



# Model MD-220

## HALL EFFECT MAGNETIC FIELD STRENGTH METER

### FEATURES/BENEFITS

- Fully protected removable Hall Effect Probe
- Meets AMS, ASTM & Mil Standards
- NIST Traceability assures meter accuracy
- Range of 0 to 199.9 Gauss, either polarity
- Battery or AC operation modes
- Includes rechargeable battery and charger
- Easy to read Liquid Crystal Display
- Reads AC and DC fields
- Meter accuracy within 2%
- Sample & Hold feature retains previous readings
- Durable Molded case withstands rugged NDT use
- Indicates field polarity
- Alignment fixture included



The **Gould-Bass Model MD-220 Magnetic Field Strength Meter** is a portable handheld instrument with three and a half digit display that measures magnetic field strength. It combines the latest digital display and "Hall Effect" technology into a functional, rugged, and aesthetic design. The handheld meter provides the user with an easy means for accurately measuring magnetic fields.

The **easy to read liquid crystal display** indicates the magnetic field present at the hall effect sensor. The MD-220 Field Strength Meter is designed to measure, in gauss, the AC and DC fields as required during magnetic particle inspection.

**Unlike analog magnetic field indicators**, the Gould-Bass MD-220 is not damaged by intense magnetic fields, even though they may far exceed the range of the meter.

### Technical Data

MD-220

<b>Model Number</b>	<a href="#">Buy Now!</a>
<b>Part Number</b>	N501196001
<b>Display Range</b>	0 to 199.9 gauss
<b>Display Type</b>	0.35" Liquid Crystal Display
<b>Accuracy</b>	within 2%
<b>Sampling Time</b>	0.3 Seconds
<b>Resolution</b>	0.1 Gauss
<b>Power Requirements</b>	9 Volt Rechargeable Battery (included) AC Adapter / Battery Charger (included)
<b>Current Drain</b>	25 milliamperes (approx.)
<b>Battery Life</b>	4 Hours between charges
<b>Temperature Range</b>	0 to 50 deg. C (32 to 122 deg. F)
<b>Humidity Range:</b>	0 to 100% R.H. ( <i>Non-condensing</i> )
<b>Dimensions:</b> - Readout Unit Only - Hall Effect Probe - MD-220 in Polymer Case	5.8" x 3.6" x 2" 3/16" x 3/8" x 2" w/ 3' cable & plug 10" x 7.5" x 3"
<b>Weight:</b> - Readout Unit Only - Hall Effect Probe - MD-220 in Polymer Case	235 Grams 8.3 oz. 32 Grams 1.7 oz. 1.8 lbs.
<b>Recommended Calibration Interval</b>	The MD-220 should be returned to the factory every six months for recalibration and routine inspection service. The recommended six month interval is based upon normal usage of intermittent readings. If the the unit is used continuously, recalibration should be performed more often.

### Method of Operation

#### Operating Instructions

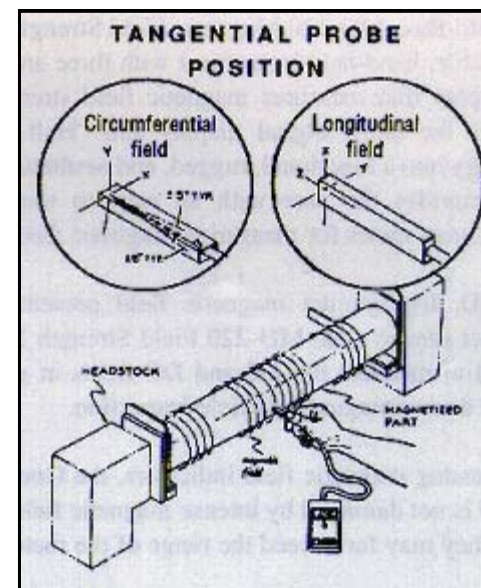
1. Charge 9 volt battery or attach the AC adapter prior to use.
2. Plug the the Hall Effect Probe into the readout unit.
3. Turn the selector switch to the desired mode (see below).
4. Position the MD-220 probe on the part surface as illustrated.
5. Energize the magnetic particle inspection machine to 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.



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