

Gauss Meter

Introduction

Digital Gauss Meter is an instrument used for measurement of residual magnetic field on the job during Magnetic Particle inspection or otherwise. It also measures magnetic field created by DC Magnetisation. The instrument operates on 9 V Battery source & has two ranges. It is capable of measuring Magnetic field from 0 to 2000 gauss with 1 gauss resolution & 0 to 20000 gauss with 10 gauss resolution. The required range is selected by a rotary switch provided on the front panel. Major Features of the equipment are as given below.

Measuring Range : Range 1 -- 0 to 2000 gauss

Range 2 -- 0 to 20000 Gauss

Indication : 3 ½ digit LCD Display

Power : 9V Battery Type 6F22 or Equivalent

Battery Life : 15 hrs. continuous

Dimension : 180 x 100 x 50 mm

Hall Probe

Transverse Hall probe is supplied along with equipment, and is mounted on a 50mm x 5 mm x 1 mm non magnetic substrate. The crystal is located at front edge of the plate and is placed in the casing. The probe is fragile and hence needs to be handled very carefully. When not in use, the probe is placed in the casing provided. It may also be noted that probe should not be used when the job temperature is above 60 deg. C.



How To Use

- ◆ Connect the probe to the socket provided at top of the unit
- ◆ Switch on the instrument & select the desired range.
- ◆ Rotate zero control knob to adjust so as to read zero on the scale. This is to take care of external magnetic field present in the vicinity.
- ◆ Remove the probe from the casing carefully and place on the DC magnetized job or job having residual magnetism after magnetization or even on the pole of permanent magnet. Rotate the probe slightly for maximum reading on the scale. The maximum reading will be obtained when the magnetic lines of force are perpendicular to the plane of the probe. Note the magnetic field. When the black marked surface faces the north pole, the reading displayed will be positive and when it faces south the reading will be negative.
- ◆ Always place the probe in the casing when not in use with protective cap on. Switch off the equipment after the use for long use of battery
- ◆ Meter will display BATT LOW, in case of low battery and in such case, replace the battery