



HOMMEL-ETAMIC W10 - mobile roughness measurement



MOBILE ROUGHNESS MEASUREMENT

Transverse probing

- 90° tilting of the probe for measurements in grooves and incisions or between collars
- Probing of the surface transversely to the traverse direction without complex conversion

Overhead measurement

- Measurement of small workpieces in overhead position
- Contact to the workpiece is made by precisely polished shafts on the bottom side of the traverse unit

Mobile measurement on small shafts

- Support prism for shafts from 10 mm diameter
- Reliable centering of the roughness probe on the shaft

Integrated height adjustment

- Extendable tripod legs for adjusting the traverse unit to the height of small workpieces
- Easily adaptable to the desired measuring position

Perpendicular measurement

- 3-point support on the back side of the traverse unit
- Secure positioning when measuring perpendicular surfaces

Height measuring stand HS300 (optional)

- Turns the mobile W10 into a stationary measuring configuration
- For precise positioning of the roughness probe on the workpiece surface
- Height adjustment range 300 mm
- Tilting device $\pm 180^\circ$



Integrated V groove

- For reception of small shafts directly on the basic unit
- Allows for stable and mobile measurements in connection with the tripod legs

Integrated rest and barrel jack

- Secure storage of the traverse unit
- Protection of the probe
- Continuous operational readiness of the traverse unit thanks to the automatic battery charging function

Traverse unit LV17

- Easy changing of the probes
- Precise positioning on the workpiece via support prism
- Transparent probe protection with measurement position lighting (patented)
- Cable-free with *Bluetooth*[®] wireless technology

Integrated roughness standard

For immediate verification of the W10.

V groove

For secure positioning of small, shaft-type workpieces.

Rest and barrel jack

For secure and protective storage of the traverse unit and automatic charging of the battery.

Probe protection with lighting (patented)

Protects the roughness probe from damaging and illuminates the measuring position when needed.

Large color touchscreen

For comfortable operation with preselectable measuring programs. Clear display of results with tolerance evaluation.

Printer

For immediate documentation of the measurement results.

Cable-free traverse unit

With *Bluetooth*® wireless technology for safe, mobile roughness measurements without cable connection.



EASY AND CONVENIENT OPERATION



Context sensitive operation via touchscreen

- 8 measuring programs
- Function keys for the 4 basic functions
- Evaluation of all common roughness parameters
- Extensive possibilities for tolerance evaluation
- Fast and comfortable input of additional data via touchscreen
- Clear display of the measurement results
- Results display: parameters, profile view, interactive Abbott curve, extensive statistics functions



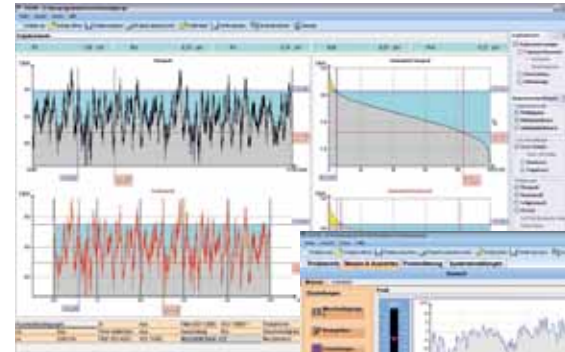
Integrated roughness standard

- Exchangeable roughness standard, safely stored in the W10 basic unit
- Immediate verification of the measuring device on site
- Stable measurement configuration
- 1 measuring program specifically for the verification of the measuring device with predefined nominal values
- For reliable measurement results - anytime and anywhere



Integrated thermal printer

- For documentation of the measurement results in situ
- „Easy Paper Loading“ function
- Printing of measurement results with tolerance evaluation, profiles, Abbott curve, additional information, statistics



Interactive profile analysis



Measurement and evaluation in Online mode

Optional evaluation software EVOVIS mobile

- Specifically for operation with portable measuring devices
- Online mode: the W10 is connected to the PC and operated directly via the software
- Offline mode: parameters and profile data stored in the W10 are transferred to the PC/software for further evaluation
- Individual test plan creation
- Wizard for selecting the measuring conditions
- Over 90 roughness and waviness parameters in accordance with EN ISO 4287 as well as other ISO and national standards (ASME, DIN, JIS, Motif, etc.)
- Open design of the print log
- Electronic archiving of logs with PDF printout and automatic save function

- **Mobile** - battery-supplied, with cable-free traverse unit, for flexible day-to-day use
- **Simple** - modern, intuitive operation via touchscreen
- **Complete** - measurement of all common roughness parameters according to international standards
- **Clear** - results display with tolerance evaluation, surface profiles
- **Practical** - integrated printer for documentation of the measurement results on the spot
- **Reliable** - immediate verification of the W10 via the integrated roughness standard
- **Convenient** - integrated barrel jack for traverse unit LV17
- **Versatile** - transverse probing, overhead measurement or on perpendicular surfaces



Scope of delivery
HOMMEL-ETAMIC W10
Art. 1006 5263

- W10 basic unit
- Traverse unit LV17
- Roughness probe T1E
- Probe protection
- Support prism for small shafts (from Ø 10 mm)
- USB cable
- Line adapter 90-240 V
- Roughness standard
- Allen wrench
- Factory calibration certificate
- Datasheet roughness standard
- Operating instructions
- Case

TECHNICAL DATA

Measurement range	320 µm (-210/+110 µm)
Probe	Inductive skid probe T1E 2 µm/90°
Measurement display	µm/pinch selectable
Max. traverse length	17.5 mm
Traverse length according to ISO/JIS	1.5 / 4.8 / 15 mm
Traverse length according to MOTIF	0.64 / 3.2 / 16 mm
Cut-off	0.08 / 0.25 / 0.8 / 2.5 mm
Individual traverse lengths	1 - 5 selectable
Filter	EN ISO 11562: Gaussian filter EN ISO 16610-21: Gaussian filter EN ISO 13565-1: Filter for Rk parameters EN ISO 3274: λs filter
Traverse speed vt	0.15 / 0.5 / 1 mm/s; return 3 mm/s
Data point interval	Min. 0.5 µm (9600 points when lt = 4.8 mm)
Parameters EN ISO 4287	Ra, Rz, Rmax, Rt, Rq, RSm, Rp, Rv, Rq, Rsk, Rku, Rdc, Rdq, RzISO, Rmr, Rmr(c), C(Rmr), Pt, Pz, Pa
Parameters EN ISO 13565-1, -2	Rk, Rpk, Rvk, Mr1, Mr2, A1, A2, Rpk*, Rvk*
Parameters MOTIF ISO 12085	R, AR, Rx, CR, CL, Nr, CF
Parameters ASMB46	Rpm
Parameters JIS B601 (2001)	Rz-JIS
Parameters EN 10049	RPc
Parameters Daimler MBN 31007	R3z
Battery (basic unit)	Lithium-ion battery, 800 measuring cycles (without printout, traverse length 4.8 mm)
Measuring programs	7 measuring programs, 1 measuring program for verification
Data memory	2000 measuring data records/parameters, 500 profile data records
Interfaces	USB, Bluetooth® technology
Dimensions (L x W x H), weight Basic unit W10 Traverse unit LV17	224 x 226 x 70 mm, 980 g 151 x 50 x 55 mm, 275 g

Integrated printer

Printing method	Static thermal print lines
Paper/printing width	57 ±0.5 mm / 48 mm
Paper roll	Ø = 31 mm
Resolution	8 points/mm, 384 points/line
Print functions	Measuring conditions, parameters, roughness profile, Abbott curve, statistics



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