# Recognize Quality



AT-1200 Rotary Powder Feeder

# THERMACH INC.

THERMAL SPRAY AND MACHINING

### AT-1200 Series Rotary Powder Feeders



#### AT-1200

- · Plasma & HVOF capable
- 15 RPM std. motor (32 RPM available)
- Closed-loop wheel speed control
- · 90 PSI max. pressure
- 115/230VAC & 50/60Hz capable
- · 205 cu. in. capacity (3359 ml)
- · Remote control capable
- (+/-) 2% feed accuracy

#### AT-1200HPHV

- Designed for thermal spray applications where extra powder capacity and up to 500 PSI of back pressure is encountered
- 15 RPM std. motor (32 RPM available)
- Closed-loop wheel speed control
- 500 PSI max. pressure
- 115/230VAC & 50/60Hz capable
- · 464 cu. in. capacity (7603 ml)
- Remote control capable
- +/- 2% feed accuracy





#### AT-1200HP

- · Designed for HVOF applications
- · 32 RPM std. motor
- · Closed-loop wheel speed control
- · 150 PSI max. pressure
- 115/230VAC & 50/60Hz capable
- 205 cu. In. capacity (3359 ml)
- · Remote control capable
- · +/- 2% feed accuracy

#### AT-1200VFHP

- Designed for cold spray applications where up to 1000 PSI of back pressure is encountered
- · 32 RPM std. motor
- · Closed-loop wheel speed control
- · 1000 PSI max. pressure
- · 115/230VAC & 50/60Hz capable
- 205 cu. In. capacity (3359 ml)
- · Remote control capable
- +/- 2% feed accuracy





#### AT-1210

- · Designed for laser cladding
- Advanced closed loop controller
- 100 PPR encoder for increased resolution
- 15 RPM std. motor (1.3 RPM available)

#### AT-1200VFHP Extended Capacity

- Designed for HVOF applications where extra powder capacity is required
- · 32 RPM std. motor
- Closed-loop wheel speed control
- · 150 PSI max. pressure
- · 115/230VAC & 50/60Hz capable
- 312 cu. In. capacity (5112 ml)
- · Remote control capable
- · +/- 2% feed accuracy



#### RELIABILITY

Achieve unmatched quality and dependability with the precision machined and electronically controlled AT-1200 series of powder feeders. Using a digital closed loop controller, Thermach Powder Feeders provide metric feed rates that are both highly accurate (± 2 grams per/min tolerance) and repeatable. Operators can easily monitor and control process parameters as wheel speed is displayed in revolutions per minute and can be controlled either locally or remotely by PLC or computer. Depending on customer applications, Thermach Powder feeders can be easily modified for the diverse needs of most thermal spray processes.

#### **OPERATIONS**

In operation, powder is metered out to the spray process when slots in a powder wheel fill and move past an exit port and enters a powder gas stream which carries the material to the thermal spray torch.

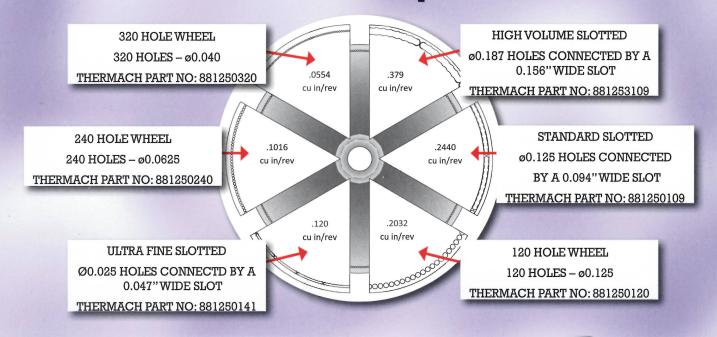
In this feeding process, wheel speed and powder wheel configuration determine the rate of powder flow to the spray gun.

To add an additional measure of accuracy,
Thermach Powder Feeders not only provide a tamper assembly which helps certain hard to feed powders fill the slots completely, but also offers a wide array of powder wheels and motor to encoder configurations to ensure that consumers can meet their desired feed rates.

#### AT-6000 Weight Loss System

- · PLC based system
- Easy to use touch window interface
- Accurate feed rate calculated on weight loss
- · Vibration tolerant
- Standalone operation capable
- Compatible with AT-3000, AT-8000 consoles
- Compatible with AT-1200, AT1200HP and AT-1210 rotary powder feeders

#### **Powder Wheel Options**



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### THE QUALITY WORKMANSHIP OF THERMACH INC.

Developing and manufacturing world-class products for our customers is the driving force behind Thermach Inc. The AT-1200 Rotary Powder Feeder is no exception. Proven technology and superior electrical controls make the

electrical controls make the AT-1200 a highly efficient and versatile piece of equipment for aerospace, transportation and other manufacturing industries.



Thermach Inc. offers a full range of services, including in-house set-up, product support, custom equipment, part design, and repair of all brands of thermal spray parts and machinery.

#### COMMITMENT

Thermach's commitment to quality ensures the latest technology and production methods are used in their manufacturing products. Because of this, Thermach Inc. is a leader in the thermal spray and machining industry.



AT-1230 Gas Flow Control

The AT-1230 is a gas flow controller. The AT-1230 meters gas flow using a pressure control regulator, a pressure gauge, and a critical orifice.

Features of the AT-1230 Gas Flow Control include:

- · Designed for Thermach Powder Feeders
- 0-250 PSI using an inert gas supply only
- · Critical orifice control 0-160 PSI
- Control Gas Hose and Feed On/Off Control Cable included



AT-1231 Wheel Speed Control

The AT-1231 is a closed-loop remote wheel speed controller for use with rotary powder feeders. The AT-1231 controls both Feed On/Off functions and wheel speed.

Features of the AT-1231 Wheel Speed control include:

- Designed for Thermach Powder Feeders
- No external power required
- Feed On/Off and Wheel Speed Control Cable included



AT-1245 /Carrier Gas Flow Control

The AT-1245 is a HVOF carrier gas flow control designed to interface an AT-1200HP rotary powder feeder with the Diamond Jet® HVOF gun.

Features of the AT-1245 HVOF Carrier Gas Flow Control include:

- Designed for Thermach Powder Feeders
- 0-250 PSI using an inert gas supply only
- Rotometer controlled 0-45 SCFH at 150 PSI gauge pressure
- Control Gas Hose and Feed On/Off Control Cable included

Diamond Jet is a registered trademark of OERLIKON METCO.

### THERMACH INC. THERMAL SPRAY AND MACHINING

Ship: W8921 State Highway 96 Hortonville, WI 54944 Mail: PO Box 1995 Appleton, WI 54912 Phone: 920-779-4299 Fax: 920-779-4452 Email: engineer@thermach.com sales@thermach.com www.thermach.com

TO PURCHASE, CONTACT OUR AUTHORIZED DISTRIBUTOR: NATIONAL ALLOY SOLUTIONS

Phone: 713-955-0173