

# 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.*

**AI 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-ST-MAC magnetic stand**

Mount for 6 mm dia.

0102050:

Permits measurement at different levels and angles.

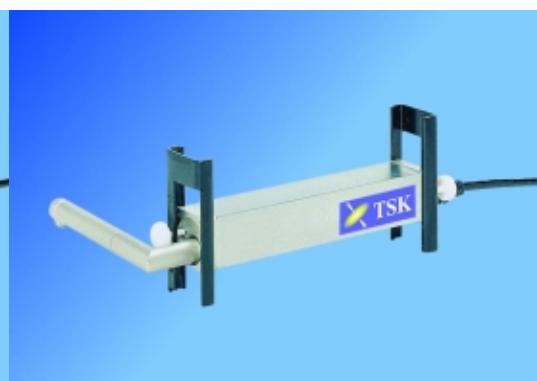
Granite measuring stand 625006-3403

**DT57506 extension**

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

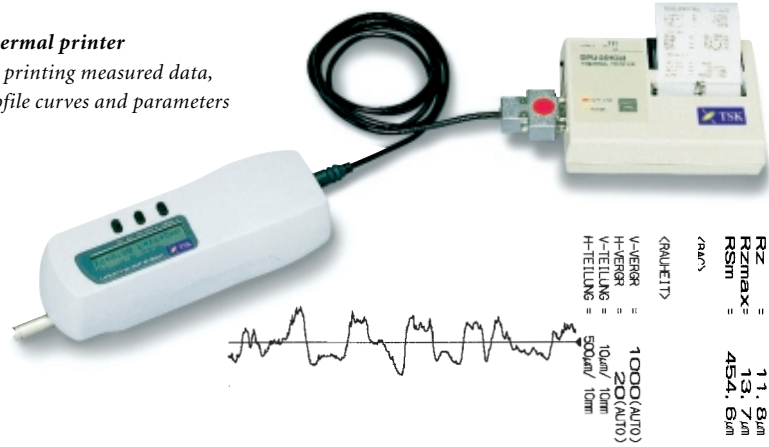
**DT57707 extension adapter**

The extension offset by 90° permits lateral probing.



# Easy operation

**Thermal printer**  
for printing measured data,  
profile curves and parameters



**Thermal printer**  
(high-speed) with  
high resolution



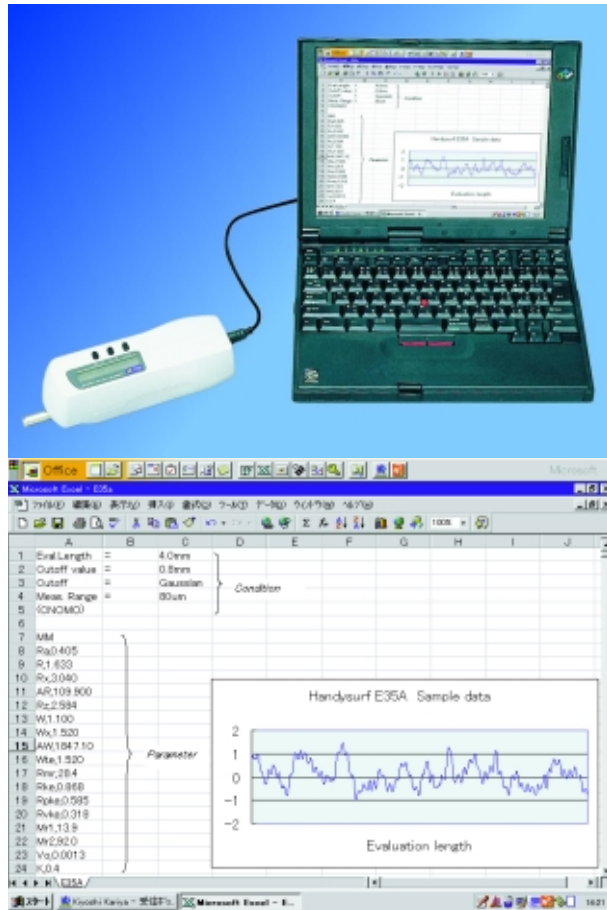
**Surface attachment E-WJ-S88A**  
The attachment permits freehanded  
measurement of flat surfaces.

**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:

- Excel
- TIMS roughness software

### Optional pick-up systems

Type	E-DT-SM10A	E-DT-SM11A	E-DT-SM12A	E-DT-SM13A
Application	Standard pickup	Pickup for $\phi > 6$ mm	Pickup for $\phi > 3$ mm	Pickup for grooves $< 7$ mm
Measuring force	4 mN	4 mN	4 mN	4 mN
Stylus tip	Diamond 5 $\mu$ m/90°	Diamond 5 $\mu$ m/90°	Diamond 5 $\mu$ m/90°	Diamond 5 $\mu$ m/90°
Skid	Saphire	Saphire	Saphire	Saphire

# Specifications

## Traversing unit

Traversing length		12.5 mm
Tracing speed		0.6 mm/s
Reserve speed		1 mm/s
Evaluation length	flexible mode	0.4 to 12.5 mm with 0.1 mm step
	fixed mode	5 $\lambda_c$ (0.4/1.25/4/12.5 mm)

## Pick-up system

Measuring range	40/160 $\mu\text{m}$ /Auto
Resolution	0.02 $\mu\text{m}$
Probing force	4 mN
Material of stylus	Diamond
Radius of stylus	5 $\mu\text{m}$
Skid	Sapphire, 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
Standard	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
Units	$\mu\text{m}$ / $\mu\text{inch}$
Data interface	PC interface
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 accessories	Calibration & stylus check specimen, tracing driver support, Extension cable & transport case
Printer	optional

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