

# Western Instruments

Established 1965

26509 Township Road 543  
Sturgeon County, Alberta  
T8T 1M1

Phone: (780) 459-6720  
Fax: (780) 459-7837  
E-Mail: info@westerninstruments.com

Web: www.westerninstruments.com

## Castrol Strips\*

February, 2008

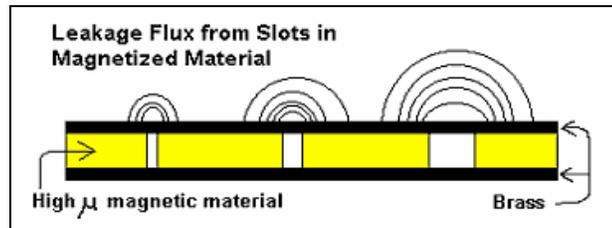


### Type G (or Type I or Gold) –

General Purpose Castrol Strips. Used for General Industrial Inspection on High Permeability Ferro-Magnetic (Mild and High Carbon Steels) workpieces.

### Type A (or Type II or Silver) –

Inspection of Aviation or other critical parts. Used on Low Permeability Ferro-Magnetic (high alloys) workpieces.



Castrol Strips or Flexible Magnetic Flux Indicators are used to check if an induced magnetic field is strong enough to show an indication or a defect of a given orientation. These Foil Type Flux Indicators are approximately 12mm x 50mm, with an overall thickness of approximately 0.15mm. The Strips are manufactured from a high  $\mu$  0.05mm (0.002") magnetic layer, with machined slots, sandwiched between 0.05mm (0.002") protective outer layers of non-ferrous material. The 3 indications, of various widths, are centrally located over approximately  $\frac{3}{4}$  of the 50mm length. Strips are placed perpendicular to the direction of the field for sensitivity, or at increasing angles to ensure a field is sensitive to a particular orientation of defect. Reference literature encourages the use of multiple Strips, in various orientations.

Castrol Strips are supplied in Packages of 5, include basic instructions, identified as **Type G** (Type 1 or Gold) or **Type A** (Type 2 or Silver), as follows;

- Type G (Type 1) Slot widths: 0.0075", 0.009" and 0.010".  
0.019mm, 0.023mm, 0.25mm
- Type A (Type 2) Slot widths: 0.003", 0.004" and 0.005"  
0.08mm, 0.10mm, 0.13mm

While simple to use as a Comparative Tool for the field inspector, certification work (or procedure development) by an Engineer, requires familiarization with Reference Specifications (ASTM E1444-05) and the guidelines for use supplied with each package.

\* Foil Type Magnetic Flux Indicators, as discussed in many MPI Guides and Specifications, are commonly referred to as "Castrol Strips", while no longer manufactured by Castrol, the name carries on