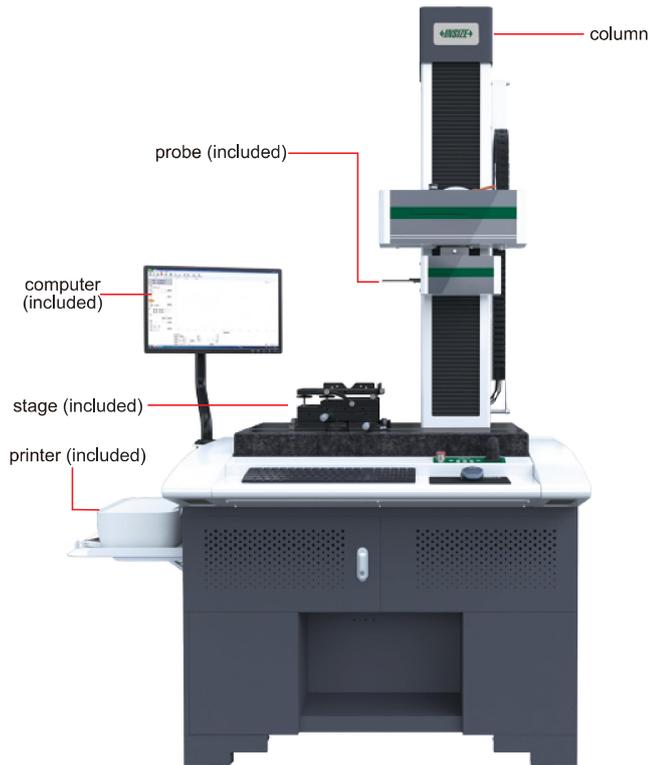


ROUGHNESS AND PROFILE MEASURING MACHINE (ONE PROBE TYPE) PART NO. SPM-5000-U

PROFILE AND ROUGHNESS
MEASUREMENT AT THE SAME TIME



- Roughness, waviness, and profile analysis can be achieved with just one measurement
- Can measure all roughness and waviness parameters
- Can be used for automatic measurement system
- Air flotation and shockproof system to reduce measurement deviation
- Free to edit measurement reports

PROFILE MEASUREMENT SPECIFICATION

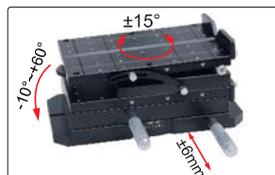
X axis measuring range	150mm
X axis resolution	0.0012μm
X axis traverse speed	(0.05~50)mm/s
X axis linear accuracy	±(0.8+ 0.015L)μm, L is measuring length in mm
Z axis measuring range	±10mm
Z axis resolution	0.0012μm
Z axis traverse speed	(0.2~40)mm/s
Z axis linear accuracy	±(0.5+ 0.02H)μm, H is measuring height in mm
Angular measuring accuracy	±1'
Arc measuring accuracy	±(1+R/12)μm, R is 2~10mm standard ball
Straightness	0.3μm/100mm
Measuring unit	mm/inch
Travel of Z axis	420mm
Power supply	110±10%V, 50Hz
Dimension (L×W×H)	66.9"×32.3"×74.8"
Weight	1102.3lb

ROUGHNESS MEASUREMENT SPECIFICATION

Roughness parameters	Ra, Ramax, Ramin, Rasd, Rp, Rpmax, Rpmin, Rpsd, Rv, Rvmax, Rvmin, Rvsd, Rz, Rzmax, Rzmin, Rzsd, R3z, Rc, Rcmx, Rcmn, Rcsd, Rt, Rq, Rqmax, Rqmin, Rqsd, Rsk, Rskmax, Rskmin, Rsksd, Rku, Rkumax, Rkumin, Rkugd, Rsm, Rsmmax, Rsmmin, Rsmsd, 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, Wksd, Wku, Wkumax, Wkumin, Wkugd, WΔq, WΔqmax, WΔqmin, WΔqsd, Wδc, Wmr
Original 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 parameters	Ncrr, R, Rx, AR, Nr, Cpm, Sr, Sar, W, Wx, Aw, Wte, Nw, Sw, Saw
Measuring range	±10mm
Resolution	0.0012μm
Linear accuracy	≤±(6nm+2.5%)
Probe radius/angle	5μm/90°
Cut off	0.025/0.08/0.25/0.8/2.5/8mm
Number of cut-offs	2~7
Measuring unit	μm
Measuring speed	(0.1~2)mm/s



vise (included)



stage (included)



standard balls (included)



standard blocks (included)



standard shaft (included)

STANDARD DELIVERY

Main unit (including workbench, controller, driver, sensor)	1 pc
Calibration block	1 set
Probe arm	1 pc
Stylus	1 pc
Air flotation and shockproof system	1 set
Stage	1 set
Vise	1 set
Computer	1 pc
Software	1 set
Printer	1 pc
Installation tools	1 set

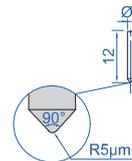
OPTIONAL ACCESSORY

Probe	refer to details
-------	------------------

SPECIFICATION OF STANDARD PROBE

unit: mm

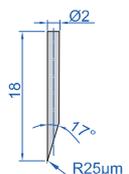
standard stylus, part No. **SPM-5000-R1** (included)



SPECIFICATION OF PROFILEPROBES

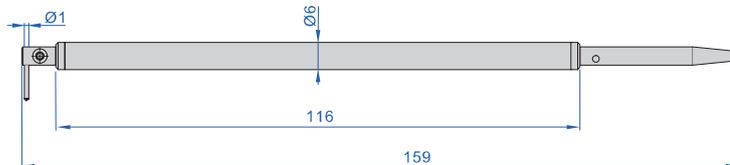
unit: mm

chisel stylus

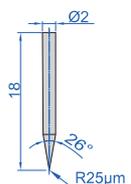


part No. **SPM-5000-T01** (optional)

standard arm, part No. **SPM-5000-P1** (included), stylus is not included

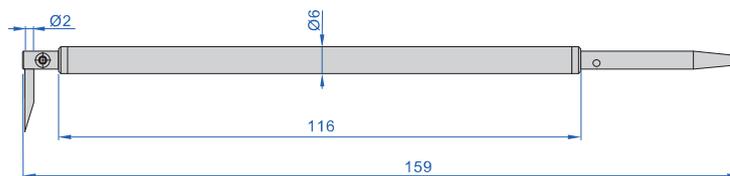


cone stylus

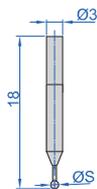


part No. **SPM-5000-Z01** (optional)

profile arm, part No. **SPM-5000-P2** (optional), stylus is not included



ball stylus



part No. **SPM-5000-S01** (ØS=1mm, optional)
part No. **SPM-5000-S02** (ØS=2mm, optional)

profile arm, part No. **SPM-5000-P3** (optional), stylus is not included

