



## 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



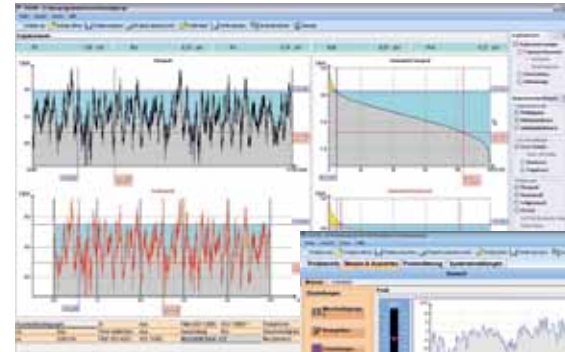
## Integrated roughness standard

- 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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