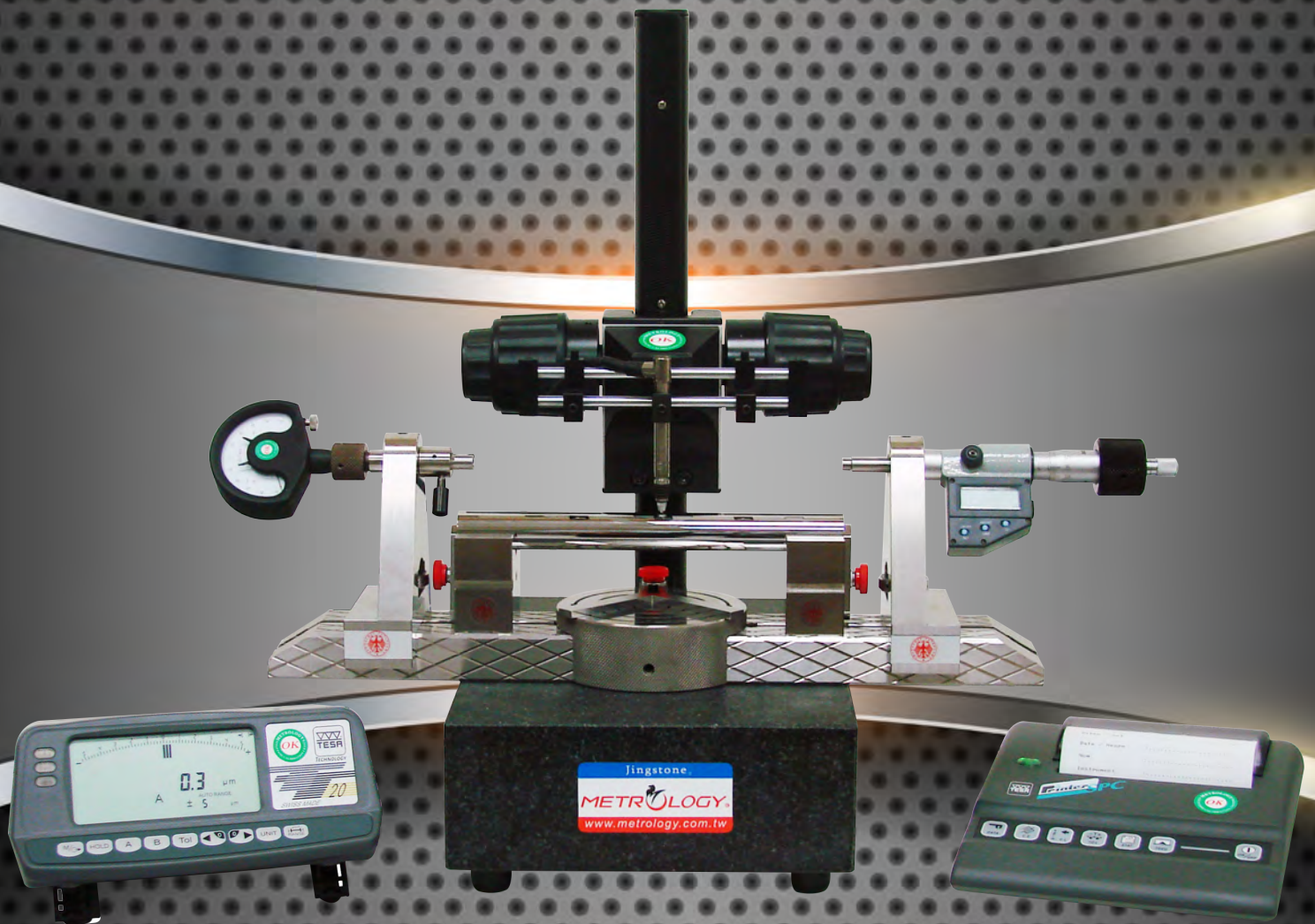


Universal Measuring & Calibration Instrument

Ultimate weapon – The Devil is in the details



Unprecedented & Unbeatable Flagship

TRANSFORMERS

Universal Measuring & Calibration Instrument



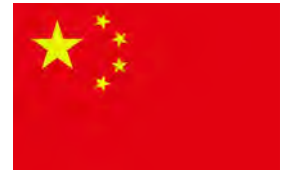
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Taiwan Patent



UN patent



China Patent

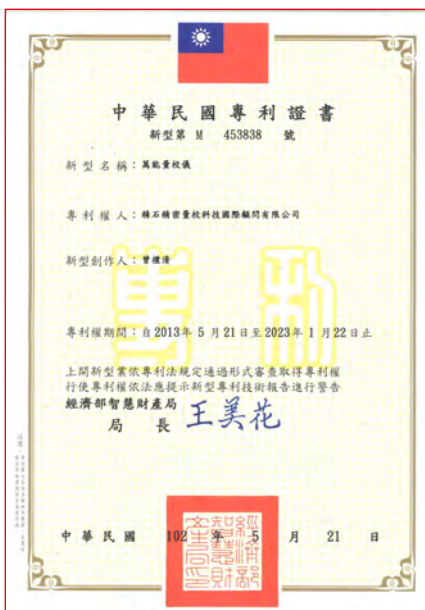


Innovation Research & Development Design
Manufacture Assembly Inspection

TRANSFORMERS



Universal Measuring Stand
Electronic Length Measuring Equipment & SPC Printer



Germany England France Sweden Italy
Spain Poland Czech Finland Denmark
New Zealand Hungary and etc.

28 UN member countries.

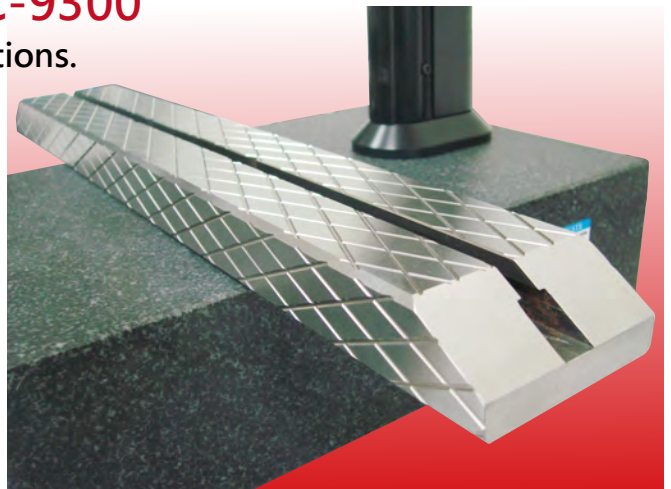


■ Universal Measuring & Calibration Instrument

TRANSFORMERS

Universal Measuring Stand **UMC-9300**

Reference base of measuring & calibration functions.



German DIN 00 grade granite base. Ultra precision grinded and hardened tool steel standard reference base.



Z-axis precision coarse and fine adjusting movement hand wheel.



Plastic steel ball screw slide guide and column.

