

Elcometer 456 IPC Industrial Protective Coating Thickness Gauge

Can be used in accordance with:
 ASTM D7091, ISO 2808, ISO 19840, SSPC PA-2, US Navy NSI 009-32



The Elcometer 456 Industrial Protective Coating Thickness Gauge¹ is designed to measure dry film thickness on shot or grit blasted steel substrates.

Pre-calibrated with 4 profile ranges² to ensure accurate coating thickness measurement on blasted substrates, the Elcometer 456 IPC Thickness Gauge is fast and very easy to use.

Features

- Pre-calibrated with 4 profile ranges²
- Displays 3 individual readings together with their average in microns or mils
- Stores up to 150,000 readings in 2,500 batches
- Built in integral probe for stable, repeatable readings on flat or curved surfaces
- USB or Bluetooth® data output to the ElcoMaster® or your own software application

Profile Ranges

The user selectable surface profiles include smooth, fine, medium and coarse ranges. The gauge's built in integral ferrous probe allows thickness measurements to be taken on flat or curved surfaces, in mils or microns.

Profile	Metric
Smooth	0-25µm
Fine	25-60µm
Medium	60-100µm
Coarse	>100µm

With a reading rate of 70+ readings per minute, the gauge displays three individual thickness readings together with the average. Coating thickness readings can be transferred via Bluetooth® or USB to ElcoMaster®, or your own software application, for instant report generation.



1 USA patent number: US6243 661
 2 European Patent Number: 2754993

Technical Specifications

Model	Model S	Model T
Part Number	A456CFI1-IPC	A456CFT11-IPC
Test Certificate	•	•
Fast, accurate reading rate; 70+ readings per minute	■	■
Data output	■	■
USB; to computer	■	■
Bluetooth® to computer, Android™ & iOS ¹ devices	■	■
On screen statistics in Batch Mode	■	■
Number of readings; \bar{n} , Mean (average); \bar{x} , Standard deviation; σ , Highest reading; H_i , Lowest reading; L_o , Coefficient of variation; CV%, Elcometer index value; EIV, Nominal dry film thickness; NDFT, High & low limits; definable audible & visual alarms, Number of readings above high limit; Number of readings below low limit		■
ElcoMaster® software & USB cable		■
Integral Probe type; Ferrous (F)	■	■
Measurement range; 0 - 1,500 μ m	■	■
Resolution; 10 μ m (where 5 μ m is rounded up)	■	■
Accuracy ³ ; $\pm 5\%$	■	■
Minimum substrate thickness; 300 μ m	■	■
Pre-calibrated with 4 profile ranges ⁵ ;	■	■
Smooth 0-25 μ m, Fine 25-60 μ m	■	■
Medium 60-100 μ m, Coarse >100 μ m		
Auto calibration	■	■
Calibration memory type; gauge (g) or gauge & batch (gb)	g	gb
Number of batches with unique calibrations		2,500
Calibration lock with optional PIN code unlock	■	■
Delete last reading	■	■
Gauge memory number of readings		150,000
Individual batch calibrations sent to PC via ElcoMaster® software		■
Limits user definable audible & visual pass/fail warnings		■
Gauge & batch specific limits		■
Date and time stamp		■
Review, clear & delete batches		■
Batch types; normal, counted average		■
Batch review graph		■
Copy batches and calibration settings		■
Alpha-numeric batch names; user definable on the gauge		■
Operating Temperature	-10 to 50°C	
Battery Type	2 x AA batteries	
Battery Life ⁴	Alkaline: Approx. 16 hours Lithium: Approx. 24 hours	
Weight (including batteries)	156g	
Gauge Dimensions	141 x 73 x 37mm	

² Elcometer Index Values are used in the automotive industry to assess a coating's overall quality; USA patent number US7606671B2

³ When in test calibration mode

⁴ Using default settings & lithium batteries, alkaline or rechargeable batteries may differ

⁵ European Patent Number: 2754993

• Test certificate supplied as standard

Video



YouTube Video - Using the Elcometer 456 IPC in accordance with SSPC-PA2 & NSI 009-32

(Click on the image to the left to view the video)

Reduce coating thickness inspection times on blast cleaned steel substrates with the Elcometer 456 IPC Dry Film Thickness Gauge. Pre-calibrated with 4 surface profile ranges, in accordance to the NAVSEA Standard Item (NSI) 009-32, the Elcometer 456 IPC is fast and accurate.