

Fischer DUALSCOPE® FMP20

Powder Coating Thickness Measurement Instrument

Proven performance that allows for non-destructive and highly precise measurement of powder coatings.

The DUALSCOPE FMP20 coating thickness measurement instrument is a portable, reliable solution for the measurement of powder coatings. The unit offers precise measurement technology and is ideal for quality control in a manufacturing process or for the incoming inspection of random samples or complete batches.

Features and Benefits:

- **Fast and non-destructive measurement on steel or iron (F) and non-ferrous metals (NF).**
- **Comes with the Fischer FD13H probe for measurement on virtually all metals.**
- **Easy to use, intuitive menu.**
- **Automatic probe and substrate recognition.**
- **Large contrast-rich color display.**
- **Units of measurement can be switched between μm and mils.**
- **Memory for up to 1,000 readings.**
- **Instant measurement upon probe placement.**
- **Audible signal with measurement acquisition.**
- **Easy adaptation to the shape of the specimen through a zero-point correction.**
- **Easy to perform corrective calibration for verification of accuracy.**
- **Sliding cover to protect keys against unintentional operation.**
- **Various language settings.**
- **Supports measurements according to IMO PSPC, SSPC-PA2, QUALANOD and QUALICOAT**
- **USB interface, Bluetooth or COM interface as option.**



The user-friendly and sturdy DUALSCOPE FMP20 instrument can be adapted to all requirements of coating thickness measurement using a measuring probe. It displays the most significant statistical values, which can be stored together with the calibration in the instrument, providing quick and reliable operation.

Application Versatility

The DUALSCOPE FMP20 features automatic substrate material recognition and the ability to integrate measurement methods on steel and iron (F) and on non-ferromagnetic metals (NF). Duplex coatings (lacquer/zinc) on steel can be measured simultaneously with the values of the lacquer and zinc coatings displayed individually. These features make the DUALSCOPE FMP20 a universal tool capable of meeting the measurement requirements of multiple applications.

Measurement Strategies & Evaluation

- Single reading acquisition
- Measurements with the “free-running display” mode for continuous scanning of surfaces
- Statistical display of significant values such as mean value, standard deviation, min, max, and range



The Fischer FD13H Probe

The DUALSCOPE FMP20 instrument comes with a Fisher FD13H probe, allowing measurements on virtually all metals. The probe works with two test methods, measuring coating thicknesses on non-ferrous metals as well as on ferrous metals. The FD13H probe is an axial single-tip probe with a spring-loaded measuring system. It incorporates a robust design with a wear-resistant probe tip that makes it well suited for measurements on rough surfaces.



Service Worldwide

Fischer has established a tightly linked, highly qualified global network of service partners. Offering fast help and repairs, Fischer supports you in every respect concerning your instruments and their use.

Calibration and Certification

Fischer Technology performs a full inspection and calibration of all instruments and probes prior to customer delivery. A broad assortment of calibration standards is available and a certification certificate is issued with every instrument and calibration standard.

Specifications for FD13H Probe*

	Steel or iron substrates (Fe)	Nonferrous metal substrates (NF)
Trueness- based on Fischer standards	0 ... 1075 µm: ≤ ± 1.5 µm 75 ... 1000 µm: ≤ ± 2 % of reading 1000 ... 2000 µm: ≤ ± 3 % of reading 0.97 ... 32.95 mils: ≤ ± 0.06 mils 2.95 ... 39.37 mils: ≤ ± 2 % of reading 39.37 ... 78.74 mils: ≤ ± 3 % of reading	0 ... 1050 µm: ≤ ± 1 µm 50 ... 1000 µm: ≤ ± 2 % of reading 1000 ... 2000 µm: ≤ ± 3 % of reading 0.37 ... 11.97 mils: ≤ ± 0.039 mils 1.97 ... 39.37 mils: ≤ ± 2 % of reading 39.37 ... 78.74 mils: ≤ ± 3 % of reading
Repeatability Precision	50 ... 2050 µm: ≤ 0.25 µm 50 ... 2000 µm: ≤ 0.5 % of reading 0.97 ... 1.97 mils: ≤ 0.0098 mils 1.97 ... 78.74 mils: ≤ 0.5 % of reading	0 ... 2100 µm: ≤ 0.5 µm 100 ... 2000 µm: ≤ 0.5 % of reading 0 ... 3.94 mils: ≤ 0.02 mils 3.94 ... 78.74 mils: ≤ 0.5 % of reading
Ordering Data	1605781 FD13H Probe	
Scope of Supply	Instrument case; protective instrument cover; lanyard; 2 batteries; metal plates NF/FE and ISO/NF for testing purposes; calibration foil; operator's manual; manufacturer's certificate; USB cable; support CD with USB drivers, software program FISCHER DataCenter for convenient evaluating, documenting and archiving of the measurement data, software program PCDatex for exporting the measurement data to an Excel spreadsheet. Probe, metal plates, ISO/NF and NF/FE for instrument check, calibration foils.	

* Fischer offers additional probes to fit a variety of application needs.

For more information, speak with your Nordson representative or contact your Nordson regional office.

United States

Amherst, Ohio
+1.800.433.9319 Phone
+1.888.229.4580 Fax

Canada

Markham, Ontario
+1.905.475.6730 Phone
+1.800.463.3200 Phone
+1.905.475.8821 Fax

Europe

Erkrath, Germany
+49.211.9205.141 Phone
+49.211.9252.148 Fax

Japan

Tokyo, Japan
+81.3.5762.2700 Phone
+81.3.5762.2701 Fax

Asia/Australia/ Latin America

Amherst, Ohio
+1.440.985.4000 Phone
24-hour message service:
+1.440.985.4797

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