Coating thickness gauges MP0, MP0R and MP0R-FP

The compact solution for quick and easy coating thickness measurements in the corrosion protection field

The compact solution for reliable corrosion protection

Robust, precise, handy

The compact devices of the MP0 and MP0R series are an economical solution for quick and easy coating thickness measurements in the corrosion protection field. When it comes to examining the layers that protect ships, bridges or other hard-to-access steel structures, these lightweight and hand-sized instruments really show their strength.

- Backlit graphical display and additional readout window on the top make these gauges ideal for field use
- Suited for thousands of measurements due to wear-resistant probe tips

- Integrated conductivity compensation balances out differences in conductivity of non-ferrous metals
- Sample geometry and permeability exert relatively little influence on the measurement results
- DUALSCOPE-series instruments automatically recognize the kind of substrate under test and select the correct measurement method: magneto-inductive or eddy current

The software and interfaces of the MP0 and MP0R instruments are designed for precise coating thickness measurement as well as efficient analysis of the resulting data. For example, measurement guidelines like IMO PSPC and SSPC-PA2 are already pre-programmed into the software. This makes it easy to carry out standardized control procedures without much training. The device's internal memory can store up to 10,000 measurement values, which – in combination with its long battery life – enables extended periods of use. Via a USB port, the data can be transferred to a PC, where tailored reports can be generated with the FISCHER DataCenter software.

The lit display rotates automatically, allowing easy readout in any measurement position

Built tough
The MP0 and MP0R gauges were developed specifically to be easy to operate and to withstand harsh environments. The instrument's durable plastic housing and bumpers reliably protect the electronics from damage. The mechanical probe-guides and the probe itself are especially robust. The wear-resistant probe tip ensures long service life.

Simple and quick measurements
For fast and error-free reading of the measurement results, the devices are equipped with two lighted graphical displays. When measuring overhead or on slanted or vertical surfaces, the display rotates automatically. An LED on the top of the unit signals whether the value just taken is within the tolerances previously entered.

The carbide probe tip is especially wear-resistant and stands up to thousands of measurements

Perfect interplay between hardware and software
The self-explanatory menu navigation on the MP0 and MP0R instruments requires little to no instruction. Tolerance ranges can be easily set or various norms activated for a given measurement task. Likewise, calibration on the substrate material is straightforward.

To ensure stable positioning on the sample, the devices are equipped with a three-point support. That combined with curvature compensation guarantees reliable measurements even on non-flat surfaces.

An LED shows immediately whether the value is within tolerance

Overview of the MP0 and MP0R gauges

Instrument name		PERMASCOPE MP0	PERMASCOPE MP0-FP	DUALSCOPE MP0	PERMASCOPE MP0R
Measurement*	Iso/Fe + NF/Fe	•	•	•	•
	Iso/NF	–	–	•	–
Memory for results		1,000	1,000	1,000	10,000
USB interface		–	–	–	•
Automatically rotating display		–	–	–	•
Measurement range in µm		0...2,500	0...2,500	0...2,000	0...2,500
Angled probe		–	–	–	–
Weight in g		137	184	137	137
Measuring speed: over 70 measurements/minute		•	•	•	•
Available with Bluetooth		–	–	–	–

* Iso/Fe: Non-conductive coatings on magnetic materials
Iso/NF: Non-conductive coatings on non-magnetic materials
NF/Fe: Non-magnetic coatings on magnetic metals

PERMASCOPE MP0R-FP	PERMASCOPE MP0R-FPW	DUALSCOPE MP0R	DUALSCOPE MP0R-FP	DUALSCOPE MP0RH-FP	DUALSCOPE MP0R-FPW	ISOSCOPE MP0R
•	•	•	•	•	•	–
–	–	•	•	•	•	•
10,000	10,000	10,000	10,000	10,000	10,000	10,000
•	•	•	•	•	•	•
•	•	•	•	•	•	•
0…2,500	0…2,500	0…2,000	0...2,000	0...7,000 (Substrate Fe) 0...2,500 (Substrate NF)	0…2,000	0…1,200
–	•	–	–	–	•	–
184	184	137	184	184	184	137
•	•	•	•	•	•	•
–	–	–	•	–	–	–

Delivery contents

All devices of the MP0 and MP0R series come in a robust carrying case. Besides the measurement instrument, the shipment includes:

- 2 Batteries, LR6.AA 1.5 V
- Impact protection and Carrying strap
- Operation manual
- USB cable for devices with USB interface
- Material calibration standards corresponding to the respective measurement methods
- Calibration foils

Correct measurements, efficient evaluation

Correct measuring practices – made foolproof
The consistently easy operation of the MP0 and MP0R devices incorporates the principles of correct measurement. Everything about these small but powerful instruments is designed to ensure efficient and error-free testing. For example, the master calibration performed at the factory guarantees accuracy across the entire measurement range. For the user, this means: once turned on, the device is immediately ready to go. For even more precise measurement results, the instruments can be calibrated on the substrate material at hand. If testing requires particularly exact values within a specific tolerance range, both one- and two-point calibration can be performed. As a DAkks-accredited company, FISCHER also produces and sells a broad portfolio of calibration standards, including calibration foils spanning the complete measurement range of the MP0 and MP0R instruments.

Irrespective of the substrate, the MP0R gauges always deliver correct measurement values because they recognize whether the base material is magnetic or non-magnetic and automatically select the appropriate method. For example, the thicknesses of paint layers on a structure with parts made of both aluminum and steel can be taken without ever having to change the instrument's settings.

In addition, the integrated conductivity compensation feature balances out differences in the conductivities of non-ferrous metals. For measuring on non-flat parts, FISCHER has also built in its proven curvature compensation.

Data acquisition and analysis
The MP0/MP0R series offers several different measurement modes. This includes, among others, coating thickness measurement according to IMO PSPC and SSPC-PA2. The intuitive menu navigation makes it quick to activate the desired parameters, ensuring that even non-expert users can conduct control measurements in compliance with the standards.

A USB port is available for transferring the data to a PC or laptop, where, using the FISCHER DataCenter software, the values are quickly imported and easy-to-read reports generated.

As a DAkks-accredited company, FISCHER offers a variety of calibration standards

FISCHER Worldwide
Anyone striving to succeed in today's globalized markets must know what their customers need and want. Because FISCHER considers itself a partner to its customers, it places great emphasis on excellent consultation and close cooperation. This is why FISCHER maintains its worldwide presence through independent companies and qualified distribution partners; there is one near you.

Service
Good service and efficient customer support are just as important to FISCHER as technically advanced and innovative products. For this reason, FISCHER has established a dense and tightly-linked global network of service partners with highly qualified staff. Offering extensive services such as setup, maintenance, training and calibration, FISCHER supports every aspect of your instruments and their use. This is how FISCHER guarantees the reliability and precision of its products. Worldwide.

Application Laboratories
More and more, demanding applications require highly qualified application advice. FISCHER addresses this need through Application Laboratories located strategically around the world (Germany, Switzerland, China, USA, India, Japan and Singapore).

Global Sales
Global Application
Global Service

www.helmut-fischer.com

Headquarter:
Helmut Fischer GmbH
Institut für Elektronik und Messtechnik
Industriestraße 21
71069 Sindelfingen

902-010 09/21