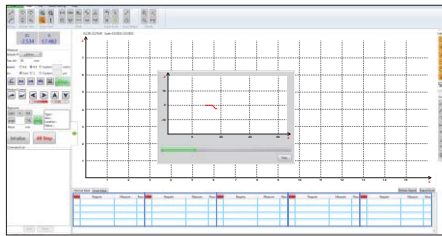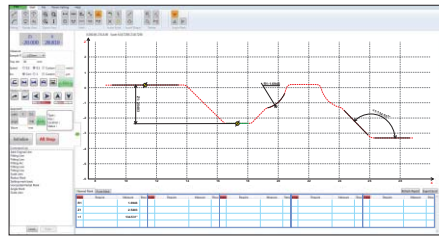# SURFACE PROFILE MEASURING MACHINE
CODE SPM-1000

- 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 elastic components, ensuring the measuring force is constant regardless the position of probe
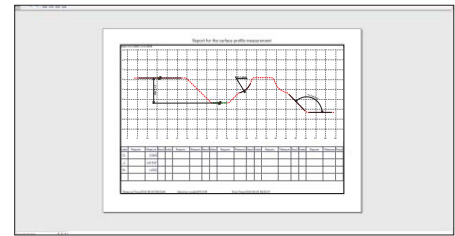
standard probe
(height 32mm, included)

computer (included)

stage (included)

printer (included)
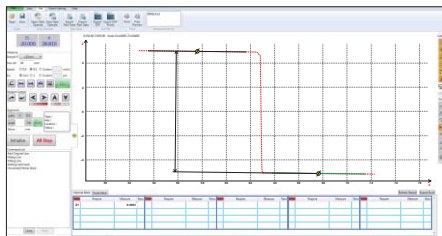
calibration

contour scanning

dimension measurement

data output

SPECIFICATION

X axis measuring range	140mm
X axis resolution	0.2µm
X axis straightness	0.8µm/100mm
X axis traverse speed	0.1~10mm/s
Z axis measuring range	±20mm
Z axis resolution	0.05µm
Z axis traverse speed	0.5~10mm/s
Linear accuracy	$\pm(1.5+|0.2H|)$µm, H is measuring height in mm
Angular measuring accuracy	±2′
Arc measuring accuracy	$\pm(2+R/8)$µm, R is 2~10mm standard ball
Radius of probe tip	25µm
Traverse direction	backword
Measuring force	6.86~9.8mN
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
Weight	320kg
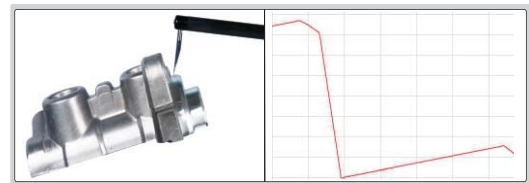
standard balls (included)

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
Measuring arm	1 pc
Computer	1 pc
Measurement software	1 pc
Printer	1 pc
Installation tools	1 set

±10°
-3°~+60°
±6mm
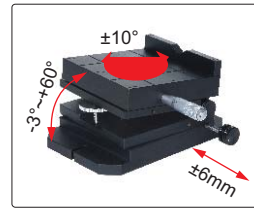
stage (included)

vise (included)

OPTIONAL ACCESSORY

Probe	see details

SPECIFICATION OF PROBES

Unit: mm

chisel stylus

Ø4
H
17°
R25µm

code **SPM-1000-T01** (H=32mm, included)
code **SPM-1000-T02** (H=48mm, **optional**)
code **SPM-1000-T03** (H=68mm, **optional**)

cone stylus

Ø4
H
20°
R25µm

code **SPM-1000-Z01** (H=32mm, **optional**)
code **SPM-1000-Z02** (H=48mm, **optional**)
code **SPM-1000-Z03** (H=68mm, **optional**)

ball stylus

Ø4
H
Ø2

code **SPM-1000-R01** (H=32mm, **optional**)
code **SPM-1000-R02** (H=48mm, **optional**)
code **SPM-1000-R03** (H=68mm, **optional**)

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

Ø8
2.5
181
66

probe for small holes, code SPM-1000-SBP (optional), stylus is included

Ø8
Ø4
Ø2
8
2
45
181
66

measure the contour of holes with diameter>Ø8mm

transverse probe, code SPM-1000-LP (optional), stylus is included

Ø8
181
66

41
Ø6
4

measure the contour of holes in radial direction