

**Foil Thickness  
Measuring  
Instrument  
Model 497**



testing equipment for quality management



**Small and handy  
measuring instrument**

**Non-destructive  
difference measurements**

# Foil Thickness Measuring Instrument, Model 497

## Purpose and Application

The foil thickness measuring instrument is used in two fields:

It may be used to measure the thickness of sheet metal, plastic foil, carton, paper, and other laminates, in a direct manner.

The second and more important application from the point of view of coating material technology is the thickness measurement of coating materials on thin base material previously referred to. If the base material is non-metallic, magnetic or electric, thickness measurement techniques cannot be employed. For non-destructive testing this instrument is the only possible method of measuring differences. A particularly important field of application for this instrument, for which it can be considered to be essential is the measurement of "Leneta" foils for the scrubbing resistance test in accordance with the German standard DIN 53 778 Part 2 and on black and white contrast cards for colour measurement and hiding power. (Our instruments for this: *Microprocessor Controlled Film Applicator, Model 510-Basic; Washability and Scrub Resistance Tester, Model 494 MC or 494 MC-Basic; Film Applicators, Models 284, 286, 288, 358, 360, 411, 421; Test Cards, Model 451.*)

## Principle of Test

The thickness of the foil is measured between a rigid surface and a plunger under spring pressure which can be raised, and which is coupled to a dial gauge for direct read-out.

## Design and Function

The foil thickness measuring instrument, Model 497, is a small handy measuring instrument of high precision. It consists of the measuring bracket with support face, plunger and dial gauge with zero point setting, hand grip and thumb pressure lever. The bracket has a high rigidity, the hand grip is heat insulated from the dial gauge.

The device is delivered with a Manufacturer's Test Certificate M.

## Test Procedure

The measuring probe is raised by applying pressure to the thumb lever, the specimen is placed between the support face and the plunger, and the plunger is slowly lowered after which the result is read off on the scale.

## Technical Data

Net weight, approx.:	100 g
Measuring range:	0 - 1000 $\mu\text{m}$ over 5 pointer revolutions, Scale 0 - 200 $\mu\text{m}$ with 1 $\mu\text{m}$ divisions
Readout accuracy:	$\pm 1 \mu\text{m}$
Depth of throat:	30 mm
Size of support face:	approx. 6 mm dia., flat, = approx. 30 mm <sup>2</sup>
Measuring pressure:	approx. 1.2 N, = approx. 0.04 N/mm <sup>2</sup>

## Ordering Information

Ord.-No.	Product Description
00140131	<b>Foil Thickness Measuring Instrument, Model 497</b> incl. Manufacturer's Test Certificate M

The right of technical modifications is reserved  
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