

ABM-E Educational MPI Bench Machine



Salient Features:

- Complying to ASTM E1444, ASTM E709, ASTM E1417, ASMEBPVC Sec V
- Capable to perform Head Shot, Coil Shot, Central Conductor, Prod Method, Wrap Technique.
- Light weight, movable equipment.
- AC & HWDC or FWDC current
- Dark room for fluorescent MPI testing
- Auto AC demagnetization with coil

The ABM-E is a compact, lightweight, and user-friendly Magnetic Particle Inspection (MPI) system specifically developed for training, demonstration and basic inspection applications in educational institutes, R&D centres, and skill development laboratories.

Engineered for versatility and mobility, the unit offers a complete learning platform to understand the principles and operation of MPI in both circular and longitudinal magnetization modes - making it ideal for hands-on skill development and academic demonstrations.

Key Learnings:

- Principle of magnetic particle testing
- Types of magnetization (circular & longitudinal)
- Various Magnetizing techniques
- Detection of surface and sub-surface defects
- Interpretation of indications
- Demagnetization process

Technical Features:

- Digital ammeter to confirm amperage & audible alerts
- Thyristor based stepless current control
- Auto Cut-Off with temperature sensor
- Spring loaded Head stock to hold the component firmly in head shot & coil magnetization.
- Linear guide assembly to move coil and tail stock with locking provision.
- Easy shift of head to coil shot in one step by placing the prod position without help of any tools.
- Powder coated rust proof MS housing with matt finish
- Lockable wheel support for easy movement and setting up equipment at predefined location.
- Foot Switch or Push button for mag shot activation
- Emergency Cut Off

General Specifications:

Particulars	Specification
Input Power supply	220-230V 50 Hz Single phase
Operating Temperature	55° C
Humidity	95 %
Current Control	SCR stepless control
Part Length	470mm / 19"
Coil Diameter	200mm /8 inch
Dimensions (with dark room)	1100 mm x 1050mm x 2030mm (L x W x H)

Kit Contains:

- APP-1500 or APP-2000 as ordered
- Educational bench setup
- Accessories
- Operation manual

Order Part No.:

- ABM-E1500: 1500A AC & HWDC or FWDC educational MPI bench machine
- ABM-E2000: 2000A AC & HWDC or FWDC educational bench machine

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