

D-2100

Magnetic Wet Bench with 3-Phase FWDC Capability

The D-2100 is our most powerful wet magnetic bench. Providing 10,000 amps of 3-phase Full Wave Direct Current, this MPI equipment offers maximum magnetization for finding surface and sub-surface defects with clearer indications while using minimal power.

The two outputs are independently adjustable to set each magnetic field, circular or longitudinal.



BENEFITS

Faster part processing

- Reduce processing time with operator-enabled automatic Double-Mag Shot
- Generate 300+ shots per hour at maximum unit output
- Optional Database System with advanced touch screen operating interface and barcode scanner eliminates time spent on manual inputs and record keeping

Easy to use and maintain

- Make quick operational adjustments using the simple, user-friendly operator interface with touch-screen controls
- External pump system provides fast access for easy cleaning and service

Real-world dependability for minimal downtime

- Allen-Bradley PLC provides reliable controls and off-the-shelf replacements
- Advanced agitator system helps prevent blockages and clumping by keeping magnetic particles well suspended
- Rely on our industry leading warranty with best in-class service delivered by a global network of trained Magnaflux authorized service centers

Meets aerospace specifications

- Inspect a wide range of components reliably using machinery that meet all Nadcap specifications
- Assure testing accuracy and repeatability with direct amperage control and fluctuation mitigation

STANDARD FEATURES

- Oversized Contact Assembly for headstock and tailstock, 12 x 12 in / 30 x 30 cm
- Reinforced Rail for heavier part load, 1,500 lb / 680 kg part capacity
- 2.5% duty cycle of 0.5 seconds on, 20 seconds off at maximum output
- Allen-Bradley PLC
- Control circuit feedback loop for amperage regulation and repeatability
- Simple touch-screen operator interface
- External pump system for particle bath agitation, circulation and application
- Integrated ultra-low frequency, reversing, step-down DC demagnetization with 1-touch control
- Low-voltage output minimizes electrical exposure for operator safety
- Adjustable mag shot time from 0.5 to 2 seconds
- Automatic Double-Mag Shot with 1-touch control
- Mag-shot-activating front push bar with 1-touch control to enable/disable this feature
- Current assurance indicator light confirms magnetizing current delivery
- Solid state circuitry increases lifetime and performance of machinery
- Quick break feature on coil circuitry

CONFIGURATION OPTIONS

- Long & Extra-Long Part Capacity to increase max clamping length to 102 in / 259 cm or 146 in / 370 cm
- 20 in / 50 cm, 25 in / 63 cm, 30 in / 76 cm or 36 in / 91 cm Coil, or 19.5 in / 49 cm Clam-Shell Coil (instead of 16 in / 40 cm coil)
- Dual-Touch Sensor eliminates risk of injury during pinch points

PRODUCT PROPERTIES

Magnetizing Current Capacity	3-Phase FWDC 10,000 A
Maximum Part Length*	54 in / 137 cm <i>(102 in / 259 cm, 146 in / 370 cm)</i>
Maximum Unsupported Part Weight Capacity Only using head and tailstock mounted V-Blocks	300 lb / 136 kg
Maximum Supported Part Weight Capacity using rail-mounted steady rests* <i>(With reinforced rail)</i>	1,500 lb / 680 kg
Maximum Part Diameter*	16 in / 40 cm <i>(20 in / 50 cm, 25 in / 63 cm, 30 in / 76 cm 36 in / 91 cm)</i>
Particle-Bath Tank Capacity*	20 gal/ 76 L <i>(34 gal/ 129 L, 46 gal/ 174 L)</i>
Available Voltages	230, 380, 415, 460, 575 V
Available Frequencies	50 or 60 Hz

* Optional feature configurations shown in italics

UPGRADE OPTIONS

- MOD 4.0 AC magnetization / demagnetization adds 4,000 A of AC current to increase the variety and range of inspections the equipment can perform
- MOD 6.0 AC magnetization / demagnetization adds 6,000 A of AC current to increase the variety and range of inspections the equipment can perform
- Database System upgrade with advanced touch screen operating interface and barcode scanner for quality control traceability, record automation and reporting

- Auto-Bath upgrade with 22 in / 55 cm capacity decreases processing time by automatically clamping, bathing, magnetizing and unclamping the part
- XG-Series conveyer inspection booth maximizes throughput by automatically transferring inspection-ready parts to an adjacent inspection booth
- Inspection Enclosure Hood with ventilation fan for a darkened inspection area without sacrificing function and operator comfort, includes an EV6000 LED UV lamp, flame resistant curtains and visible lighting
- ST700 stationary overhead LED UV lamp, 100-240 V, 50-60 Hz