SURFACE PROFILE MEASURING MACHINE
CODE SPM-1000

standard probe
(length 32mm, included)

computer
(included)

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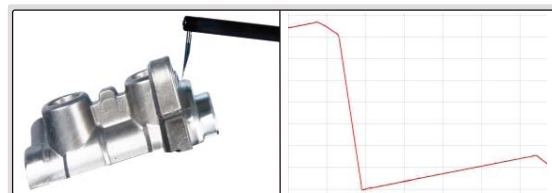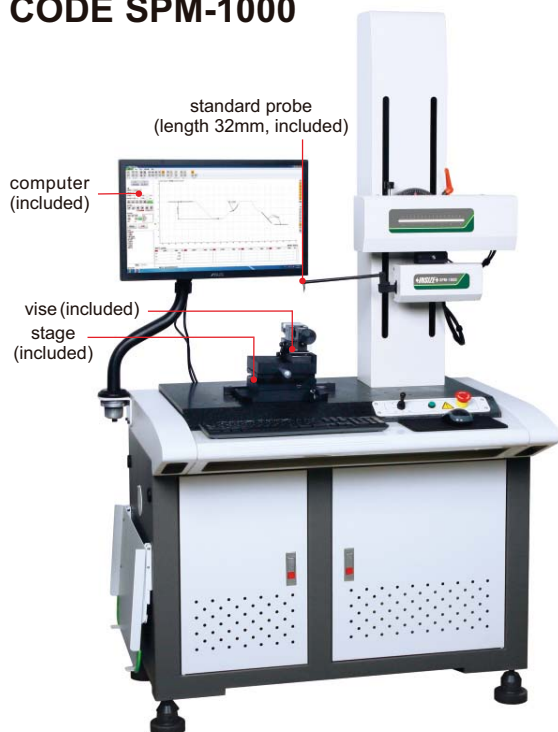
- Software is included, for surface profile measurement and data output
- Probe compensation
- Output as format txt, csv, etc.
- Large range design, the leverage ratio is 1:2.2, maintain the original accuracy of the sensor
- The overall structure of the Z-axis sensor does not have any elastic components,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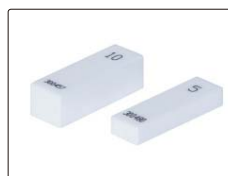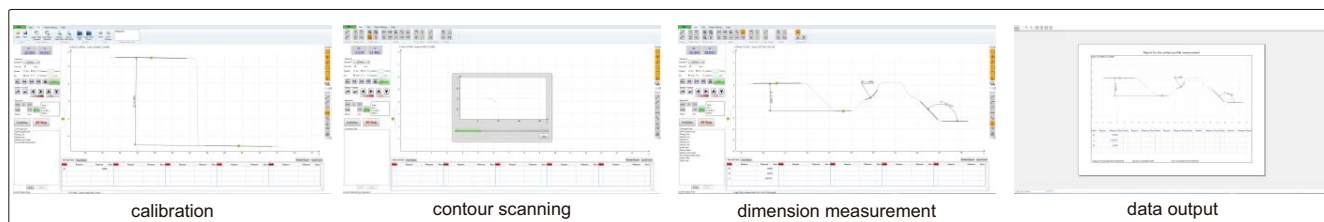
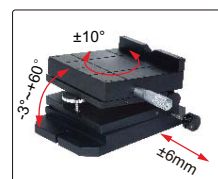standard blocks (included)

standard balls (included)

standard shaft (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	±(1.5+|0.2H|)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
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

±10°
-3°~+60°
±6mm

stage (included)

vise (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
Measuring arm	1 pc
Computer	1 pc
Measurement software	1 pc
Printer	1 pc
Installation tools	1 set
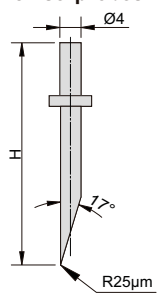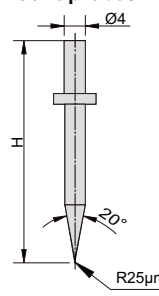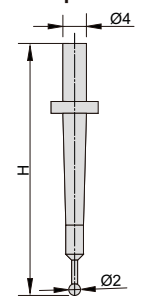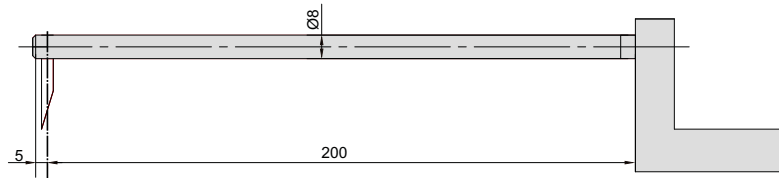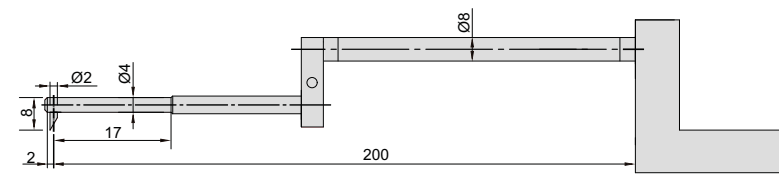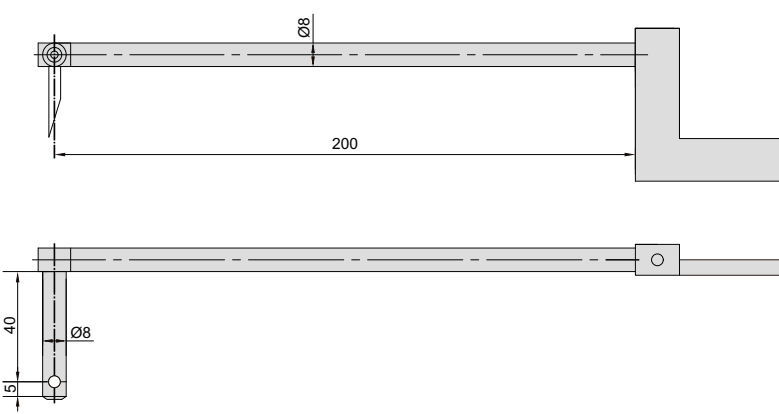
OPTIONAL ACCESSORY

| Probe and measuring arm | see details |

SPECIFICATION OF PROBES AND ARMS   Unit: mm

chisel probes	cone probes	ball probes
Ø4 H 17° R25µm	Ø4 H 20° R25µm	Ø4 H Ø2
code SPM-1000-T01(H=32mm, included) code SPM-1000-T02(H=48mm, optional) code SPM-1000-T03(H=68mm, optional)	code SPM-1000-Z01(H=32mm, optional) code SPM-1000-Z02(H=48mm, optional) code SPM-1000-Z03(H=68mm, optional)	code SPM-1000-R01(H=32mm, optional) code SPM-1000-R02(H=48mm, optional) code SPM-1000-R03(H=68mm, optional)

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

Ø8

5   200

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

Ø8

Ø2   Ø4

8

17

2   200

measure the contour of holes with diameter>Ø8mm

transverse measuring arm, code SPM-1000-LP(optional), probe is not included

Ø8

200

40

Ø8

5

measure the contour of holes in radial direction