



DIGITAL HALL EFFECT MAGNETIC FIELD STRENGTH METER

MD-220

The Gould-Bass MD-220 Magnetic Field Strength Meter is a portable, hand- held instrument with three and a half digital display that measures magnetic field strength.

The L.C.D. displays the magnetic field present at the Hall-effect sensor.

The MD-220 Magnetic Field Strength Meter is designed to measure the A.C. and D.C. fields in Gauss as required during magnetic particle inspection.

The MD-220 Magnetic Field Strength Meter is equipped with a "sample and hold" feature wherein the L.C.D. display holds the previous reading until the magnetic field drops near zero and a new field is introduced.

The user has a choice of selecting the hold feature, or selecting continuously updated readings.

FEATURES

- Meets AMS, ASTM & Mil Standards
- Fully protected removable Hall Effect Probe
- N.I.S.T. Traceability
- Range of 0 to 199.9 Gauss, either polarity
- Battery or AC operated
- Liquid Crystal Display
- Supplied in a durable molded case
- Simple & easy to use
- Reads AC & DC fields
- Sample & Hold
- Not damaged by strong fields
- Indicates field polarity
- Alignment fixture included

BENEFITS

- Compliance to MPI Process Specs
- Withstands rugged NDT use
- Assures 2% meter accuracy
- Reads full MPI range
- Uses rechargeable battery with charger
- Easy to read, long battery life
- Storage space for all items
- Direct readings, no lengthy setups
- Reads residual, active, mag & demag
- Retains previous readings
- Less care required when using
- Identifies north & south poles
- Assures repeatable readings

The MD-220 should be returned to QNDE every six months for recalibration and routine inspection service. The recommended six month interval is based upon normal usage of intermittent readings. If the unit is used continuously, recalibration should be performed more often.

TECHNICAL DATA	
Model Number	MD-220
Display Range	0 to 199,9 gauss
Display Type	9mm (0,35") Liquid Crystal Display
Accuracy	within 2%
Sampling Time	0,3 seconds
Resolution	0,1 gauss
Power Requirements	9 Volt Rechargeable Battery (included) 120 V AC Battery Charger (included)
Current Drain	25 milliamperes (approx.)
Battery Life	4 Hours between charges
Temperature Range	0 to 50°C (32 to 122°F)
Humidity Range	0 to 100% R.H. (Non-condensing)



TECHNICAL DATA (CONT'D)

Dimensions: <ul style="list-style-type: none"> • Readout Unit Only • Hall Effect Probe • MD-220 in rigid carrying case 	14,73cm x 9,14cm x 5,08cm (5,8" x 3,6" x 2") 0,95cm x 5,08cm x 0,48cm (3/8" x 2" x 3/16"), 91cm (36") cable & plug 25,4cm x 19,05cm x 7,62cm (10" x 7,5" x 3")
Weight: <ul style="list-style-type: none"> • Readout Unit Only • Hall Effect Probe • MD-220 in rigid carrying case 	235g (8,3 oz) 32g (1,7 oz) 816,47g (1,8lb)

Operating Instructions

1. Charge 9 volt battery or attach the AC adapter prior to use.
2. Plug the the Hall Effect Probe into the readout unit.
3. Turn the selector switch to the desired mode (see below).
4. Position the MD-220 probe on the part surface as illustrated.
5. Energize the magnetic particle inspection machine to generate the magnetic field to be measured. If measuring residual field, place the residual field adapter over the end of the Hall Effect probe.
6. Observe the field strength reading on the LCD.

Three Operating Modes:

1. Measures DC or residual fields on a continuous basis. Polarity is displayed in this mode.
2. Measures AC or DC fields by the "sample and hold" method. The peak reading is held. The display holds the previous reading until a new field is introduced. Polarity is not displayed in this mode.
3. Measures AC field on a continuous basis. Polarity is not displayed in this mode.