

# Magnetizing / Demagnetizing Coil



## MAGNETIZING

EECI's Portable AC Magnetizing Coils are designed for Magnetic Particle Inspection for ferrous metal parts, AC coils only induce a surface field and are typically not strong enough to set-up s field. AC will only detect 'surface' defects. The coil allows the use of either dry powder or wet fluorescent inspection media and may be used for demagnetizing as well.

## DEMAGNETIZING

Demagnetization is an important component of Electro-Magnetic Crack Testing. Residual Magnetism in test samples is an issue for many users and the industry demands increasingly better demagnetization values.

Where work pieces are subjected to a magnetic field due to a Magnetization Process - as part of a testing method, processing or from magnetic lifting equipment - a residual magnetic field will remain in the component after the field-generating source has been disabled (remanence), which must be neutralized. Eliminating this magnetic residue will help to avoid negative effects during later processing or when using the work pieces.

The EECIFLUX coils are made of black Glass filled nylon. It is equipped with a Press to ON / Press to OFF foot switch and 3 mtr long power cord and (400mm x 100mm) flat base, allowing the coil to stand in a vertical position.

## TECHNICAL SPECIFICATION

Model no	DM 150	DM 201	DM 254	DM 280	DM 305	DM 355	DM 381	DM 406	DM 457	DM 635
Size (ID)	6"	8"	10"	11"	12"	14"	15"	16"	18"	25"
Supply voltage	230VAC									
Frequency	50/60Hz									
Line Current(Air)	8.0A	6.5A	8A	7.8A	9A	10A	6.0A	8.5A	11A	14A
Amp-turns(Air)	4000	4250	4150	3600	4050	3875	3000	16000	18000	24000

\* Custom size can be manufactured as per request.

## GENERAL SAFETY RULES

### Always Wear Eye Protection

Please read all instructions. Failure to follow all instructions listed below may result in serious injury. If the equipment is used in a manner other than as specified in these operating instructions, the protection provided by the equipment may be impaired.

### Operating & Environmental Conditions

Operating temperature: 32 F (0°C) degrees to 104 F (40°C) degrees. Relative Humidity 10% to 95% non-condensing. Always operate from a grounded power source. Do not operate from a DC output.

### General Cleaning

- The outside surface of the instrument can be periodically wiped with a clean cloth. Avoid using cleaners such as lacquer thinner, or mineral spirits that could damage the outside Glass filled Nylon housing.
- Do not abuse the power cords. Never carry the instrument by the cord or attempt to unplug the instrument using the cord. Always operate the instrument with the standard installed cable. Changing or using a damaged cord can increase the risk of electrical shock. The cord should be checked periodically for any damage.
- Do not position the instrument such that it would be difficult to operate the disconnect device (plug) on the end of the power cord.
- The outside Glass filled nylon housing should remain intact and solid. Any damage or chipping exposing internal wires is a hazard. Instruments should not be used in this condition. The outside housing should be periodically checked for damage.

### Never Attempt Field Service

- All EECIFLUX Coil should be returned to the factory for repairs.
- The coils are designed for a 50% duty cycle, or approximately Two Minutes 'ON' and Two Minutes 'OFF'.
- Continuous operation may cause overheating and damage the coil.



*For the correct and safe use of this equipment, proper training for inspection techniques, specifications and safety requirements is necessary and is the obligation of the user.*

