Specifications

Environmental Characteristics

Operating temperature range	-18 to 70 °C
Survival temperature range	-40 to 70 °C
Constant acceleration overload	50 g
Shock survival	1500g, 0.5msec, ½ sine
Vibration endurance	35g rms, 20 Hz to 2000 Hz sinusoidal
Environmental sealing	IP65

Specifications by Range @ 20°C

Range		±1°	±3°	±14.5°	±30°	±90°
Non-Linearity	% FRO (max)	0.05	0.05	0.02	0.02	0.05
Non-Repeatability	% FRO (max)	0.04	0.02	0.004	0.002	0.001
Resolution	arc seconds	0.1	0.2	1.0	2.0	4.0
Sensitive Axis-to-Case Misalignment	deg (max)	±0.1	±0.15	±0.25	±0.5	±1.0
Cross-axis sensitivity	% FRO (max)	0.1	0.1	0.1	0.1	0.1
Thermal Sensitivity	%Reading/°C (max)	0.04	0.03	0.01	0.006	0.006

Measurement and Output Parameter

Geometrical form	⌖	Flatness, Straightness, Angular Pitch, Angular Roll and Parallelism
Unit under test size	⌖	Unlimited size of surface and length.
Output parameter	⌖	Flatness – Union Jack, Closed Rectangular Transverse, Closed Rectangular, Open Rectangular
	⌖	Straightness – Linear Measurement
	⌖	Angular Roll and Pitch – Linear Measurement
	⌖	Parallelism – Linear Measurement
Output analysis	⌖	Absolute measurement.
	⌖	Least square analysis
	⌖	Minimum zone method
Standards	⌖	BS, ISO, JIS
Output reporting	⌖	ISO 17025 Calibration Certificate – Customisable company logo, details and accreditation symbol
	⌖	Detail result data and graphical output
	⌖	Measurement uncertainty calculation budget according to ISO-GUM standard.
Graphical style	⌖	Meshing with colour scale
	⌖	3D line grid
	⌖	2D plan view
	⌖	1D linear graph

Miscellaneous

Power supply	⌖	100, 110, 120, 200, 220, 240 V (50/60 Hz)
Input power	⌖	DC 12 V, I Amp Max
Dimensions	⌖	Level unit - 95 x 45 x 40 mm
	⌖	Controller unit – 250 x 250 x 100 mm
	⌖	Adjustable base – 240 x 25 x 15 mm
	⌖	Carrying case – 460 x 320 x 150 mm
Total mass includes casing	⌖	5 kg
Output/Input to PC	⌖	USB / RS232

Subjects to modification

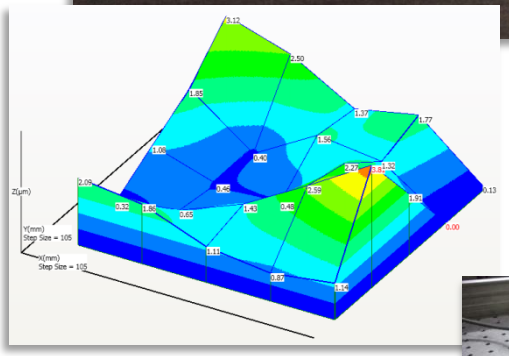
Authorised Distributor / Agent

Micron Engineering
68-2-21 Block H, Cheras Business Center,
Jalan 5/101C, 56100 Kuala Lumpur, Malaysia
Tel: + 6 - 012 364 8049
Fax: + 6 - 03 - 9100 3467
Email: cdmeas@gmail.com
Internet: www.cdmeasure.com

Another Precision Instrument from Micron Engineering

micro-vel ME-900

Surface Flatness, Straightness, Angular Pitch, Angular Roll and Parallelism Measurement System

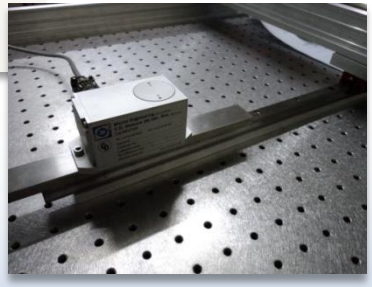


Large measuring ranges

High measuring accuracy

Fast profile analysis

Professional data output



Another Precision Instrument from Micron Engineering

Micro-vel ME-900

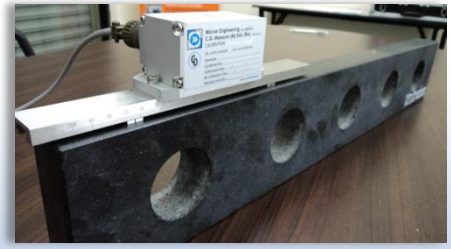
Developed by calibration specialists for calibration specialists

Precision and range

- Fast, accurate and simple solutions to flatness, straightness, parallelism and angular roll and pitch measurements.
- The resolution of measurement can up to micro-radian or 0.1 arc-second.
- The accuracy is typically at 0.05% of display reading error.
- Ranges of ±1°, ±3°, ±14.5°, ±30° and ±90°.