Solid Accurate Exquisite
Astonishing super body

Model No.	Measuring Range	Measuring Height	Center Height	Accuracy
UMC-9300	0-300mm	250mm	85mm	1.5um
UMC-9600	0-600mm	400mm	120mm	3.0um

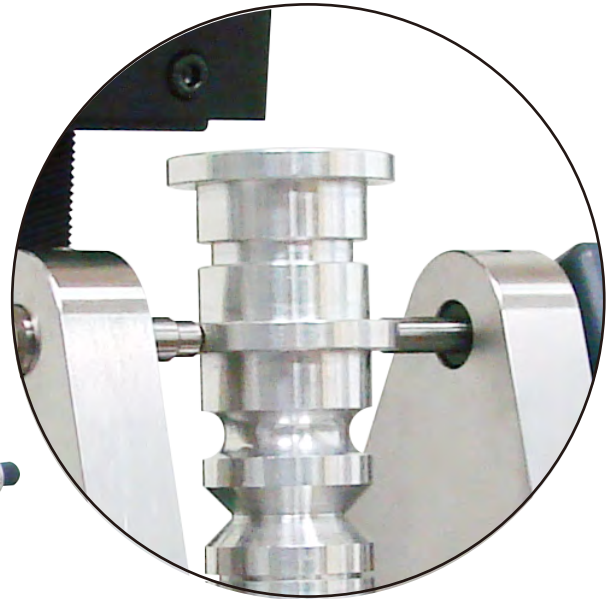
*Accuracy : Max permissible error of granite and reference base

■ Universal Measuring & Calibration Instrument

Normal measuring function.

For measuring length, thickness, outside dimension, and diameter.

TRANSFORMERS



Normal external measuring



Innovation Design R&D
Patented Technology Award

Combo accessories

■ Flat measuring jaw

■ Digital micrometer head

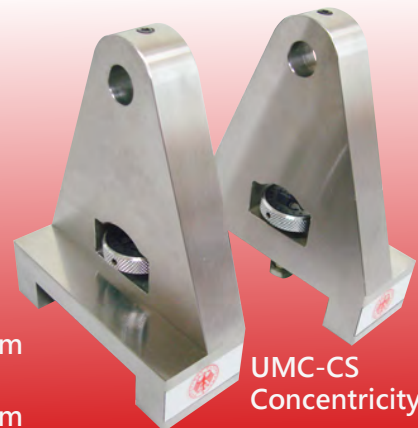
■ Concentric slide



UMC-FJ
Anvil diameter $\Phi 6.5\text{mm}$



UMC-MH28R 54
Measuring range 0-25mm/0.001mm
UMC-MH31F
Measuring range 0-50mm/0.001mm



UMC-CS
Concentricity 0.002mm

■ Universal Measuring & Calibration Instrument

Expandable measuring functions

For measuring length, thickness, outside dimension, and diameter.

Measuring range can be pre-set with gauge blocks to extend the max measuring travel.



TRANSFORMERS



- Gauge block (sold separately) For dimension setting, comparison calibration and expandable measuring range.
- Preset extend valve by digital micrometer head.



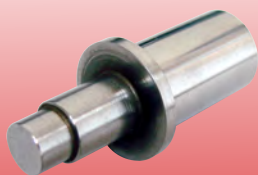
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Combo accessories

- Flat measuring jaw

- Digital micrometer head

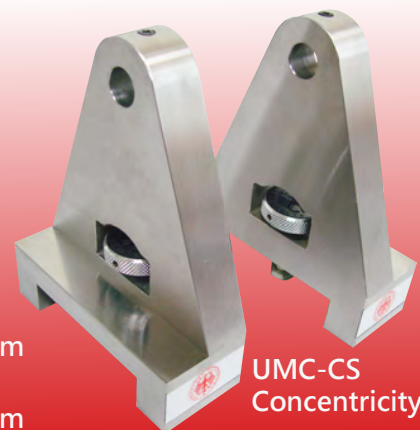
- Concentric slide



UMC-FJ
Anvil diameter $\Phi 6.5\text{mm}$



UMC-MH28R54
Measuring range 0-25mm/0.001mm
UMC-MH31F
Measuring range 0-50mm/0.001mm



UMC-CS
Concentricity 0.002mm

■ Universal Measuring & Calibration Instrument

Universal measuring functions

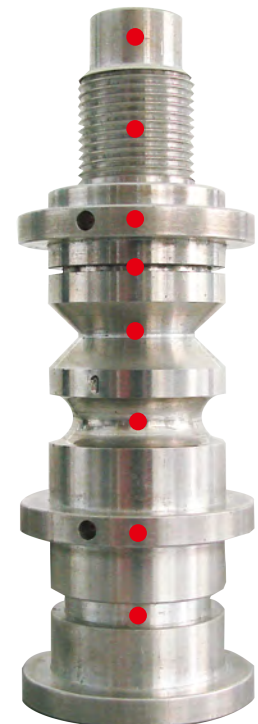
For directly measuring length, thickness, outside dimension, and outside diameter of various shape of machining workpiece.



TRANSFORMERS



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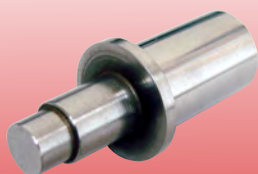
● Direct measuring positions (see K38)

Combo accessories

■ Insert-type measuring jaw

■ Digital micrometer head

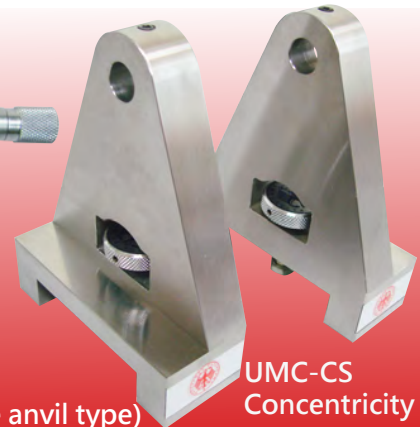
■ Concentric slide



UMC-JH
Anvil inside diameter $\Phi 5\text{mm}$



UMC-MH30UNR
Measuring range 0-25mm/0.001mm
(Non-rotating universal interchangeable anvil type)



UMC-CS
Concentricity 0.002mm

■ Universal Measuring & Calibration Instrument

Universal measuring functions

For rapid comparative measuring length, thickness, outside dimension, and outside diameter of various shape of machining workpiece.



