

SURFACE PROFILE MEASURING MACHINE

CODE SPM-1000



- 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

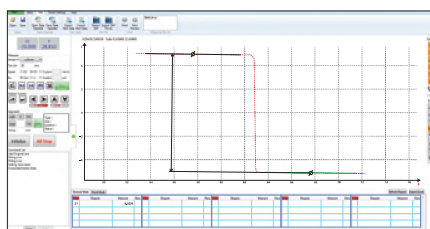
standard probe
(height 32mm, included)

tilting frame (optional)

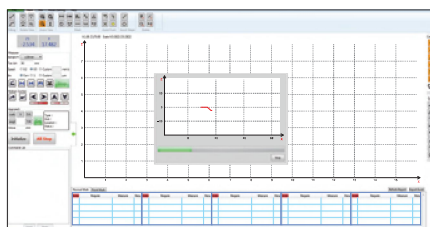
computer (included)

stage (included)

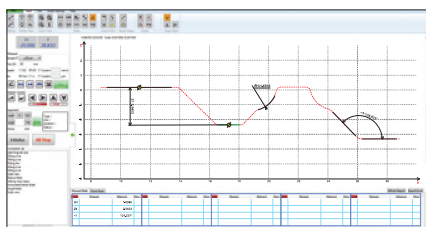
printer (included)



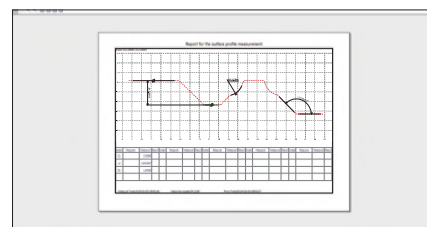
calibration



contour scanning



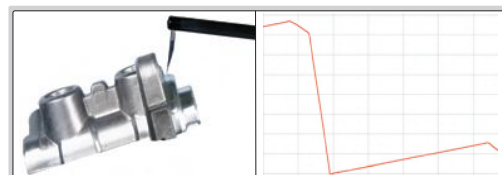
dimension measurement



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)



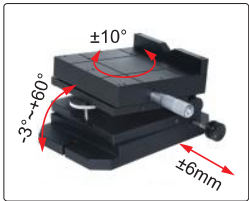
standard blocks (included)



standard shaft (included)

STANDARD DELIVERY

Main unit	1 pc
Standard probe 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 rod*	see details

*Reference catalogue (SPM Series): styli and rods 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 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 stylus rod, code SPM-1000-SP (included), stylus is not included measure the contour of holes with diameter > Ø8mm	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		