

## MD3-2060 UL/CSA Certified

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

The MD3-2060 UL/CSA Unit is designed, built, and certified to UL/CSA 61010-1 by a third party Nationally Recognized Testing Laboratory (NRTL).

This 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

##### 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

##### 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

- Assure testing accuracy and repeatability with direct amperage control and fluctuation mitigation
- Maximize consistency between tests with 1,000 customer-programmable techniques
- Track productivity using the automatic parts counter

**Advanced process control** *continued*

- 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
- Control circuit feedback loop for amperage regulation and repeatability
- 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

**CONFIGURATION OPTIONS**

- Long & Extra-Long Part Capacity to increase max clamping length to 89 in / 226 cm or 133 in / 337 cm
- 12 / 16 / 19.5 / 20 / 25 in coils available
- 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
- 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>	<b>AC</b>	5,000 A
	<b>HWDC</b>	6,000 A
	<b>1-Phase FWDC</b>	6,000 A
<b>Available Voltages</b>	460, 575 V	
<b>Available Frequencies</b>	50 or 60 Hz	
	<b>Standard configuration</b>	<b>Optional features</b>
<b>Maximum Part Length</b>	89 in / 226 cm	133 in / 337 cm
<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</b> (using rail-mounted steady rests) Both limits are considering the use of Rail Mounted Steady rest to help support part on rails	700 lb / 317 kg	1,500 lb / 680 kg
<b>Particle-Bath Tank Capacity</b>	34 gal/ 129 L	46 gal/ 174 L