TRANSFORMERS



● Comparable measuring positions (see K38)

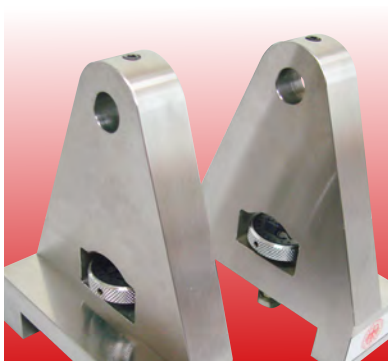
Combo accessories

■ Insert-type telescoping measuring anvil device



UMC-ITD
Anvil inside diameter $\Phi 5\text{mm}$
indicator optional

■ Concentric slide



UMC-CS
Concentricity 0.002mm

■ Digital micrometer head



UMC-MH30UNR
Measuring range 0-25mm/0.001mm
Non-rotating universal interchangeable anvil type

■ Universal Measuring & Calibration Instrument

Universal measuring functions

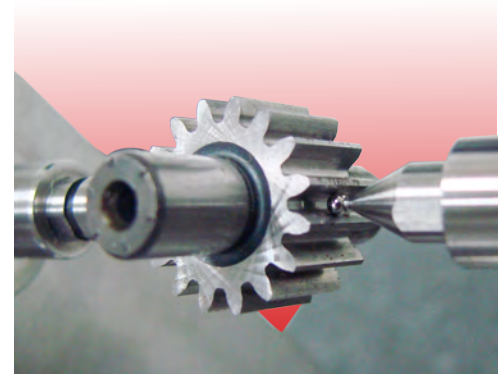
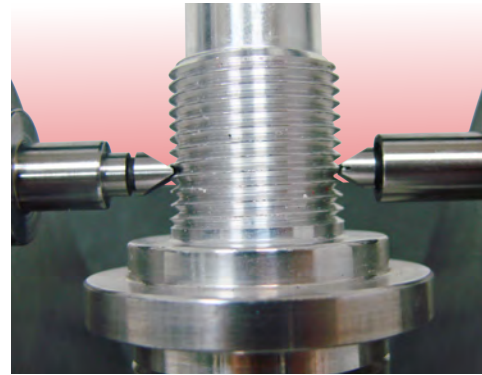
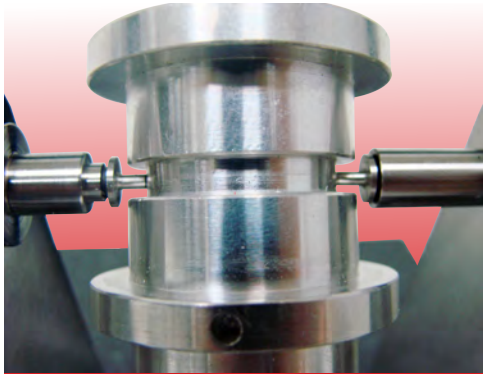
For direct and rapid comparative measuring length, thickness, outside dimension, and outside diameter of various shape of machining workpiece.

TRANSFORMERS

■ Universal measurement

■ Thread measurement

■ Gear measurement



Model No.	Anvil
AV-9001	Flat
AV-9002	Spherical
AV-9003	Blade
AV-9004	Point
AV-9005	Spine
AV-9006	Disk
AV-9007	Knife-edge
AV-9008	7 pairs/Set

*Detail specification, see F21

Model No.	Metric & Inche (60°)
AV-9009	0.4-0.5mm/64-48TP1
AV-9010	0.6-0.9mm/44-28TP1
AV-9011	1-1.75mm/24-14TP1
AV-9012	2-3mm/13-9TP1
AV-9013	3.5-5mm/8-5TP1
AV-9014	5.5-7mm/4.5-3.5TP1
AV-9015	0.4-7mm/64-3.5TP1(set)

Model No.	Whitworth (55°)
AV-9016	60-48TP1
AV-9017	48-40TP1
AV-9018	40-32 TP1
AV-9019	32-24 TP1
AV-9020	24-18 TP1
AV-9021	18-14 TP1
AV-9022	14-10 TP1
AV-9023	10-7 TP1
AV-9024	7-4.5 TP1
AV-9025	4.5-3.5 TP1
AV-9026	60-3.5 TP1(set)

*Detail specification, see F26

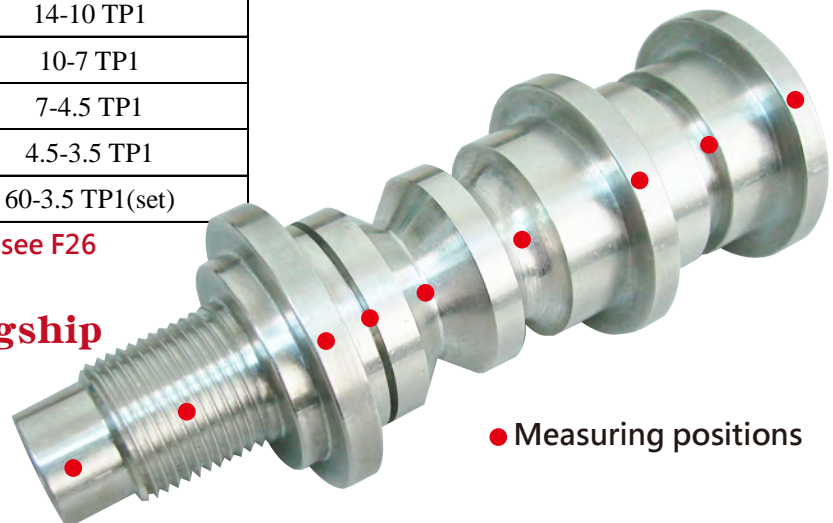
Model No.	Ball Diameter	Module/Pitch Dia
AV-9027	Φ1.0mm	0.6-0.65 / 45
AV-9028	Φ1.5mm	0.9-1.0 / 28-26
AV-9029	Φ2.0mm	1.25 / 22
AV-9030	Φ2.5mm	1.5 / 17
AV-9031	Φ3.0mm	1.75 / 15
AV-9032	Φ3.5mm	2 / 13
AV-9033	Φ4.0mm	2.25 / 11
AV-9034	Φ4.5mm	2.5 / 10
AV-9035	Φ5.0mm	2.75 / 9
AV-9036	Φ6.0mm	3.5 / 7
AV-9037	Set	

*Detail specification, see F32



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Unprecedented & unbeatable flagship



● Measuring positions

■ Universal Measuring & Calibration Instrument

Measuring functions

For measuring height, thickness, depth, of normal workpiece.

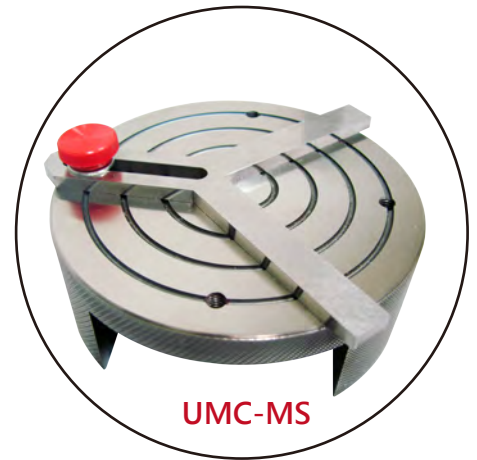
For direct, comparison measuring of flatness, parallelism and straightness.

