

## D-2100 WET HORIZONTAL UNIT



D-2100 with 36 inch coil



### GENERAL DESCRIPTION

The Magnaflux® D Series (3 Phase Units) are our most powerful standard wet bench units. They offer magnetization for finding surface and sub-surface defects while using minimal power. The two outputs are independently adjustable to set each magnetic field, circular or longitudinal.

### BENEFITS

- High output for inspection of large parts
- Ability to locate sub-surface defects using DC
- Shot time can be adjusted to meet different inspection requirements or needs
- Footswitch to free-up hands for inspection

### EXTERIOR

- NEW Touch screen interface with selectable standard and optional features. New standard features include:
  - Current Type Selector
  - Adjustable Mag Shot Timer
  - Double Mag Shot
- Innovative pump system for fluid delivery, agitation with easy maintenance access
- Push bar design for easy activation
- Current assurance indicator for magnetic current flow
- Large, easy to read Digital Ammeter
- Independent Contact and Coil Current Controls
- 16 inch (41 cm) diameter coil
- Footswitch-activates pneumatic headstock

- Adjustable tailstock with crank
- Stainless steel tank
- Front and rear maple hardwood grilles

## INTERIOR

- Microprocessor control advanced technology; reduce components and increase reliability
- RS-232 port for computer interface
- Solid state circuitry
- Quick break on coil circuit
- Liquid Resistant panels, allow ventilation while inhibiting fluid intrusion

## SPECIFICATIONS

- 10,000 amp Three (3) Phase Rectified to FWDC magnetizing current capability at contacts
- Ultra Low Frequency reversing DC Demagnetization
- Duty cycle 0.5 seconds on, 20 seconds off (5% with maximum of 2 seconds)
- Off time between magnetizing shots increases for shot time set above 0.5 seconds to maintain 2.5% duty cycle
- 54 inch (137 cm) headstock/tailstock capacity
- Infinitely variable current control
- Available Voltages: 230, 380, 415, 460, 575, 50 or 60 hertz, 3 phase power
- Recommended 20 Gallon (75 Liter) Tank Fluid Capacity
- Minimum 80 PSI with 5 SCFM capability
- 89" (224 cm) x 41" (104 cm) Foot Print, allow 24"(61 cm) per side for ventilation

## OPTIONAL FEATURES

- Coil of 20" ID (in lieu of the 16" ID coil)
- Coil of 25" ID with raising blocks (in lieu of the 16" ID coil)
- 30" Coil (in lieu of 12" coil)
- 36" Coil (in lieu of 12" coil)
- 19.5" inch (50 cm) clam-shell coil (3-turn) (In lieu of 16" coil)
- Reinforced Rail for Heavier Part Load - 4,000 lbs. (1815 kg) part capacity
- Oversized Contact Assembly (12" x 12") for headstock and tailstock
- MOD 4 AC - Additional 4,000 Amp AC output
- NRTL Certification to CSA C22.2 No. 61010-1
- Dual Palm Button
- Auto-Bath
  - Automatically applies magnetic particle bath to the part
  - Engage/Disengage switch
  - Adjustable stroke length up to 22 inches
  - Automatic mag shot after Auto-Bath
  - Automatic bath shut off, no flow when bath in retracted position
  - Articulating spray nozzles
- Auto-Mag
  - Automatically clamps part, initiates magnetizing shot, then unclamps part

- Low End Current Control
  - Tighter tolerance at lower amperage settings
- Configure Unit for 102" Part
  - Recommended 32 Gallon (122 Liter) Tank Fluid Capacity
  - 136" (346 cm) x 41" (104 cm) Foot Print, allow 24" (61 cm) per side for ventilation
- Configure Unit for 146" Part
  - Recommended 55 Gallon (209 Liter) Tank Fluid Capacity
  - 180" (458 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

**POWER PACK VS. WET HORIZONTAL  
UNIT COMPARISON CHART**

**CD-2060**

6,000 amp 3 Phase Rectified to FWDC  
1 Output - Bus Bars  
Voltages Available (230V or Higher)

**CD-2100**

10,000 amp 3 Phase Rectified to FWDC  
1 Output - Bus Bars  
Voltages Available (230V or Higher)

**D-2060**

6,000 amp 3 Phase FWDC - 54" (137 cm)  
2 Outputs - Contacts, 12" ID Coil  
Voltages Available (230V or Higher)  
Standard Coil May Be Substituted for 16", 20", or 25" ID Coil

**D-2100**

10,000 amp 3 Phase FWDC - 54" (137 cm)  
2 Outputs - Contacts, 12" ID Coil  
Voltages Available (230V or Higher)  
Standard Coil May Be Substituted for 16", 20", or 25" ID Coil

**D SERIES SIZE COMPARISON CHART**

UNIT SIZE	PART LENGTH CAPACITY	DIMENSIONS	TANK CAPACITY
Standard	54 Inches (137 cm)	89" x 41" x 61"	20 Gal (75L)
Long	102 Inches (259 cm)	136" x 41" x 61"	32 Gal (122L)
Extra Long	146 Inches (371 cm)	180" x 41" x 61"	55 Gal (209L)