# Handysurf E-35A. The Small, Portable Surface Measuring Unit



- Easy operation
- Instant data processing and display
- Data memory



# Handysurf E-35A: Extremely versatile surface inspection

Whether used in the receiving inspection, production or final inspection, Handysurf E-35A makes quality assurance incredibly flexible. Because you take this compact, hand-held surface tester to where the part is. There is no easier way of measuring, evaluating and documenting surface roughness than with Handysurf E-35A. Why not try for yourself.







A range of easily exchangeable pick-up systems (see page 5) is available for different applications.

# Al function for convenient operation

Automatic, standardized setting of measuring range, evaluation length and cut-off value, optimized for the surface to be measured.

# Complies with all customary surface standards

Standards: ISO, DIN, CNOMO, JIS and ASME. Select any one of the following seven languages: German, English, French, Italian, Spanish, Portuguese, Japanese.

## Data memory / battery operation

Ten complete data records can be stored in the built-in memory and recalled at any time. Battery operation (rechargeable) provides versatile use independent of the line supply.

### Measuring in different positions

The small and light Handysurf E-35A measures not only flat, horizontal, but also vertical and overhead surfaces. In addition, the traversing unit can be separated from the display unit and used with optional holding devices for more flexible operation.

#### Direct data transfer to the PC

The RS 232C serial interface is used to transfer measured data, parameters and profile points directly to the PC.

 $E\text{-}ST\text{-}MAC\ magnetic\ stand$ 

Mount for 6 mm dia. 0102050:

Permits measurement at different levels and angles.

Granite measuring stand 625006-3403

## DT57506 extension

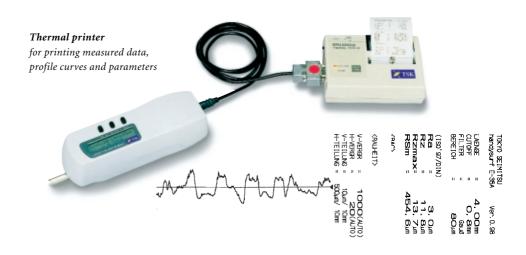
The pick-up arm can be extended by 50 mm, e.g. for the measurement of deep bores.

DT57707 extension adapter

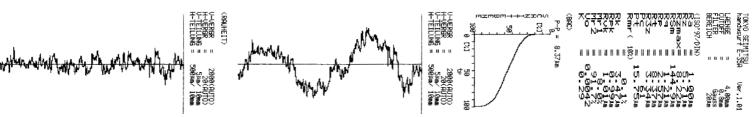
The extension offset by 90° permits lateral probing.



# Easy operation







**Surface attachment E-WJ-S88A**The attachment permits freehanded measurement of flat surfaces.

**Shaft attachment E-WJ-S85A**The attachment permits freehanded measurement of shafts and cylinders.

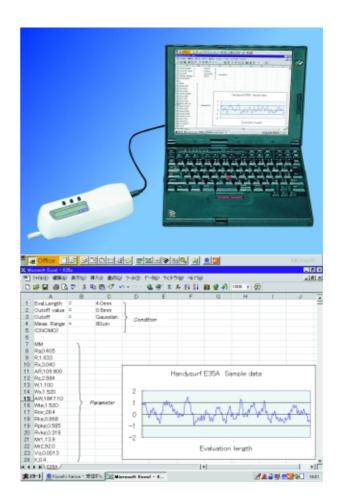
**Orthogonal attachment E-WJ-S86A**This device permits reliable alignment at right angles to the seating surface.



Direct data output on laptop/PC

# Data processing:

- $\blacksquare$  Excel
- TIMS roughness software



# Optional pick-up systems

Туре	E-DT-SM10A	E-DT-SM11A	E-DT-SM12A	E-DT-SM13A
Application	Standard pickup	Pickup for ø > 6 mm	Pickup for ø > 3 mm	Pickup for grooves < 7 mm
Measuring force	4 mN	4 mN	4 mN	4 mN
Stylus tip	Diamond 5 μm/90°	Diamond 5 μm/90°	Diamond 5 μm/90°	Diamond 5 μm/90°
Skid	Saphire	Saphire	Saphire	Saphire
	568.6 12.6 29 15	9 145 412 126 4 15	08.3 14.5 41.2 12.6 27 1.5	56.6 12.6 N 1.5

# **Specifications**

## Traversing unit

Traversing length 12.5 mm
Tracing speed 0.6 mm/s
Reserve speed 1 mm/s

Evaluation length flexible mode fixed mode 0.4 to 12.5 mm with 0.1 mm step  $5 \lambda c (0.4/1.25/4/12.5 \text{ mm})$ 

# Pick-up system

 $\begin{array}{lll} \text{Measuring range} & 40/160 \ \mu\text{m/Auto} \\ \text{Resolution} & 0.02 \ \mu\text{m} \\ \text{Probing force} & 4 \ \text{mN} \\ \text{Material of stylus} & \text{Diamond} \\ \text{Radius of stylus} & 5 \ \mu\text{m} \\ \end{array}$ 

Skid Saphire, Radius 40 mm

## Data processing

Data memory 10 data records; profile curves, parameters, measuring conditions

Filter type Gaussian DIN 4777 and 2RC Roughness filter cutoff value  $\lambda c$  0.08/0.25/0.8/2.5 mm ISO/DIN/JIS/CNOMO/ASME

Roughness parameters Ra, Rz, RSm, Rq, Rp, Rt, R3z, Pc, Pt, Rmr, PK, Rpk, Rvk, Mr1, Mr2, Vo, K, Rzmax

# Tolerance comparison

Display unit LCD, 16 digit x 2 lines

Display items Measuring conditions, parameters and OK/NG results

 $\begin{array}{ll} \text{Units} & \mu\text{m}/\mu\text{inch} \\ \text{Data interface} & \text{PC interface} \end{array}$ 

Languages German, English, French, Italian, Spanish, Portuguese, Japanese

# Miscellaneous

Powersupply Built-in, rechargeable battery with

AC adapter 100, 120, 127, 220, 240 V, 50-60 Hz

Power consumption approx. 0.5 VA (battery provides approx. 7 h hours operation)

Dimensions, weight width = 186 mm, depth = 68 mm, height = 54 mm, weight approx. 0.6 kg
Standard acesssories Calibration & stylus check specimen, tracing driver support, Extension cable

& transport case

Printer optional

# **Carl Zeiss**

## **Industrielle Messtechnik GmbH**

73446 Oberkochen

Vertrieb: (0180) 3 33 63 36 Service: (0180) 3 33 63 37 Telefax: (07364) 20-38 70 E-Mail: imt@zeiss.de www.zeiss.de/imt Please contact us.

# Contact:

Jean-Louis Ménégon 06 76 08 96 83 jlouismenegon@aol.com