TRANSFORMERS



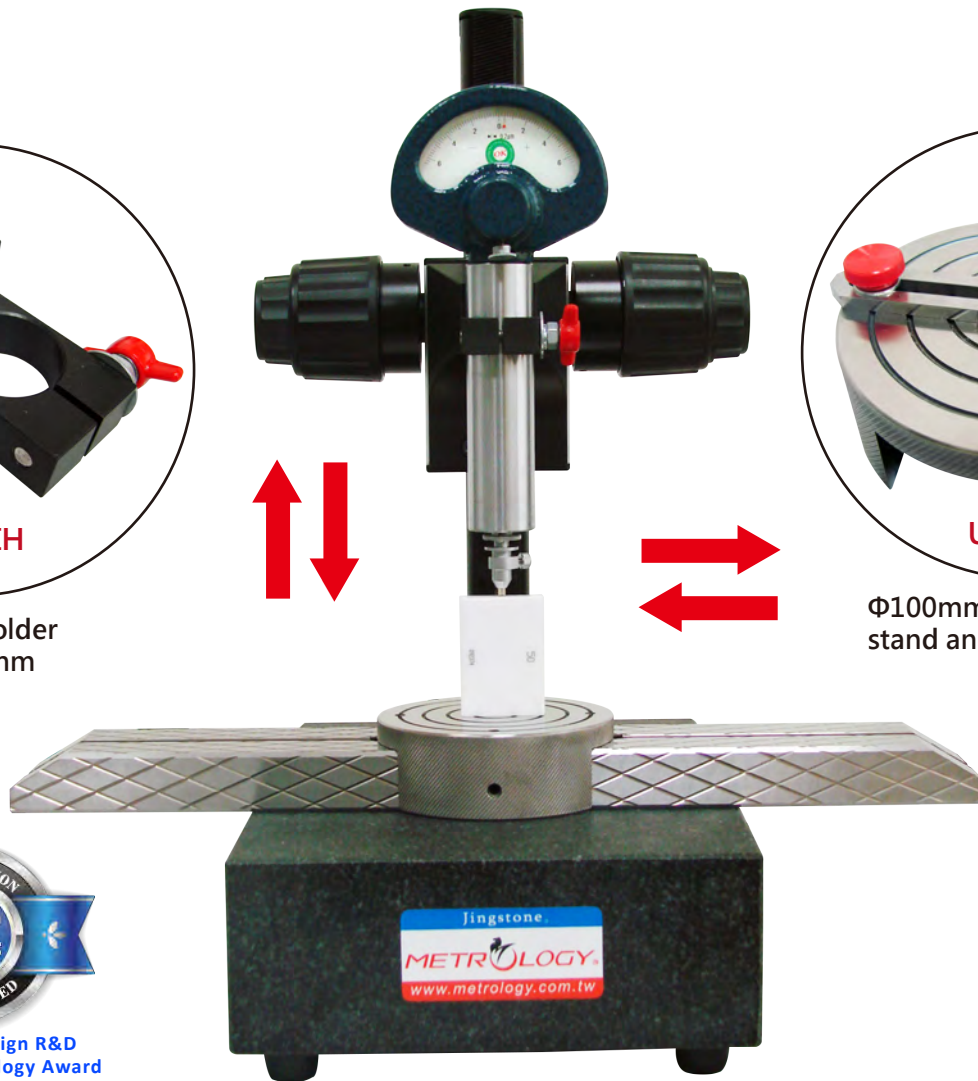
UMC-IH

Indicator holder
Φ8 or Φ28mm

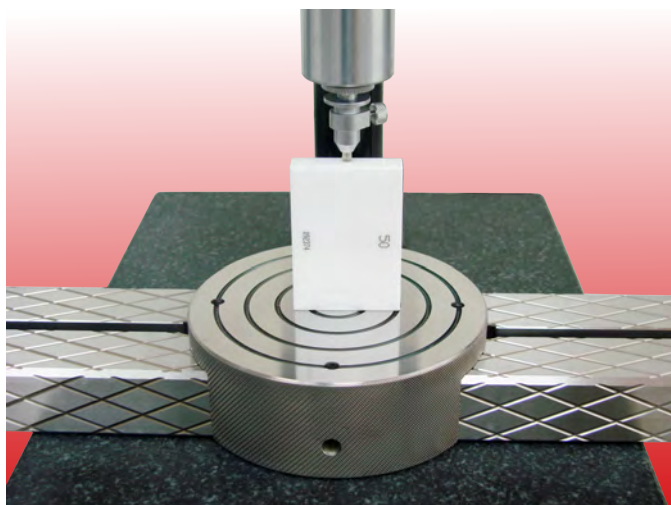


UMC-MS

Φ100mm round measuring
stand and V device



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Patented Technology Award



Comparison measurement



Direct measurement

■ Universal Measuring & Calibration Instrument

Measuring functions

For measuring inside diameter, roundness and other geometric tolerance of normal workpiece.

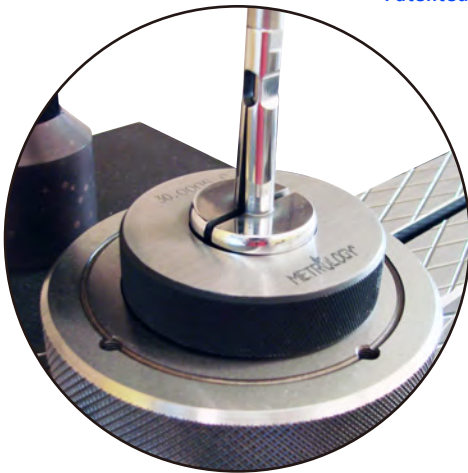
TRANSFORMERS



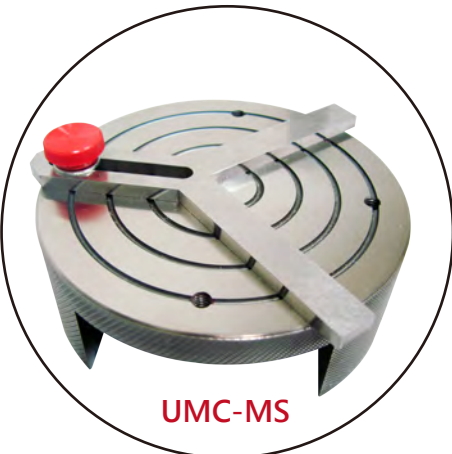
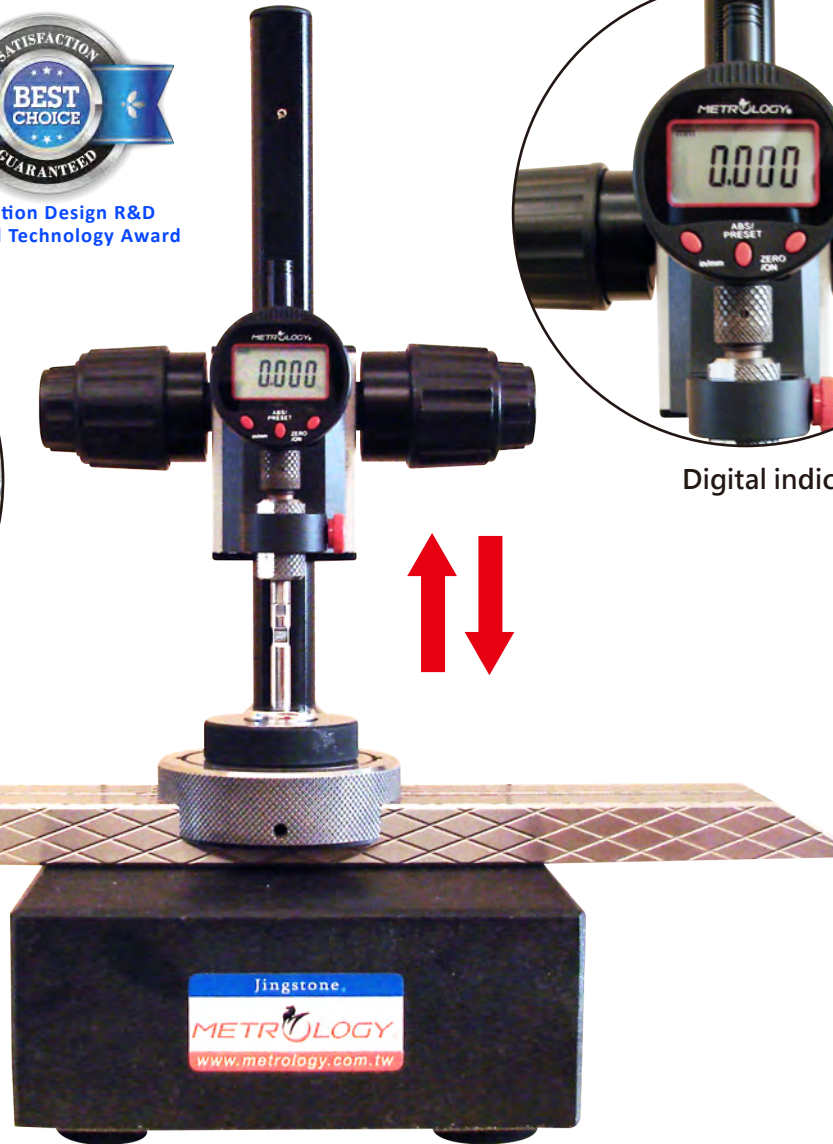
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Digital indicator