Application

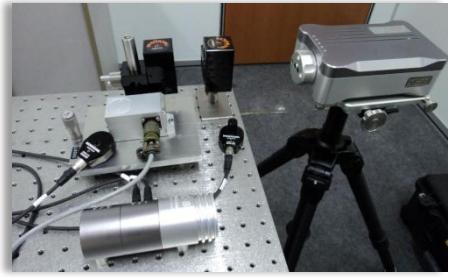
- Flatness calibration/measurement of reference surface plate.
- Bore-hole mapping, dam and rock shifts and other geophysical, seismic and civil engineering studies
- Ballast transfer systems for offshore barges, ships and other marine applications
- Level control and calibration systems
- Pipeline levelling, setting tilt of grading machines, crane overturning-moment alarms, and other heavy duty construction control requirements
- Large machinery installation, levelling to gravity reference, roll and yaw motion of table.
- Floor, road surface and wall flatness and straightness.
- and other electronic level applications



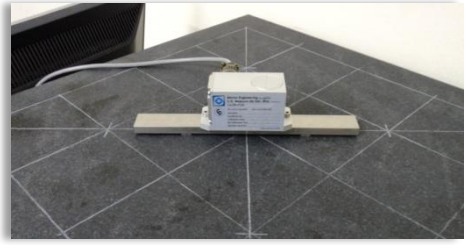
Granite straightedge calibration

micro-vel ME 900 system

Accuracy guaranteed



micro-vel calibrated by laser inteferometry. Traceability to UKAS-ISO 17025 standard.

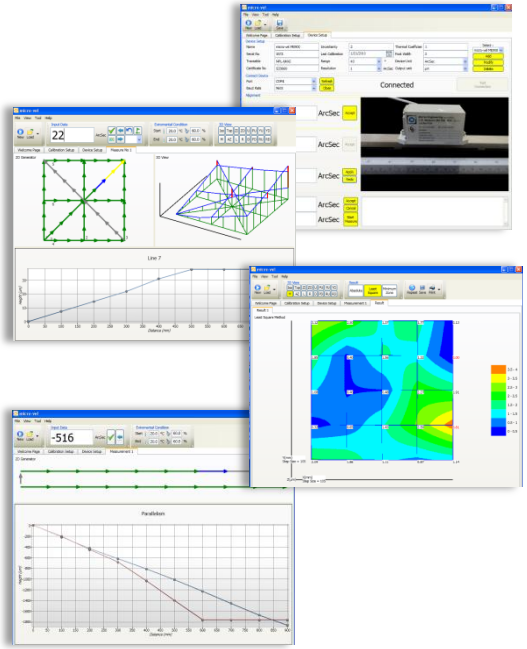


Surface plate calibration

CNC machine levelling / calibration

Powerful software

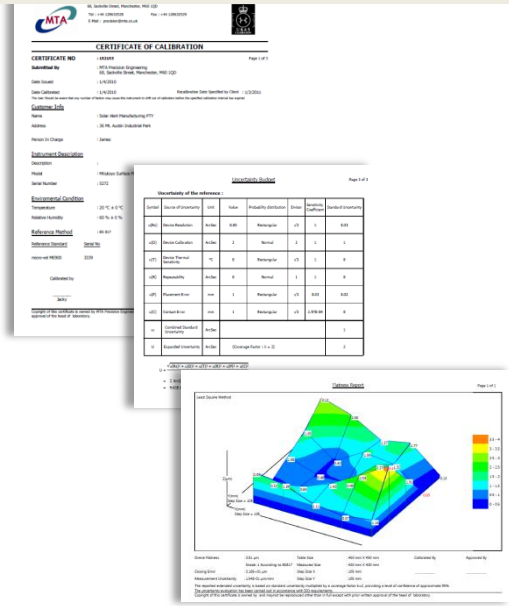
- Equipped with modern PC hardware, supports to Windows XP, Vista and Windows 7 operating system and the comprehensive micro-vel software.
- Simple handling, even for beginners; software operation by straightforward user friendly interface; from the measurement to the record output and data storage.



Interactive software applications and functions

Calibration friendly

- The measurement output from simple angular reading to calibration report with certification, data listing, 3D grid lines, 3D surface mesh and measurement uncertainty computation.



Calibration certificate, measurement uncertainty calculation and 3D/2D graphical outputs

Small carrying case with micro-vel ~ 5 kg

Practical investment

- At an affordable cost, the micro-vel investment is worth as compared to other brand or other type of instruments.

	micro-vel	planekator	Other brand
Price	affordable ✓✓ ✓	affordable	expensive
Time to calibrate 1 m x 1 m surface plate	0.5 hour with reporting ✓✓✓	2.5 hour without reporting	1.0 hour with reporting
Software functions / outputs	Calibration Certificate, Graphical 3D Mesh + Grid, Measurement Uncertainty ✓✓✓	None	3D Grid and standard report

Comparison between instruments