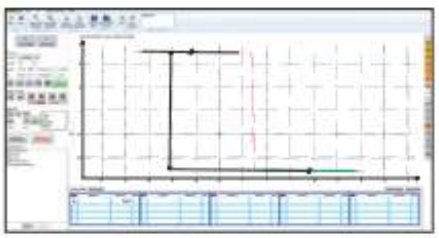
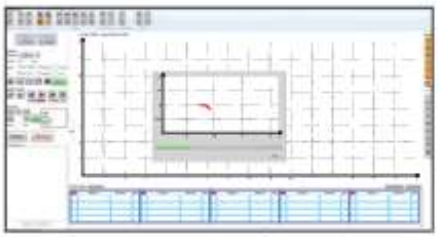
SURFACE PROFILE MEASURING MACHINE
CODE SPM-1000

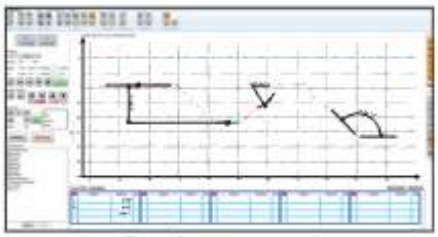
VIDEO

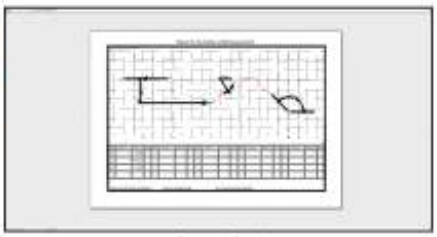
- Software is included, for surface profile measurement and data output
- Probe compensation
- Output as format txt, csv, etc.
- Large range design, the leverage ratio is 1:2.2, maintain the original accuracy of the sensor
- The overall structure of the Z-axis sensor does not have any flexible components, ensuring the measuring force is constant regardless the position of probe




calibration

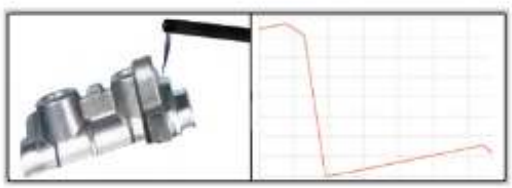

contour scanning


dimension measurement


data output

SPECIFICATION

X axis measuring range	140mm
X axis resolution	0.1μm
X axis straightness	0.5μm/100mm
X axis moving speed	0.1~15mm/s
Z axis measuring range	±20mm
Z axis resolution	0.05μm
Z axis moving speed	0.5~20mm/s
Linear accuracy	±(1.5+|0.05H|)μm, H is measuring height in mm
Angular measuring accuracy	±2'
Arc measuring accuracy	±(2+R/8)μm, R is 2~10mm standard ball
Radius of probe tip	25μm
Moving direction	backward
Measuring force	6.9~9.8mN
Measuring unit	mm/inch
Traceable angle	72° (upward), 87° (downward)
Drive mode	motor
Travel of Z axis	430mm
Dimension (L×W×H)	1200×700×1780mm
Power supply	220±5%V, 50Hz
Net weight	320kg




standard balls (included)


standard blocks (included)


standard shaft (included)

STANDARD DELIVERY

Main unit	1 pc
Standard stylus and arm	1 pc of each
Standard block	2 pcs
Standard ball	2 pcs
Standard shaft	1 pc
Stage	1 pc
Vise	1 pc
Computer	1 pc
Measurement software	1 pc
Printer	1 pc
Installation tools	1 set



stage (included)


vise (included)

OPTIONAL ACCESSORY

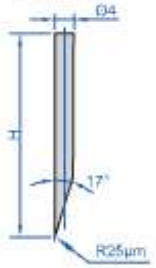
Tilting frame	SPM-1000-TILTING
Stylus and arm	see details

*Reference catalogue (**SPM Series**): styli and arms for roughness/profile measuring machines

SPECIFICATION OF PROFILE PROBES

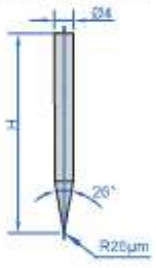
unit: mm

chisel stylus



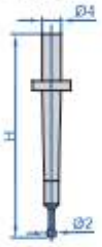
code **SPM-T32-4-17** (H=32mm, included)
code **SPM-T48-4-17** (H=48mm, **optional**)
code **SPM-T68-4-17** (H=68mm, **optional**)

cone stylus (profile)



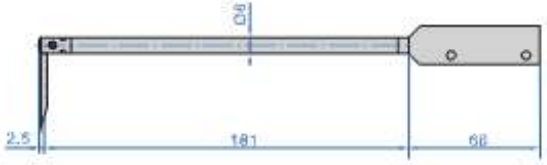
code **SPM-Z32-4-26** (H=32mm, **optional**)
code **SPM-Z48-4-26** (H=48mm, **optional**)
code **SPM-Z68-4-26** (H=68mm, **optional**)

ball stylus

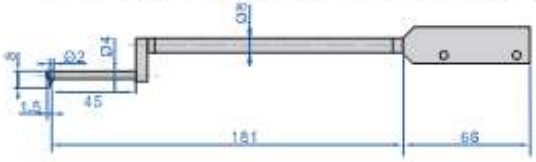


code **SPM-R32-4-2** (H=32mm, **optional**)
code **SPM-R48-4-2** (H=48mm, **optional**)
code **SPM-R68-4-2** (H=68mm, **optional**)

standard arm, code **SPM-1000-SP** (included),
stylus is not included

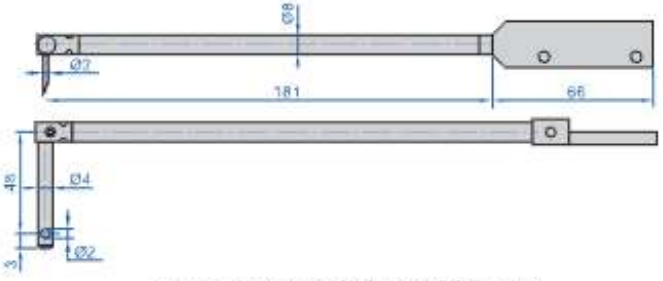


probe for small holes, N-arm (code **SPM-1000-SBP-N**),
paired with L-stylus rod (code **SPM-T8-2-17-45**, included stylus)



measure the contour of holes with diameter>Ø8mm

transverse probe, arm (code **SPM-1000-LP-N**),
paired with L-stylus rod (code **SPM-T18-2-17-48**, included stylus)



measure the contour of holes in radial direction