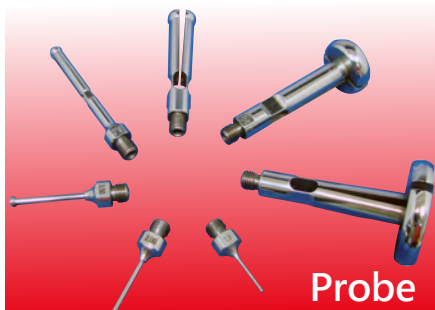
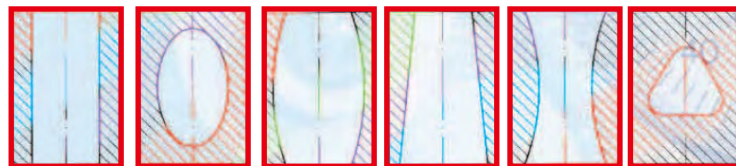


Probe Needle Ring gauge



UMC-MS

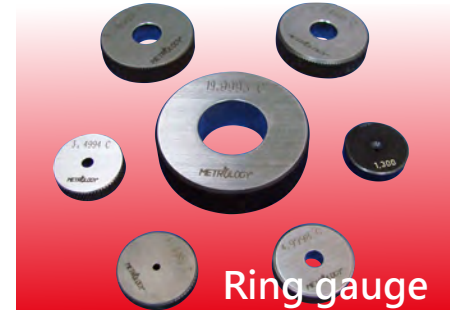
Φ100mm round measuring stand



Probe



Needle



Ring gauge

*Bore Gauge detail specification, see G42-G46

■ Universal Measuring & Calibration Instrument

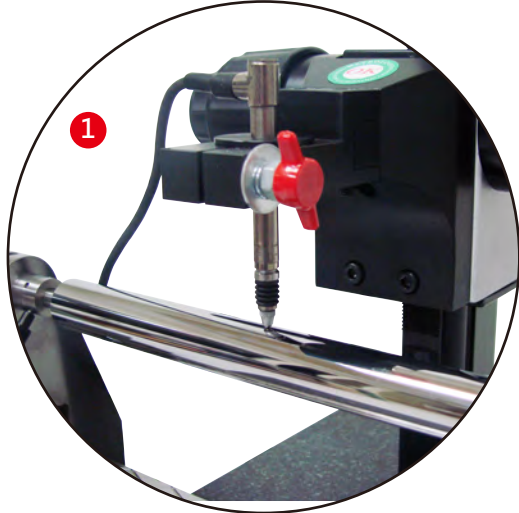
Measuring functions

For measuring concentricity, coaxis, runout, and other geometric tolerance of normal cylindrical workpiece. Pair with concentricity measuring tips.

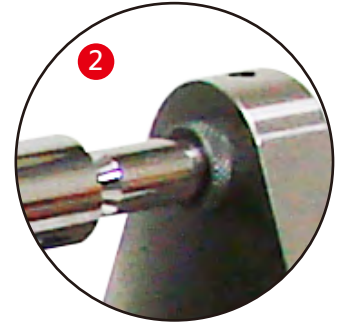
TRANSFORMERS



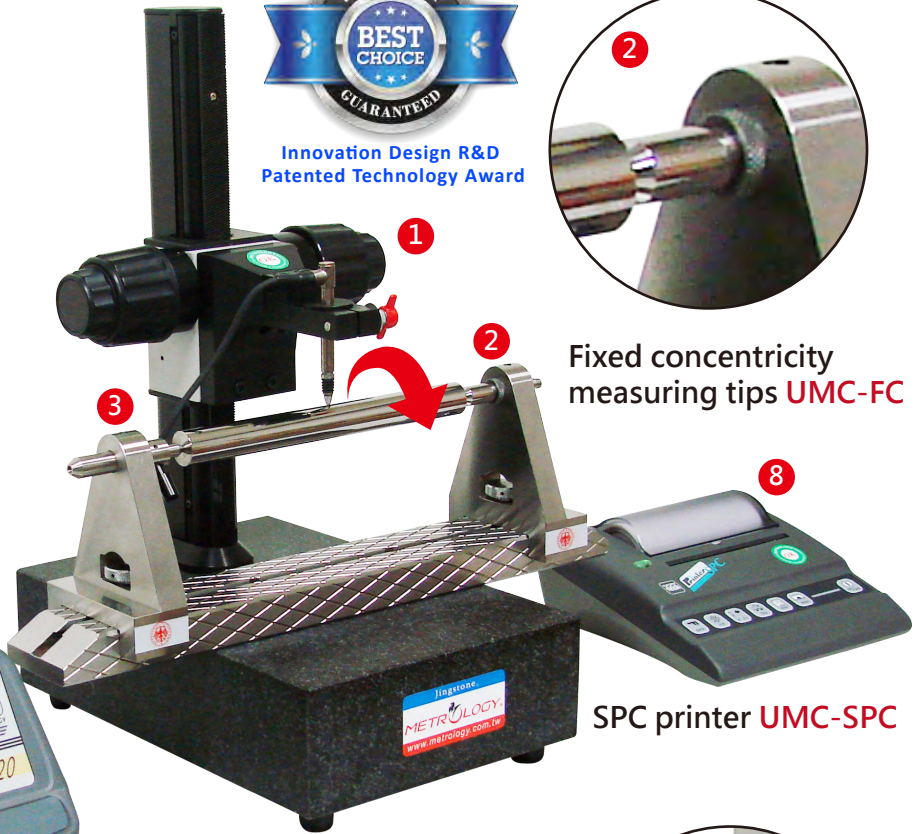
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1 Digital probe **UMC-GT22**
Measuring range : ±2mm



