

EECIFLUX

EFSDM – 2000 / 5000

MPI Multi-directional Bench Type Equipment



The EFSDM Series offers multidirectional magnetization for detecting defects in all orientations with one cycle. It is designed for high-volume inspection environments to detect surface and subsurface indications. This series offers advanced magnetic particle inspection capabilities, enabling precise and reliable flaw detection in a variety of applications.

With its multidirectional magnetization capabilities, this series is ideal for inspecting complex geometries and hard-to-reach areas. It has ability to adjust intensity of magnetic field independently with two current outputs ie AC & HWDC/FWDC and thus enhancing flexibility and accuracy in defect detection.

BENEFITS

- Versatility of multiple current output to control intensity.
- Magnetizing job in all directions in a single shot
- Single-shot mechanism saves time and labor
- Ability to independently adjust field intensity

FEATURES

- Smart Digital control and display meter for easy current setting and closed-loop current feedback.
- Mag ON Variable time from 0.5 sec to Max 5 sec.
- Module-type thyristor-based solid-state circuitry
- Independent variable current controls with keypad entry
- Current compensation adjustment in smart digital controller.
- Independent Contact, Coil, Flux Flow Current Type Selection
- Demagnetization of parts in AC mode by slowly turning the current to zero.
- Audible/visual low current alarm indication.
- Push bar design for easy activation.
- Foot switch pneumatic head stock
- Adjustable tailstocks with crank
- Stainless steel tank to prevent rust

- Innovative pump system for fluid delivery, agitation with easy maintenance access
- Front and rear hardwood grilles
- Standard-built equipment for continuous inspection.
- Can detect surface as well as subsurface defects in any direction in one shot.
- Robust, rigid & sturdy construction design to meet heavy-duty demand

TECHNICAL SPECIFICATIONS

	EFSDM – 2000	EFSDM – 5000
Input Supply	415VAC $\pm$ 5%	
Frequency	50 Hz	
Phase	3 Ph	
Class of Insulation	F	
Duty Cycle	50%	
Output Current	2000Amps $\pm$ 10%	5000Amps $\pm$ 10%
Shot Time	Digitally Adjustable 0.5 Sec to 5 Sec $\pm$ 0.1Sec	
Coil Diameter	200 / 8"	305 / 12"
Magnetizing Current	AC & HWDC/FWDC	
Current Control System	Thyristorised Step-less Solid state current control using a smart digital controller	
Display	4 digit Digital LED Display	
Safety Features	Over Heating Protection	
Air Supply	6 – 7 Kg/sq.cm	
Fluid Tank	20 Ltr.	40 Ltr.
Dimension (L x W x H)	1440 x 400 x 2100mm With hood	2500 x 1900 x 1600mm with hood
Weight	240Kg	750Kg
Standards	ASTM E709, E1444	

OPTIONS

- EFSDM-2000 is an economical solution for small components for high volume inspection.
- EFSDM-5000 Horizontal Bench Unit is a high amperage machine for industrial use in high- volume inspection.
- Coils of various sizes for jobs of different diameters.
- Optional Poka Yoke used as a safeguard that prevents a process from proceeding to the next step until the proper conditions have been met.
- Automated job handling conveyor, job loading, job holding facilities also available on request.
- Optional PC-based test data recording & storing the results.
- Optional Flood UV LED light for speeding up the inspection process.
- Automatic operation of spray system, nozzle flow control also available on request.