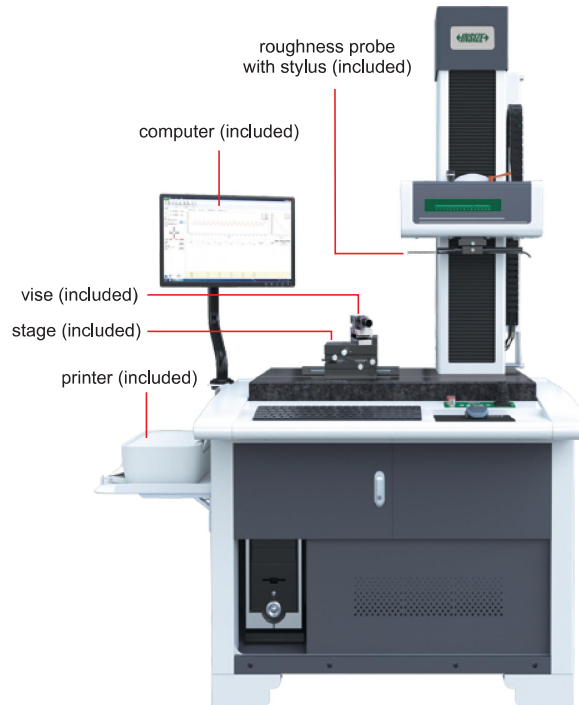




ROUGHNESS MEASURING MACHINE CODE SPM-4000

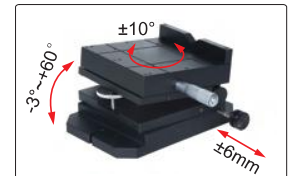
- Skidless probe
- Hundreds of parameters can be evaluated, such as roughness profile, waviness profile, primary profile, etc.
- Software is included, for measurement and data output



calibration block (included)



vise (included)



stage (included)

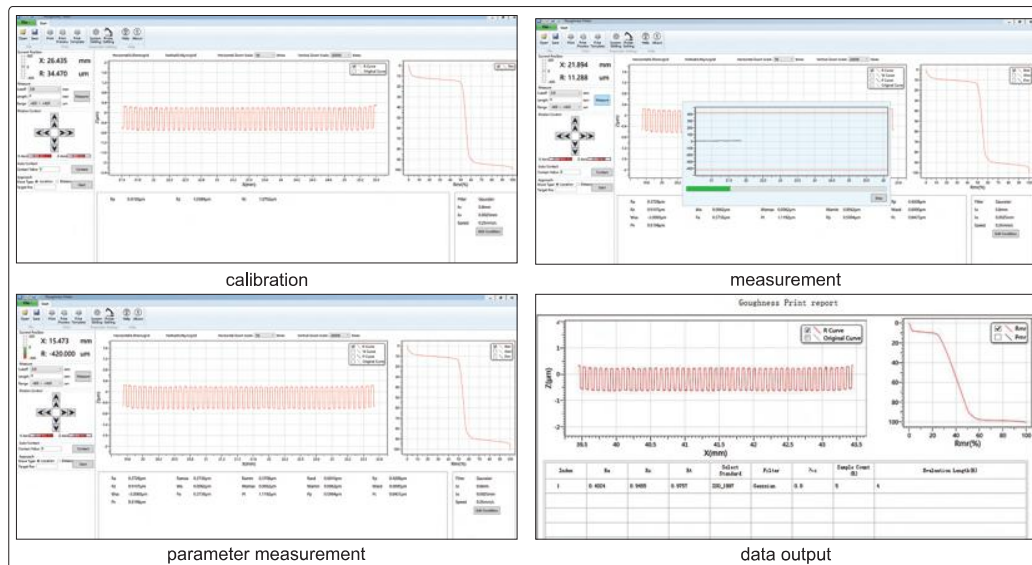
STANDARD DELIVERY

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

SPECIFICATION

Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rxsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rc, Rcmax, Rcmin, Rcsd, Rt, Rq, Rqmax, Rqmin, Rdsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkugd, Rsm, Rsmmax, Rsmmin, Rmsd, Rs, RΔa, RΔamax, RΔamin, RΔasd, RΔq, RΔqmax, RΔqmin, RΔqsd, Rk, Rpk, Rvk, Mr1, Mr2, Rla, Rlamax, Rlamin, Rlasd, Rlq, Rlqmax, Rlqmin, Rlqsd, 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, Wsmsd, 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)	1200×700×1780mm
Power supply	220V±10%, 50Hz
Weight	320kg

SOFTWARE (included)



OPTIONAL ACCESSORY

Small roughness probe

refer to details

SPECIFICATION OF ROUGHNESS PROBE

Unit: mm

