

AHD-2040

Secondary Current Control

Magnetic Wet Bench with AC and HWDC Magnetization

AHD - 2040 magnetic bench provides 4000 Amps of Alternating Current (AC) and 4000 Amps of Half Wave Direct Current (HWDC) magnetization for detecting surface and sub-surface defects during wet method magnetic particle inspection.

Two outputs are independently adjustable, allowing the setting of each magnetic field either circular or longitudinal.



Benefits

Faster Part Processing

- Reduced processing time with operator-enabled automatic Double - Mag Shot
- Generates over 300 shots per hour at maximum unit output

Real - World Dependability for Minimal Downtime

- Siemens PLC provides reliable controls and off - the shelf replacements
- Advanced agitator system helps prevent blockages 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 experts

Easy to Use & Maintain

- 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
- Assured testing accuracy and repeatability with direct amperage control and fluctuation mitigation

Standard Features

- 5% duty cycle of 0.5 seconds on, 10 seconds off at maximum output
- True Amps Current Control
- True Amps incorporates a feedback circuit which allows the MPI machine to produce the actual amperage set by the operator
- Operator can enter desired amperage via Keypad
- Siemens PLC & HMI
- Control Circuit feedback loop for amperage regulation and repeatability
- Simple touch-screen operator interface
- External pump system for particle bath Agitation, Circulation and application
- Low-voltage output minimizes electrical exposure for operator safety
- Adjustable Mag Shot time from 0.5 to 2 Seconds
- Automatic Double-Mag Shot with “One Touch Control”
- Current assurance indicator light confirms magnetizing current delivery
- Solid state circuitry increases lifetime and performance of machine

Product Properties

Magnetizing Current Capacity	AC 4000 AMPS HWDC 4000 AMPS
Maximum Part Length*	1200 mm
Maximum Supported Part Weight Capacity Only using Head and tail stock mounted V-Blocks	100 Kgs *
Maximum Supported Part Weight Capacity* (using rail-mounted steady rests) Both limits are considering the use of Rail Mounted Steady rest to help support part on rails	60 Kgs *
Maximum Part Diameter*	12 In / 30 Cm (16 In / 40 Cm, 20 In / 50 Cm)
Coil Diameter	12 In / 30 Cm
Particle - Bath Tank Capacity*	40 Ltrs
Available Voltages	380, 415
Available Frequencies	50 or 60 Hz
* Higher weight can also be accommodated with additional changeover of suitable Head Stock/ Tail Stock and rail mounted steady rest	

Upgrade Options

- Auto-Bath System upgrade decreases processing time by automatically clamping, bathing, magnetizing and de-clamping the part
- AC Decaying Demagnetization with “One Touch Control”
- 16 in / 40 cm Coil (Instead of 12 in / 30 cm coil)
- Inspection Black Hood with Exhaust fan for a darkened inspection area without sacrificing function and operator comfort, includes an ZB-6000 LED UV Lamp, Black curtains and provision for White Light

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