

FLAT MAGNETIC COIL



611700

GENERAL DESCRIPTION

The Magnaflux® Flat Magnetic Coil is designed to provide a non-contact means of magnetizing ferrous materials to allow for detection of surface defects (using AC or DC currents) and some subsurface flaws (using DC current only). It consists of a coil and special core of laminated, transformer iron through which magnetizing fields can be created. The Flat Magnetic Coil induces magnetic fields into ferrous materials which may be sensitive to direct contact applications.

FEATURES AND BENEFITS

- Magnetizes without passing current through the parts
- Accommodates a variety of sizes and shapes without adjustments
- Can inspect parts that are painted or coated
- Magnetizes and demagnetizes with either AC or DC currents
- No part surfaces hidden by contact points
- Can be used with any magnetic particle power pack or unit

INSTRUCTIONS

1. Place inspection part on top of the coil and apply current. Orientation may be crucial and stabilization of the part may be required depending on the size, weight and geometry of the part.
2. Using the Magnaglo® 14A Fluorescent Magnetic Powder, bathe the part as the current is applied to the coil. The 14A particles produce brilliant yellow-green indications that are easily detected. (Magnavis® 7C Black Concentrate or Magnavis® 8A Red visible magnetic particles may be used if preferred to fluorescent materials. Black light therefore not required).
3. Inspect the part closely for cracks and other defects using a Magnaflux® ZB-100F Black Light.
4. Reorient the part and repeat the process until the entire part has been inspected. Depending on the size and geometry, more than one part may be tested at a time. The continuous wet method is recommended for locating fine defects.