

testing equipment for quality management

ERICHSEN since 1910

Technical Description

The measuring principle conforms to the DIN, ISO, BS and ASTM norms and standards Universal probe (FN) with automatic measuring technique for measurements on steel and on non-ferrous metals

Purpose and Application

The small and robust thickness gauge LAYERCHECK 750 USB is used for guick and precise. non-destructive coating thickness measurements on metallic substrates. Typical fields of application are e.g. industrial corrosion protection, assessor matters, electroplating and paint shops, the chemical, automobile, shipbuilding and aircraft industries as well as the apparatus and machine construction.

Design and Function

The housing body of LAYERCHECK 750 USB is made of a hard, wear-resistant material. An additional optimal ram- and impact-protection is provided by a surrounding rubber edge. For measurements in badly lit surroundings the LAYERCHECK 750 USB is equipped with a large, easy-to-read LC display with backlight.

Depending on the type of instrument, the batteryoperated coating thickness gauges are working either on the magnetic induction principle (F) **or**, in addition, according to the eddy-current method (with combined universal probe - FN).

The **LAYERCHECK 750 USB-F** with its magnetic induction principle is suitable to be used for measurements of non-magnetic coatings such as lacquers, aluminium, chromium, copper, zinc, enamel, etc., on iron or steel as well as on alloyed and hardened magnetic steel.

The LAYERCHECK 750 USB-FN provides the magnetic induction principle as well as the eddycurrent method. The combined probe enables the measurement of appropriate coatings on the base material steel as well as on non-ferrous metals. The automatic mode for the universal probe ensures the correct measuring method regardless of whether the base material is a ferrous or non-ferrous metal. The instrument recognizes automatically and indicates the type of substrate.

The probe should be held by the spring-mounted sleeve. This ensures a safe and stable positioning and a constant contact pressure. The hemispherical tip is made of hard and wear-resistant material. The single-pole sensor is connected with the gauge via cable (1 m long).

For export of the measuring values during the measuring process, or also for later display and export of the statistics the **LAYERCHECK 750 USB** can be connected to a PC via USB interface. For data transmission the Software Msoft7000 basic edition (German/English/French) on CD is included. Additionally, it can also be downloaded free of charge at www.erichsen.de/service/downloads.

Technical Data

Dimensions (L x W x D)		122 x 70 x 32 mm
Probe		Ø 15 mm x 62 mm
Measuring range Model 750 USB-F Model 750 USB-FN		0 - 3000 μm 0 - 2000 μm (F) 0 - 2000 μm (N)
Tolerance		± (2% + 2 μm) of the measured value
Minimum curvature radius		convex: 5 mm/0.2" concave: 25 mm/1"
Minimum measuring area		Ø 20 mm/0.8"
Minimum base thickness		0.5 mm (F) 50 μm (N)
Display		4-digit screen data (11 mm/0.44")
Measuring units		µm – mils to choice
Calibration	standar	d, one point, two-point
Statistics	of max. 9	999 measuring values
Storage from average value, standard deviation, number of measured values, highest/lowest measuring value		
Interface		USB
Power supply		3 Micro AAA batteries (>10000 readings)
Ambient temperature		0 - 50 °C (32°- 122°F) sensor: -10 °C - 70 °C (14°- 158 °F)

Order Information	
OrdNo.	Product Description
0304.01.31	Coating Thickness Gauge LAYERCHECK 750 USB-F incl. probe for measurements on steel
0305.01.31	Coating Thickness Gauge LAYERCHECK 750 USB-FN incl. universal probe for measurements on steel <u>and</u> non- ferrous metals

For more information and accessories (for example several types of calibration foils) please refer to our price list.

The right of technical modifications is reserved. Group10- TBE 750 – VIII/2012