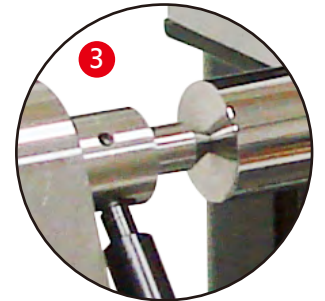
2 Fixed concentricity measuring tips **UMC-FC**



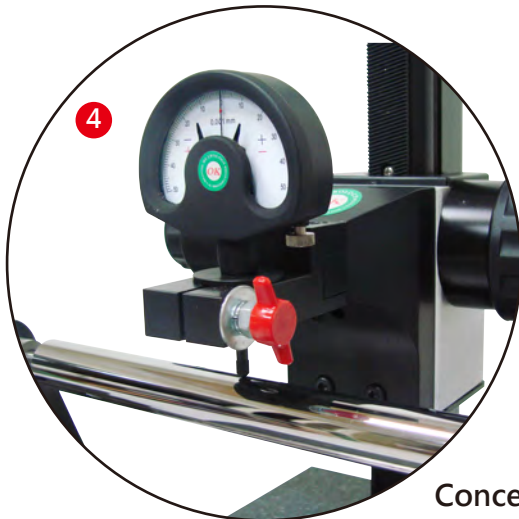
8 SPC printer **UMC-SPC**



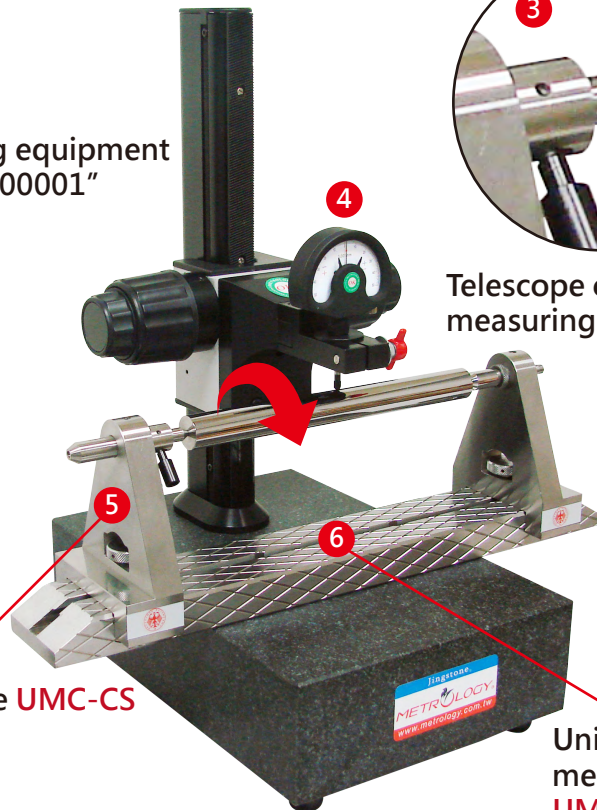
7 **UMC-TT20**
Electronic length measuring equipment
Resolution : 0.0001mm/0.000001"



3 Telescope concentricity measuring tips **UMC-TC**



4 Comparison indicator **UMC-COMP**
Graduation : 0.001mm



5 Concentric slide **UMC-CS**

6 Universal measuring stand **UMC-9300**

■ Universal Measuring & Calibration Instrument

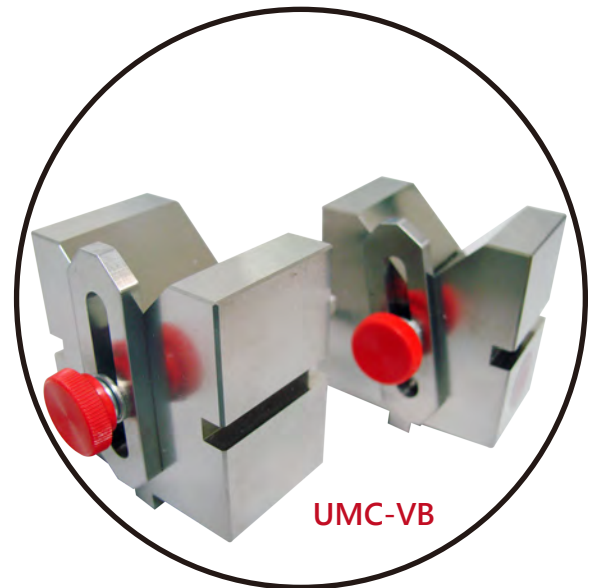
TRANSFORMERS

Measuring functions

For measuring straightness, concentricity, roundness, coaxis, runout, and other geometric tolerance of normal cylindrical workpiece. Pair with concentric V blocks.

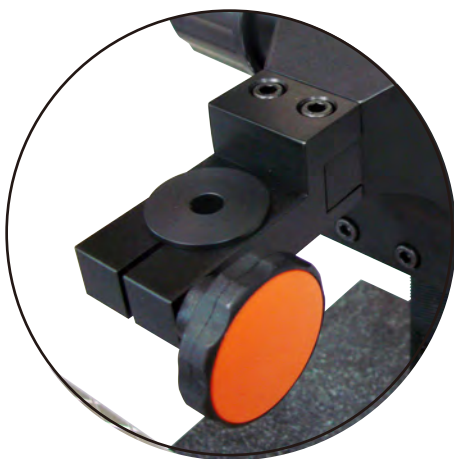


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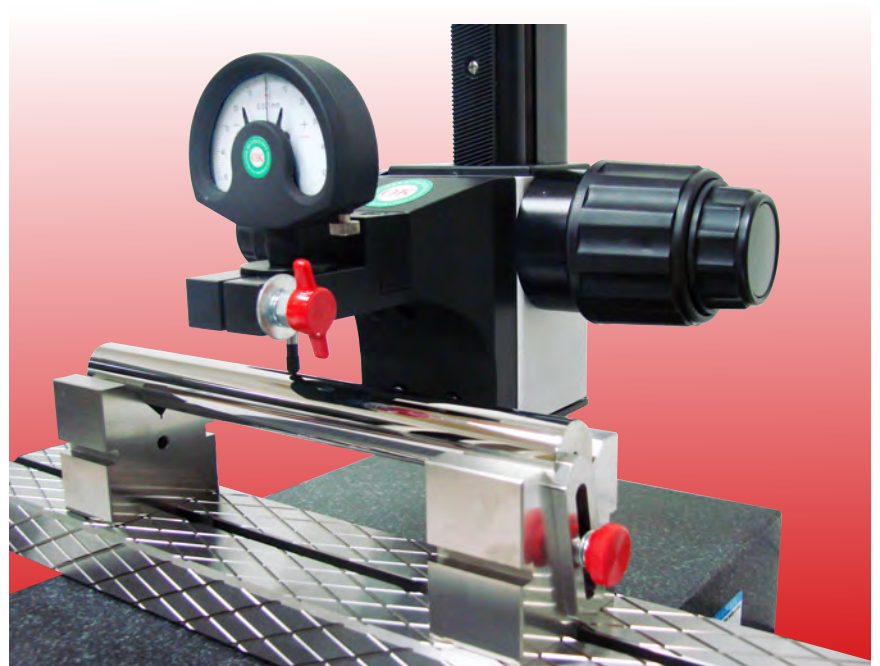


