

YM-5

Permanent Magnetic Yoke

The YM-5 is a portable permanent magnetic yoke designed with hinged arms and rotating pole pieces to allow a wide variety of test part profiles to be magnetized, while the specially shaped pole pieces permit easy removal from the component for cleaning.

It provides a portable and convenient method of magnetizing components for magnetic particle inspection flaw detection with no power supply needed. The YM-5 is supplied with a keeper bar, which includes an artificial flaw to verification of magnetic strength. The field strength of the YM-5 with pole tips in contact is greater than 7,000 Gauss, and it features 40-pound / 18 kg dead-weight lift strength.

FEATURES

- Portable magnet for field inspection
- No electrical supply needed
- Maximum magnetic field strength

SPECIFICATION COMPLIANCE

- ASME BPVC
- ASTM E709
- ASTM E1444
- ASTM E3024

PRODUCT PROPERTIES

Weight	7 lb / 3.2 kb
Leg Span	1-9.8 in / 25-250 mm
Field Strength	2 in / 50 mm air gap: > 400 gauss Pole tips in contact: > 7,000 gauss
Dead-Weight List Strength	> 40 lb / 18 kg

APPLICATIONS

Defect location: Subsurface (and some surface)

Ideal for:

- Spot inspections
- Demanding environments
- Remote sites
- Difficult to reach areas

Defect examples:

- Inclusions
- Seams
- Tears
- Laps
- Welding slag
- Grinding cracks
- Quenching cracks

INSTRUCTIONS FOR USE

Place the yoke on the work piece perpendicular to the direction of the cracks, each leg can be moved in two directions at each joint, and the pole pieces rotated. Next, adjust the spacing between the legs to be 1–9.8 in / 25–250 mm apart and contour the feet to produce a flat contact on the part. Apply the magnetic particles, either wet or dry, and surface crack indications will form immediately. The inspection can proceed rapidly in a series of steps each finding cracks in a 6 x 6 in / 150 x 150 mm area.

Since the YM-5 is a permanent magnet, no electrical power is used and arc damage is impossible.

PART NUMBER

001Y005

DISCONTINUED