

## D-2100 UL/CSA Certified

### Magnetic Wet Bench with 3-Phase FWDC Capability

The D-2100 UL/CSA Certified Unit is designed, built, and certified to UL/CSA 61010-1 by a third party Nationally Recognized Testing Laboratory (NRTL).

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**

##### **Unit designed to UL 61010-1 and CAN/CSA-C22.2 NO 61010-1**

- Unit shipped with UL/CSA sticker from the Magnaflux Production Facility
- Standard components are further guarded, insulated, and shielded for added protection
- Unit is provided with Emergency Stop buttons which will shut off any in-progress magnetic current flow and dump air from the system to stop all movement
- A shorter stroke on the headstock is used to avoid pinch points

##### **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 Capacity to increase max clamping length to 102 in / 259 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

### UPGRADE OPTIONS

- 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
- 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

### PRODUCT PROPERTIES

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

\* Optional feature configurations shown in italics