UMC-VB

Concentric V-type slide blocks and stopper
Max measurable diameter : $\Phi 60\text{mm}$ 2pcs/pair



Indicator clamp UMC-IH
 $\Phi 8$ or $\Phi 28\text{mm}$



Geometric tolerance measurement

■ Universal Measuring & Calibration Instrument

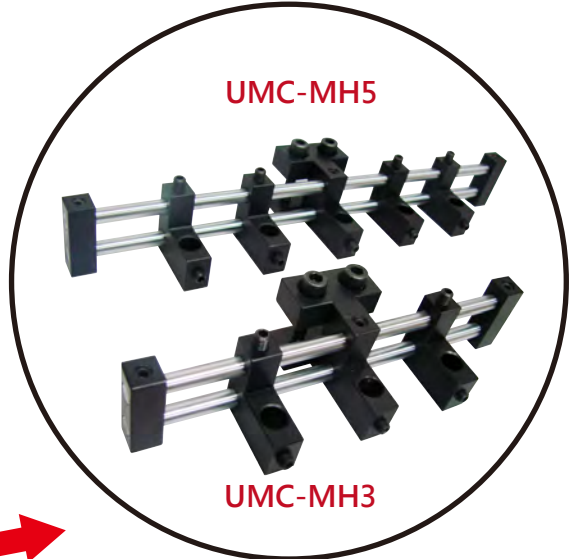
Multi-points measuring functions

For measuring straightness, concentricity, roundness, coaxis, runout, and other geometric tolerance of normal cylindrical workpiece. Pair with concentric V blocks or concentric slide and measuring tips.

TRANSFORMERS



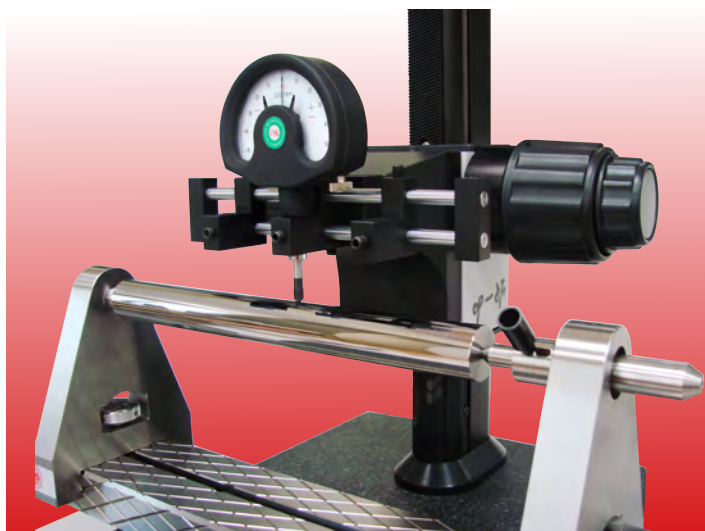
Innovation Design R&D
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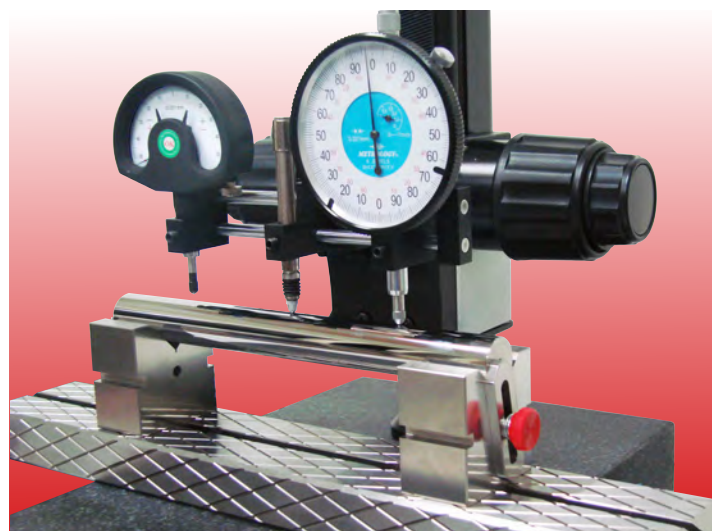
UMC-MH5

UMC-MH3

Multi-points measuring device
Clamp diameter $\Phi 8\text{mm}$



Measurement with concentricity slide and concentricity measuring tips



Measurement with concentric V blocks

■ Universal Measuring & Calibration Instrument

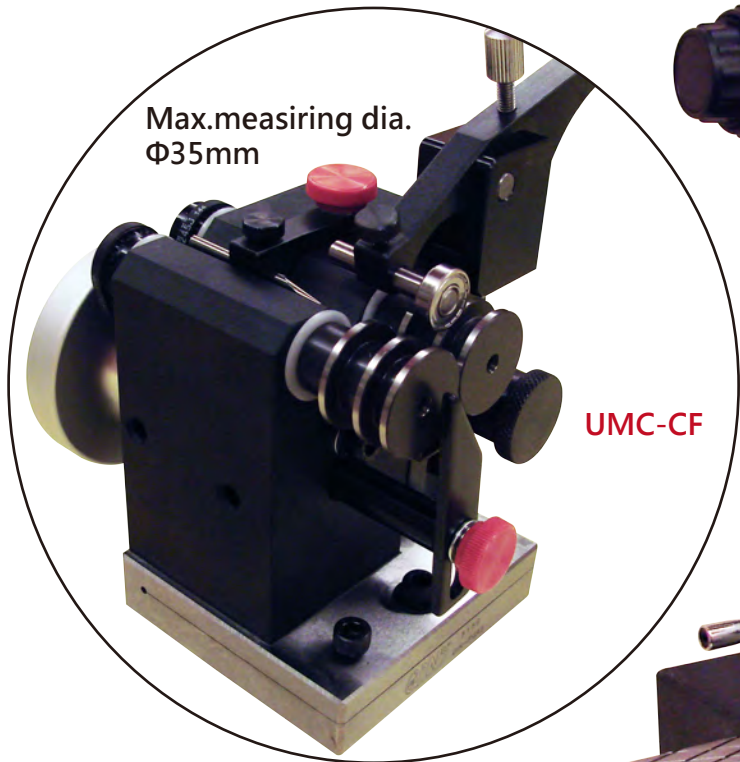
Measuring functions

For measuring roundness, straightness, concentricity, coaxis, runout, and other geometric tolerance of normal cylindrical workpiece.
Pair with concentric measuring stand.

