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Elcometer 3230 Wet Film Wheel

Can be used in accordance with: ASTM D 1212-A, AS/NZS 1580.107.3, BS 3900-C5-7A*, ISO 2808-1B, ISO 2808-7A*, JIS K 5600-1-7, NF T30-125



The Elcometer 3230 Wet Film Wheel is a high precision, accurate and easy to use instrument which consists of a set of three wheels. The central wheel is of a smaller diameter and is eccentric relative to the two outer wheels.

By rolling the gauge through a wet coating, the centre wheel eventually touches the film. This point on the scale indicates the thickness.

A convenient mounting handle for the wheel is available in two lengths; 15cm & 50cm; please order separately.

When the volume to solids ratio of the coating is known (generally found on the product data sheet supplied by the manufacturer), the wet film thickness can be used to predict the dry film thickness.

Several measurement ranges between 0 to $25\mu m$ and 0 to $1000\mu m$ are available. Continuous scale produces $\pm 5\%$ measurement accuracy.

Suitable for flat and curved surfaces.

Technical Specifications

Part Number	Scale Range	Graduations	Certificate
K0003230M001	0 - 25µm	1.25µm	0
K0003230M016	0 - 40µm	2.0µm	0
K0003230M002	0 - 50µm	2.5µm	0
K0003230M003	0 - 100µm	5.0µm	0
K0003230M004	0 - 150µm	7.5µm	0
K0003230M005	0 - 200µm	10.0µm	0
K0003230M006	0 - 250µm	12.5µm	0
K0003230M007	0 - 300µm	15.0µm	0
K0003230M008	0 - 400µm	20.0µm	0
K0003230M009	0 - 500µm	25.0µm	0
K0003230M010	0 - 1000µm	50.0µm	0
Accuracy	±5% of marked value or 3µm, whi	chever is the greater	
Dimensions	50 x 30mm		
Weight	220g		

^o Optional Calibration Certificate available

* Standards not in <u>bold</u> have been superseded but are still recognised in some industries



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Packing List

Elcometer 3230 Wet F	ilm Wheel	
Storage Case		
Operating Instructions		
Accessories		Go
Part Number	Description	

Part Number	Description	
KT003230N003	15cm Wet Film Wheel Handle	
KT003230N002	50cm Wet Film Wheel Handle	

Test Method

ISO 2808-7B, BS 3900-C5 method 7B, ASTM D4414-A specify that the wet film wheel should be perpendicular to the substrate and the thickness of the coating should be stated as that indicated on the central wheel - ensuring that the wheel has been rolled from maximum thickness to minimum thickness - thus avoiding surface tension.

The procedure outlined below is for guidance only. Consult the relevant Standard for full details of the applicable test procedure.



- 1. Using a finger and thumb, hold the wheel by its central spindle with the maximum reading on the scale nearest to the paint film.
- 2. Place the wheel into the wet film ensuring that the wheel is perpendicular to the film.
- 3. Roll the wheel across the film through 360°/180° (depending upon standard) and then remove from the surface.
- 4. Locate the first point on the central wheel where the paint has adhered. Read the wet film thickness from the scale on the side of the wheel at this point.

Repeat the procedure at least twice in different places to obtain representative results.

To use the wheel on pipes, roll the wheel at right angles to the longitudinal axis of the pipe. On rough surfaces, measurements will be made from the surface peaks and therefore will represent the minimum wet film thickness.

Video



YouTube Video - How to use a Wet Film Wheel (Click on the image to the left to view the video)

The Elcometer Wet Film Wheels are easy to use and available in a variety of scales to meet different film thickness needs. When applying a liquid coating, by measuring the uncured film thickness, it is possible to determine the eventual dry film thickness, ensuring high quality finish with minimal waste.

