HOMMEL TESTER T8000 – Technical specifications
Roughness measurement

PC evaluation unit	Evaluation unit, monitor, printer, keyboard, mouse, including measuring electronics for data logging and control of peripherics
Measuring method	Skidless/skid measurement, calibrated
Accuracy according to DIN 4772	Class 1
Measuring ranges/Resolution	± 8 µm / 1 nm ± 80 µm / 10 nm ± 800 µm / 100 nm ± 8000 µm / 1000 nm
Metric system	µm/µinch selectable
Filter	
Cut-offs	0.025 / 0.08 / 0.25 / 0.8 / 2.5 / 8.0 (mm) selectable –2 to +1 cut-off steps individual 0.001 to 80 in 0.001 increments
DIN 4768	RC, digitally calculated (mm) Cut-offs 0.025 / 0.08 / 0.25 / 0.8 / 2.5 / 8.0
DIN EN ISO 11562, Part 1 (50% Gauss)	Gauss (M1) Digital filter (mm) Cut-offs 0.025 / 0.08 / 0.25 / 0.8 / 2.5 / 8.0
DIN EN ISO 13565-1	2-fold Gauss (M2) Rk parameters Cut-offs 0.025 / 0.08 / 0.25 / 0.8 / 2.5 / 8.0
ISO 3274/11562	Short-wave cut-offs λs, individual $\lambda c/\lambda s$ 30 / 100 / 300
ISO 3274/11562	Form filter λf
Tracing speed Vt	lt – 0.05 / 0.15 / 0.5 mm/s or variable 0.01-2.0 mm/s in 0.01 increments
Tracing length lt	0.48 / 1.5 / 4.8 / 15 / 48 mm or variable 0.1-200 mm
Measuring length lm	0.40 / 1.25 / 4.0 / 12.5 / 40 mm or variable
Cut-off λ (mm)	0.08 / 0.25 / 0.8 / 2.5 / 8.0
Roughness parameters DIN EN ISO 4287	Ra; Rz; Rmax, Rt; Rq; Rsk; lmo; lo; Rdq; da; ln; La; Lq; Rz-ISO; R3z; Rpm; Rp3z; R3zm; Rp; D; RPc; RSm; Rpm/R3z; lr; Rku; tpif; tpia; tpip; tpic; Rt/Ra; Rz1; Rz2; Rz3; Rz4; Rz5; Rmr; Rmr%; Api
Rk parameters DIN EN ISO 13565	Rpk*; Rpk; Rk; Rvk; Rvk*; Mr1; Mr2; A1; A2; Vo(70%)0.01*; Rv/Rk
Profile parameters DIN EN ISO 4287	Pt'; Pp; Pz; Pa; Pq; Psk; PSm; Pdq; lp; Pku; tpaf; tpaa; tpab; Tpac; Pmr0; Apa; Apa%; Pmr; Pmr%
Waviness parameters DIN EN ISO 4287	Wt'; Wp; Wz; Wa; Wq; Wsk; WSm; Wdq; lw; Wku; WD1t'; WWD1z; WD1a; WD1q; WD1Sm; WD1dq; WD1lw; WD1Pc; WD2t'; WD2p; WD2z; WD2a; WD2q; WD2sk; WD2Sm; WD2dq; WD2lw; WD2ku; WD2Pc
Motif parameters DIN EN ISO 12085	R; Rx; AR; Nr; W; Wx; AW; Nw; Wte; Tpaf (CR, CL, CF)
Roughness parameters JIS B-0601	Rz-JIS; Rmax-JIS
Statistics	(n, x, S, R, max, min) 1 - 999 measurements
Screen and printout forms	User defined: surface parameters, statistics, profile position, P-/ R-/ W-/ K-profile, material ratio, measuring conditions, tolerances, topography (optional)
Operational modes	Programme creation, CNC-run (optional), measurement with pre-selected programmes, automatic measuring run, profile measurement, profile analysis, adjustment
Alignment	Profile inversion, coarse alignment, fine alignment, partial alignment
Peripheral equipment	Traverse units: waveline™ 20/60/120/200, LV50-LV250, RV150S Rotary traverse units: waverotor™, RV 150 S Measuring columns: wavelift™ 400/CNC, 800/CNC Tilting units: wavetilt™ 60/120/200 Contour pick-ups: wavecontour™ inductive/digital Topography: Y positioner
Languages	German, English, French, Italian, Spanish, Czech
General data	
Power supply	100V-120V / 200V-240V selectable, 50-60 Hz, 400 VA
Operating temperature	-5°C to +40°C, relative humidity max. 85% without condensation
Storage temperature	-20°C to +50°C

Subject to change without notice. 06/03

JENOPTIK-Gruppe.