

## MD-2030 WET HORIZONTAL UNIT



MD3-2060 Shown with Auto Bath and Flux-Flow Coil



### GENERAL DESCRIPTION

The Magnaflux® Multi-Directional units are our most versatile standard units. The MD Series offers time saving multidirectional magnetization for finding defects in all orientations with one cycle. The two or three outputs are independently adjustable to balance the magnetic field intensity, and each output offers AC, HWDC or One Phase FWDC output.

The user can mix and match current types while adjusting current levels creating various combinations for the operator. These combinations allow the machine to be used with a wide range of parts, while the Customer Programmable Settings insure repeatability.

### BENEFITS

- Versatility of current type and output
- Single shot saves time and labor
- Independent adjustability to balance the field intensity
- Supervisor security lock to ensure repeatability of process inspection

### EXTERIOR

- Innovative pump system for fluid delivery, agitation with easy maintenance access
- Push bar design for easy activation
- Visual/audible current assurance alarms with alarm log
- Two Large, easy to read Digital Ammeter Displays
- Two independent variable current controls with keypad entry
- Independent Contact, Flux Flow Current Type Selection

- Daily Reminder Alarms for UV Light, White Light, & Bath Concentration
- 50 customer programmable recipes
- Color Touch Screen Interface
- Automatic piece parts counter
- Footswitch-activated pneumatic headstock
- Adjustable tailstock with crank
- Stainless steel tank
- Front and rear maple hardwood grilles

## INTERIOR

- PLC control advanced technology; reduce components and increase reliability
- Modular digital solid state circuitry
- Quick disconnect wiring
- Liquid Resistant panels, allow ventilation while inhibiting fluid intrusion

## SPECIFICATIONS

- 3000 amp FWDC/HWDC or 2500 amp AC multidirectional output; current capability at contacts
- Multidirectional power supply-two outputs (Contacts, Flux-Flow coils)
- Duty cycle 0.5 seconds on, 10 seconds off (5% with maximum of 2 seconds)
- Off time between magnetizing shots increases for shot time set above 0.5 seconds to maintain 5% duty cycle
- 41 inch (104 cm) headstock/tailstock capacity
- Recommended 20 Gallon (75 Liter) Tank Fluid Capacity
- Available Voltages: 230, 380, 415, 460, 575, 50 or 60 hertz, 3 phase power
- Minimum 80 PSI with 5 SCFM capability
- 89" (226cm) x 41" (104 cm) Foot Print, allow 24"(61 cm) per side for ventilation

## OPTIONAL FEATURES

- Rapid Reversing FWDC or decaying AC Demagnetization
- 16" Coil (40 cm) in lieu of the Flux Coils
- Dual Palm Button in lieu of Footswitch
- Automatic Bath (22" Stroke)
  - Engage/Disengage switch
  - Adjustable Stroke Length, up to 22 inches
  - Automatic Mag Shot when Bath Returns
  - Automatic Bath Shut Off, no flow when bath in retracted position
  - Articulating Spray Nozzles
- Configure Unit for 89" Part Capacity
  - Recommended 32 Gallon (122 L) Tank Fluid Capacity
  - 136" (346 cm) x 41" (104 cm) Foot Print, allow 24"(61 cm) per side for ventilation

## ACCESSORIES AND MATERIALS START-UP KIT

### Please Choose Water Bath or Oil Bath Start-Up Kit

- Centrifuge Tube, 100 ml, 0-1.0 ml in 0.05 ml increments (Part Number 8493)

- Centrifuge Tube Aluminum Stand (Part Number 1837A)
- Field Indicator (Part Number 2480)
- Two Double-Braided Copper Pads with V- Blocks (Part Number 18948)
- Pie Field Indicator (Part Number 169799)
- UV Filtering Safety Glasses - non tinted (Part Number 506249)

**For Oil Baths (Part Number 621452)**

- Carrier II oil vehicle, 55 gallon drum
- 14A wet method magnetic particles, 1 lb. bottle

**For Water Baths (Part Number 621453)**

- 14A Redi-Bath, 6 - 27 oz. bottles for Water Baths

## UNIT COMPARISON CHART

### MD-2030

3,000 amp HWDC, FWDC, 2,500 amp AC Output - 41" (104 cm)  
 2 Outputs - Contacts, Flux-Flow Coils  
 Voltages Available (230V or Higher)  
 Only Available in Standard Size  
 Standard Type Coil May be Substituted for Flux-Flow Coils

### MD-2060

6,000 amp HWDC, FWDC, 5,000 amp AC Output - 41" (104 cm)  
 2 Outputs - Contacts, Flux-Flow Coils  
 Voltages Available (380V or Higher)  
 Standard Type Coil May be Substituted for Flux-Flow Coils

### MD3-2060

6,000 amp HWDC, FWDC, 5,000 amp AC Output - 41" (104 cm) - 16" Coil  
 3 Outputs - Contacts, Flux-Flow Coils, 16" ID Auxiliary Coil  
 Voltages Available (380V or Higher)  
 20" ID Coil May be Substituted for 16" Coil