

## MD3-2060

### Multi-Directional Magnetic Wet Bench for AC, HWDC or 1-Phase FWDC Magnetization

The MD3-2060 multi-directional magnetic bench offers 5,000 amps of Alternating Current, 6,000 amps of Half Wave Direct Current and 6,000 amps of 1-phase Full Wave Direct Current for time-saving multidirectional magnetization which can find defects in all orientations with one mag-cycle.

The three outputs (contact, coil and Flux-Flo coil) each offer AC, HWDC or 1-Phase FWDC, and are independently adjustable to balance the magnet field intensity.

#### **BENEFITS**

##### **Maximize part throughput**

- Maximize throughput by magnetizing a part in all directions in a single shot
- 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
- Optional automated conveyer system minimizes part handling by transporting parts directly to the inspection booth

##### **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

##### **Advanced process control**

- Maximize consistency between tests with 1,000 customer-programmable techniques
- Track productivity using the automatic parts counter
- Prevent accidental and unauthorized alterations with multiple user profiles and varying tiers of control for a range of operator experience levels
- Daily reminder alarms help ensure measurements are compliant with process specification requirements

##### **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

### STANDARD FEATURES

- 5% duty cycle of 0.5 seconds on, 10 seconds off at maximum output
- Allen-Bradley PLC
- Advanced touch-screen operator interface
- 1,000 customer-programmable techniques
- Automatic parts counter
- User-controlled security systems with password protection, supervisor locks and customizable operator access profiles
- Daily reminder alarms to verify UV light, visible light and particle bath concentration for process control requirements
- Dimmable UI display helps reduce operator eye fatigue and keeps ambient light below required minimums
- External pump system for particle bath agitation, circulation and application
- Integrated rapid-reversing FWDC or decaying-AC 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
- Three large, easy-to-read digital ammeters confirms amperage sent through the part
- Current assurance alarm with visual and audible alerts and alarm log to confirm magnetizing current delivery
- Solid state circuitry increases lifetime and performance of machinery

### PRODUCT PROPERTIES

|   |  |         |
|---|--|---------|
| <b>Magnetizing Current Capacity</b>   | <b>AC</b>  | 5,000 A |
|   | <b>HWDC</b>  | 6,000 A |
|   | <b>1-Phase FWDC</b>  | 6,000 A |
| <b>Maximum Part Length*</b>   | 41 in / 104 cm<br><i>(89 in / 226 cm, 133 in / 337 cm)</i> |         |
| <b>Maximum Unsupported Part Weight Capacity</b>                                     | 300 lb / 136 kg  |         |
| <b>Maximum Supported Part Weight Capacity*</b><br>(using rail-mounted steady rests) | 700 lb / 317 kg<br><i>(1,500 lb / 680 kg)</i>              |         |
| <b>Maximum Part Diameter*</b>   | 16 in / 40 cm<br><i>(20 in / 50 cm)</i>                    |         |
| <b>Available Voltages</b>   | 230, 380, 415, 460, 575 V                                  |         |
| <b>Available Frequencies</b>  | 50 or 60 Hz  |         |

\* Optional feature configurations shown in italics

### CONFIGURATION OPTIONS

- Long & Extra-Long Part Capacity to increase max clamping length to 89 in / 226 cm or 133 in / 337 cm
- 20 in / 50 cm Coil or 19.5 in / 49 cm Clam-Shell Coil (instead of 16 in / 40 cm coil)
- Reinforced Rail for heavier part load, 1,500 lb / 680 kg part capacity
- Dual-Touch Sensor eliminates risk of injury during pinch points

### UPGRADE OPTIONS

- 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