## **Magnetic Dry Film Thickness Gauge**

1. Description

See Figure 1.



Fig. 1 Magnetic dry film thickness gauge

The Nordson Magnetic Dry Film Thickness Gauge measures film thickness by indicating the relative attractive force exerted on a permanent magnet acting through non-magnetic dry coatings on a steel substrate. The gauge is accurate to  $\pm 5$  % within ranges of 0–80 mils or 0–500 microns.

The gauge is equipped with a carrying strap and is shipped with a protective leather carrying case.

2. Operation	<b>NOTE:</b> Make sure the film is dry. A slightly sticky film will give a false reading.		
	<b>NOTE:</b> Surface to be measured must be free from dirt, oil, or grease.		
Smooth Steel	1. Turn the gauge scale wheel to its maximum setting.		
	<ol><li>Place the gauge on a dry film so that the nose grommet and (if possible) the enlarged area of the gauge body rest firmly against the</li></ol>		

film to be measured.

Smooth Steel (contd)	<ol> <li>Set the gauge magnet by rotating the scale wheel forward (counter-clockwise) slightly until the indicator drops in the hole as the magnet attaches itself to the item being tested.</li> </ol>		
	<ol> <li>Rotate the scale wheel backward (clockwise) until the indicator pops up in the hole indicating the magnet has pulled away from the item being tested.</li> </ol>		
	5. Read the film thickness on the scale.		
Rough Surfaces	<b>NOTE:</b> Rough surfaces such as shot- or sand-blasted steel and casting have uneven surfaces. Coating materials have a tendency to build varying film thicknesses on surfaces of this type.		
	When measuring film thickness on rough surfaces, use one of the following methods.		
	<ol> <li>Follow the general operating instructions, but take multiple readings. Use the average of these readings as a general indication of film thickness.</li> </ol>		
	2. Attach small, smooth steel panels to the work and coat the work as usual. Measure the film on the panels. Remove the panels and then coat the voids on the work.		
Cylindrical Surfaces	When measuring on rod or cylindrical materials, align the "V" grooves in the probe housing and instrument base with the rod or cylinder.		
3. Maintenance	1. Periodically check the probe tip for foreign matter. Remove any foreign matter with a clean, dry brush or a soft cloth.		
	2. Always store the gauge in its case when it is not in use.		
Calibration	<b>NOTE:</b> Do not attempt to calibrate your film thickness gauge. Consult a qualified Nordson representative for calibration assistance.		
	The Nordson Magnetic Dry Film Thickness Gauge requires no calibration under normal circumstances. If you require calibration instructions, please contact your Nordson Corporation Representative.		

## Parts Magnetic Dry I

Magnetic Dry Film Thickness Gauge

ltem	Part	Description	Quantity	Note
—	790 037	Gauge, magnetic, dry film, 0–8 mil	1	
—	790 038	Gauge, magnetic, dry film, 0–80 mil	1	
—	790 039	Case, dry film gauge, leather	1	

5. Specifications

4.

Height: Length: Weight:

8-<sup>1</sup>/<sub>2</sub> in (21.59 cm) 6 oz (171.6 g)

2 in (5.08 cm)

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