-loop controlled by the console, which monitors voltage at the power supply and plasma torch. Using AT-3000 Power Feeders, the AT-3000 console commands the feeders and orders closed-loop RPM feed rate control. The AT-2000 Arc Starter, a solid-state high frequency ignition unit which is powered by the console, requires no adjustments to operate. The AT-4000 Heat Exchanger, a 10-ton refrigerated chiller, is activated by and feeds its alarms directly to the AT-3000 console. The console also offers optional interface features to incorporate customer-supplied devices, such as booth ventilation switches, external e-stop devices, and interlock control. To aid the user in operating the system, the console has been programmed with automatic start-up and shutdown sequences, an hour meter tied to a preventative maintenance warning, maintenance screens for calibrating and setting up the system, and a series of built-in process alarms and warnings.

The system is designed with safety in mind, such as the AT-3000 can safely run Hydrogen as a secondary gas. The AT-3000 features a built-in user-operated Safety Purge System that exceeds industry standards for the very best in safety. This purge system allows a user to power up the console into a safe condition. All of the components of the system are designed so that if electrical signals and power entering and leaving the AT-3000 console during purging are deactivated. This ensures that a dangerous condition prior to purging does not exist. From alarm and warning settings that include automatic safety shutdown sequences to external components that send alarm feedback to the console, the AT-3000 system is designed with safety and ease of use in mind.

Standard Features

1. **Touchscreen Control**: Features Automatic and Manual control of the plasma process, including alarms, warnings, maintenance screens, and power supply and powder feeder control.
2. **Safety Purge System**: Allows a user to safely start up and run the AT-3000 in a hazardous environment.*
3. **Main Control Panel**: Activates main power to the system, features controls for automatic start-up and shut-down, e-stop, and process fault reset.
4. **Critical Orifice Gas Control**: Argon/Nitrogen Primary and Carrier Gas Control and Helium/Hydrogen Secondary Gas Control

The Thermach Inc. Pledge

Thermach Inc. is committed to producing the highest quality thermal spray and machining products using the latest technology and production methods available. Thermach Inc. pledges to provide products and services of excellent quality at a reasonable price in a timely manner.

The AT-3000 Plasma Control System offers the world-class quality and advanced technology you’ve come to expect from Thermach Inc. Contact one of our sales representatives to find out more about this system and other thermal spray and machining products.

*Class 1, Division 2, Type Z Pressurization per NFPA 496.

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**Recognize AT-3000**

**Sample Screens**

**Automatic Mode**

**Maintenance Mode**

**Amperage Control**

**Powder Feeder RPM Control**

**Shown with optional cart**