

# **AD-2045 WET HORIZONTAL UNIT**



#### **GENERAL DESCRIPTION**

The Magnaflux<sup>®</sup> AD-2045 is one of our most economical standard wet bench units. It offers great particle mobility for finding surface and sub-surface defects, and the versatility of using AC or FWDC magnetization. The two outputs are independently adjustable to set each magnetic field, circular or longitudinal.

# **BENEFITS**

- Versatility of using AC (surface defects) or FWDC (sub-surface defects)
- 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 standard and optional features. New standard features include:
  - Current Type Selector
  - o Adjustable Mag Shot Timer
  - o 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
- 12 inch (30 cm) diameter coil
- Footswitch-activated pneumatic headstock
- Adjustable tailstock with crank
- Stainless steel tank
- Front and rear maple hardwood grilles



# **PRODUCT DATA SHEET**

#### **INTERIOR**

- · Microprocessor control advanced technology; reduce components and increase reliability
- Solid state circuitry
- Liquid Resistant panels, allow ventilation while inhibiting fluid intrusion

#### **SPECIFICATIONS**

- 4000 amp AC/5000 amp FWDC magnetizing current capability at contacts
- One Touch Decaying AC Demagnetization
- 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
- 54 inch (137 cm) headstock/tailstock capacity
- Infinitely variable current control
- Available Voltages: 230, 380, 415, 460, 575, 50 or 60 hertz, single 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

- 16" coil (41 cm) w/raising block up-grade (In lieu of 12" coil)
- 20" coil (51 cm) w/raising block up-grade (In lieu of 12" coil)
- 19.5" inch (50 cm) clam-shell coil (3-turn) w/raising block up-grade (In lieu of 12" coil)
- Reinforced Rail for Heavier Part Load 4,000 lbs. (1815kg) part capacity
- Oversized Contact Assembly (12"x 12") for headstock & tailstock
- Rotating Contacts (70 lb. Part Capacity; N/A w/12" coil or Auto-Bath; reduces part capacity by 9")
- 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
  - o Automatic mag shot after Auto-Bath
  - o Automatic bath shut off, no flow when bath in retracted position
  - Articulating spray nozzles
- Auto-Mag
  - o Automatically clamps part, initiates magnetizing shot, then unclamps part
- Pneumatic Tailstock
  - o Lever for operator to push which moves the tailstock up and down the rail
  - Ratchet to manually lock down once in final position
- Configure Unit for 102" Part
  - o Recommended 32 Gallon (122 Liter) Tank Fluid Capacity
  - o 136" (346 cm) x 41" (104 cm) Foot Print, allow 24" (61 cm) per side for ventilation
- Configure Unit for 146" Part
  - o Recommended 55 Gallon (209 Liter) Tank Fluid Capacity



# PRODUCT DATA SHEET

o 80" (458 cm) x 41" (104 cm) Foot Print, allow 24" (61 cm) per side for ventilation

# 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				
AD-2045				
4,000 amps AC or 5,000 amps FWDC - 54" (137 cm)				
2 Outputs - Contacts, 12" ID Coil				
Voltages Available (230V or Higher)				
Standard Coil May be Substituted for 16" or 20" ID Coil				
ADH-2045				
4,000 amps AC or 5,000 amps HWDC - 54" (137 cm)				
2 Outputs - Contacts, 12" ID Coil				
Voltages Available (230V or Higher)				
Standard Coil May be Substituted for 16" or 20" ID Coil				
A-2030				
3,000 amp AC - 54" (137 cm)				
2 Outputs - Contacts, 12" ID Coil				
Voltages Available (230V or Higher)				
Standard Coil May be Substituted for 16" or 20" ID Coil				

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)	