Paint Inspection Gauge P.I.G. 455

A small instrument with great capabilities

LED for optimum specimen illumination

Low current consumption



testing equipment for quality management



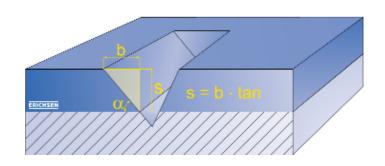
DIN 50986 DIN EN ISO 2808 ASTM D 4138 AS 1580 Meth. 408.1 For layer thickness measurements on base materials such as wood, concrete or plastics

Purpose and Application

The P.I.G. 455 is a paint inspection gauge which is suitable for use wherever conventional electro-magnetic measuring techniques are ineffective, namely for coatings on wood, concrete, plastics and other non-metallic substrates.

Testing Principle

Testing with the P.I.G. 455 is based on the standardized wedge cut procedure: The coating is cut through at a defined angle in such a way that the cut penetrates the substrate. The layer thickness (s) is calculated on the basis of the slope projection (b) of the cut face, determined using a measuring microscope, and the cutting angle (α). Similarly, the individual layer thikkness of multilayer systems can be ascertained.



For adhesion tests in accordance with AS 1580 Meth. 408.1, the width of the area where the coating has flaked off during the cutting operation is related to proiection b.

Carbide tip	Nr. 1	Nr. 4	Nr. 5	Nr. 6
Measuring range (μ m) Cutting angle α Factor (μ m/sc.div.)	20 - 2000	10 - 1000	5 - 500	2 - 200
	45°	26.6°	14°	5.7°
	20	10	5	2

Design and Function

The P.I.G. 455 consists of a black painted aluminium block which accommodates the following functional elements:

- Exchangeable carbide tip with precision-ground angular cutting blade.
- Measuring microscope with a magnification of 50 and a reticle (2 mm with 1/100 division), which is also suitable for inspection tasks.
- Two pairs of support pins to hold the measuring microscope securely and guide the carbide tip.
- Battery compartment for mignon batteries AA
- Combination of LED and fibre-optic light guide for optimum specimen illumination at low current con sumption
- Key for the integrated illumination

Technical Data

2 - 200 um Measuring range (standard): 110 x 85 x 25 mm Dimensions: 0.4 kg Net weight: Mignon batteries AA Power supply: LED diffuse white Light source:

Measuring microscope:

Magnification:

2 mm (1/100 division) - Reticle

Ordering Information			
Order No.	Description		
0098.01.31	Paint Inspection Gauge P.I.G. 455		
	Scope of delivery includes:		
	- Carbide tip No. 6		
	- Mignon batteries AA (2 pcs)		
	- Marking pen		
	- Leather case		
	- Operating instructions		

Accessories / Spares			
Order No.	Description		
910924741	Special Tip No. 1		
	for layer thicknesses up to 2000 µm		
910927441	Special Tip No. 4		
	for layer thicknesses up to 1000 μm		
910927641	Special Tip No. 5		
	for layer thicknesses up to 500 µm		
910927541	Special Tip No. 6		
	for layer thicknesses up to 200 μm		

Subject to technical modifications. Gr. 10 - TBE 455 - III/2024



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