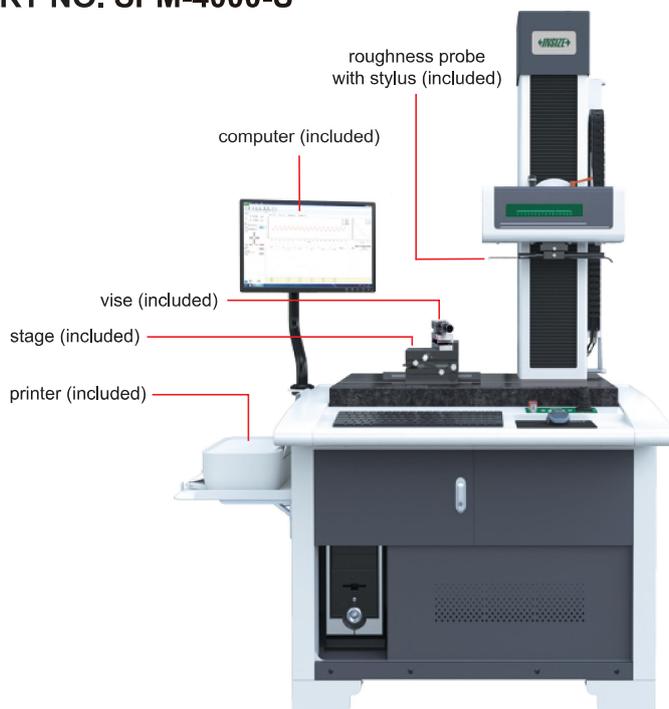


ROUGHNESS MEASURING MACHINE

PART NO. SPM-4000-U



- Skidless probe
- Hundreds of parameters can be evaluated, such as roughness profile, waviness profile, primary profile, etc.
- Software is included, for measurement and data output

STANDARD DELIVERY

Main unit	1 pc
Roughness probe (with stylus)	1 pc each
Calibration block	1 pc
Working stage	1 pc
Vise	1 pc
Computer	1 pc
Software	1 set
Printer	1 pc
Installation tools	1 set

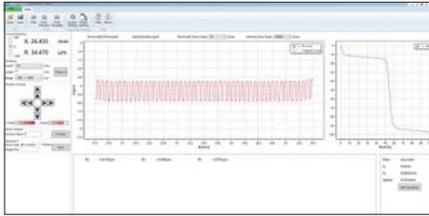
OPTIONAL ACCESSORY

Small roughness probe	refer to details
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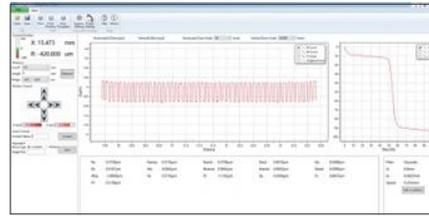
SPECIFICATION

Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rxsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rc, Rcmx, Rcmn, Rcsd, Rt, Rq, Rqmax, Rqmin, Rdsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkugd, Rsm, Rsmmax, Rsmmin, Rsmgd, Rs, RΔa, RΔamax, RΔamin, RΔasd, RΔq, RΔqmax, RΔqmin, RΔqsd, Rk, Rpk, Rvk, Mr1, Mr2, Rλa, Rλamax, Rλamin, Rλasd, Rλq, Rλqmax, Rλqmin, Rλqsd, Rδc, Rpc, Rmr
Waviness parameters	Wa, Wamax, Wamin, Wasd, Wsa, Wca, Wa08, Wc, Wcmax, Wcmin, Wcsd, Wt, Wz, Wzmax, Wzmin, Wzsd, Wp, Wpmax, Wpmin, Wpsd, Wv, Wvmax, Wvmin, Wvsd, Wq, Wqmax, Wqmin, Wqsd, Wsm, Wsmmax, Wsmmin, Wsmgd, Wsk, Wskmax, Wskmin, Wsksd, Wku, Wkumax, Wkumin, Wkugd, WΔq, WΔqmax, WΔqmin, WΔqsd, Wδc, Wmr
Primary profile parameters	Pa, Pt, Pp, Pc, Pv, Pz, Pq, Psm, Psk, Pku, RzJ, Rpq, Rvq, Rmq, Pmr, PΔq, Avh, Hmax, Hmin, Area, Pδc, Tiltα
Motif parameter	Ncrx, R, Rx, AR, Nr, Cpm, Sr, Sar, W, Wx, Aw, Wte, Nw, Sw, Saw
X axis measuring range	120mm
X axis resolution	0.1μm
X axis straightness	0.5μm/100mm
X axis traverse speed	(0.1~10)mm/s
Z axis measuring range	±420μm
Z axis resolution	1:65536
Z axis linear accuracy	≤±(10nm+3.5%)
Z axis traverse speed	(0.5~20)mm/s
Z axis repeatability	1δ≤2nm
Radius/angle of stylus	5μm/90°
Cut off length	0.025/0.08/0.25/0.8/2.5/8mm
Number of cut-offs	2~7
Measuring unit	μm
Drive mode	motor
Travel of Z axis	420mm
Dimension (L×W×H)	47.24"×27.56"×70.08"
Power supply	110V±10%, 50HZ
Weight	705.48lb

SOFTWARE (included)



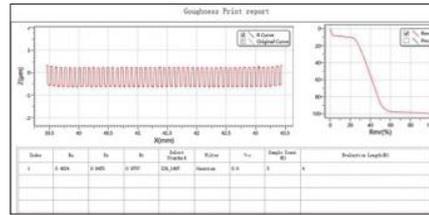
calibration



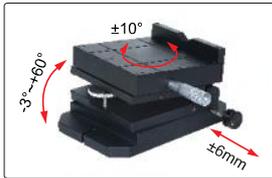
parameter measurement



measurement



data output



working stage (included)



vise (included)

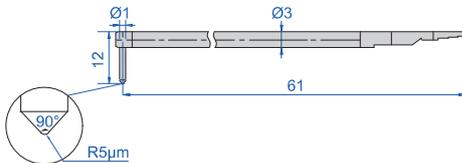


calibration block (included)

SPECIFICATION OF ROUGHNESS PROBE

unit: mm

standard probe, part No. **SPM-4000-P** (included)



small roughness probe, part No. **SPM-4000-P1** (optional)

