INTRODUCTION
The Schmidt Roll Hardness Tester determines the hardness of large rolls of paper, film and foil. It provides fast, accurate, non-destructive hardness profiles of rolls to assure smooth and efficient printing. Rolls that are too hard, or too soft, rolls that are unevenly wound, or rolls with different moisture contents can cause difficulties during the printing process. The Schmidt Roll Hardness Tester is often used in conjunction with the Smith Roll Tightness Tester (TMI 40-54-00) to provide a complete profile of roll properties.

PRINCIPLE
The Original SCHMIDT® test hammer is based on the principle of rebound measurement and is very simple in its handling. The impact plunger of the instrument is pressed against the paper roll which compresses a spring. After reaching a certain point, the spring is released and an internal hammer mass is launched against the impact plunger. The amount of hammer mass rebound depends on the hardness of the test piece. This rebound amount is then shown on a scale of 10 to 100. Test intervals of 2" to 4" (5 to 10 cm) across the whole width of the roll will give the values for the Hardness-Profile® within a short period of time. The testing is non-destructive with exception of very light marks that the instrument leaves on the top two or three layers. Such “Hardness-Profiles” will show immediately whether the rolls have the necessary consistency. Rolls that are too soft, or rolls with inconsistent hardness are immediately recognized and can be rejected before the actual insertion in the press.

APPLICATIONS
Paper, Film, Foil, Printing, Graphic Arts

FEATURES
- Self-contained, Lightweight, Portable, Quick Readings
- A convenient carrying case provides safe, easy transport of these portable, lightweight units and accessories.

INSTRUMENT SIZE
Depth: 89 mm (3.5 in)
Length: 279 mm (11 in)
Width: 133 mm (5.25 in)
Weight: 1.4 kg (3 lbs)
Case: 5.5 x 4.5 x 12.75 in.
Dimensions: (140 x 114 x 324 mm)

ORDERING INFORMATION
Standard Display Model TMI 40-20-02

OTHER MODELS AVAILABLE
Recording Model TMI 40-20-01
Digital Paper Roll Hardness TMI 40-21-00
PAROtester 2 TMI 40-20-00