TRANSFORMERS



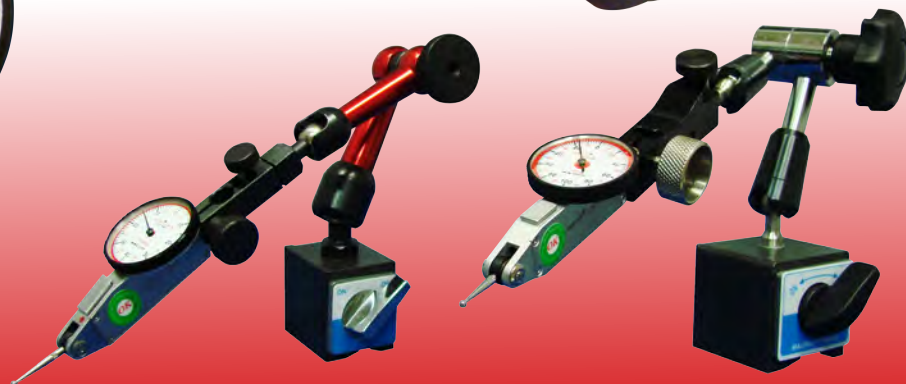
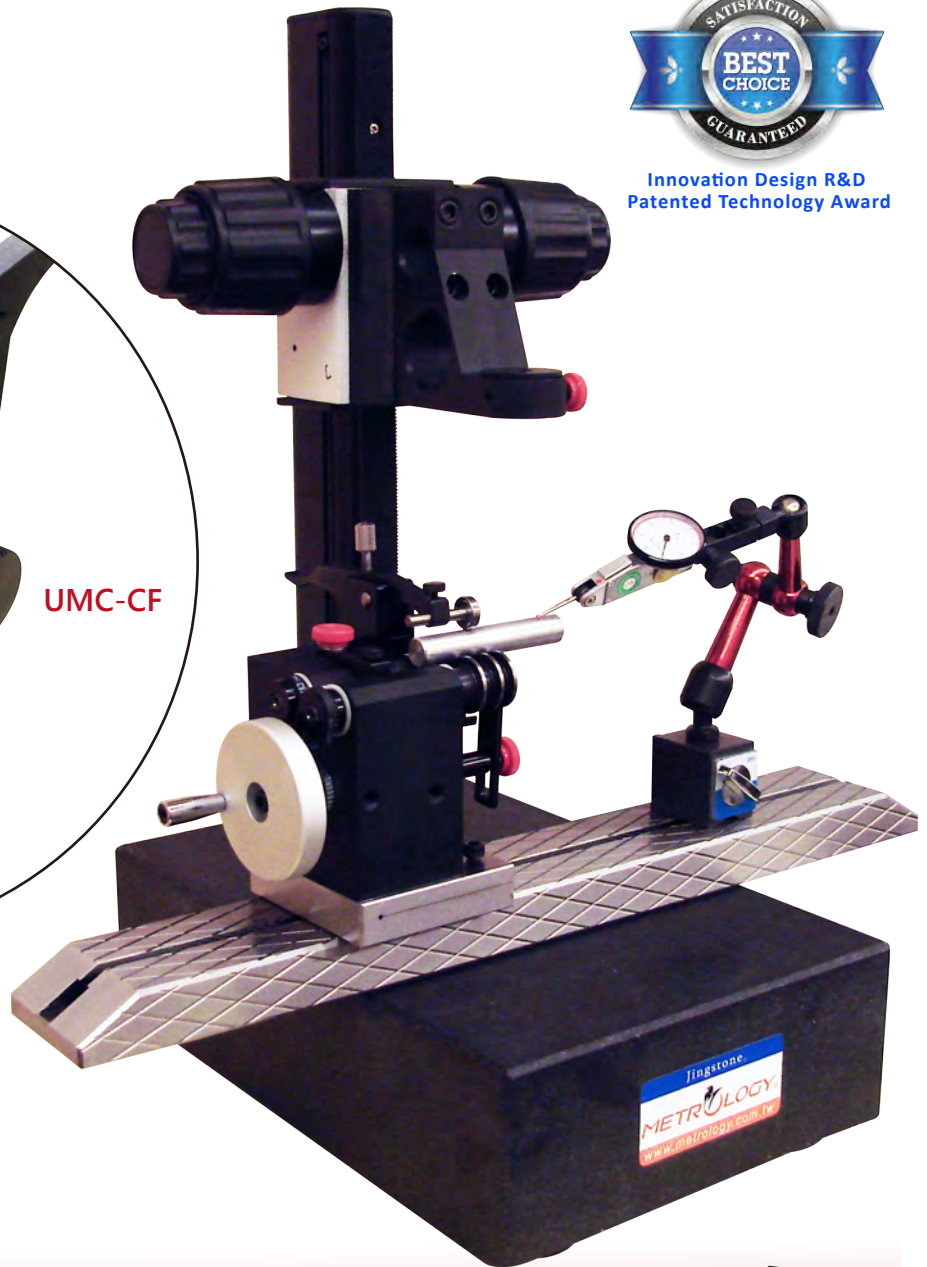
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Max. measuring dia.
Φ35mm

UMC-CF

Concentric measuring stand



*Lever type indicator & magnetic stand detail specification, see G23-G36

■ Universal Measuring & Calibration Instrument

Observation & measuring functions

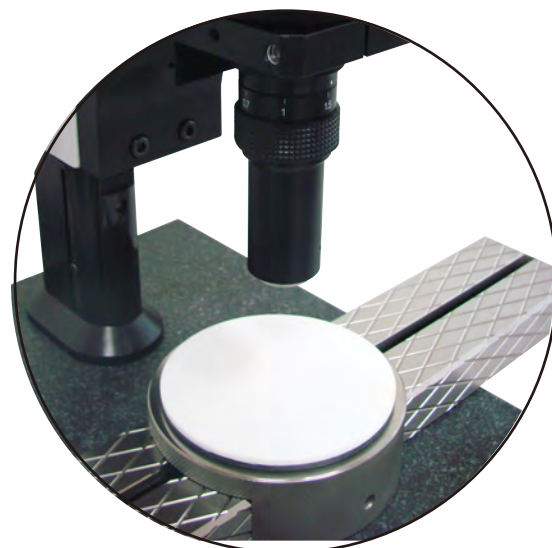
Can combine with stereo microscope and image output microscope

For observation, inspection, analysis, and dimension measuring of metal, or non-metal workpiece surface.

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UMC-BW Φ 90mm Black and white plate
UMC-MS Φ 100mm Round measuring stand



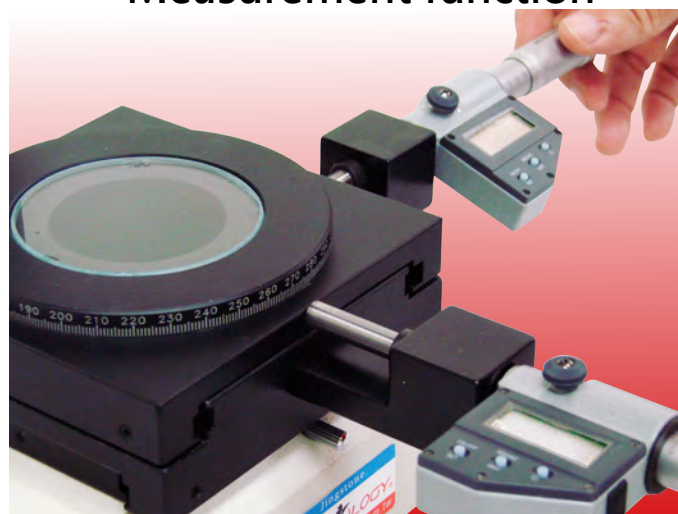
Image capture output

Observation function

Measurement function



Stereo microscope and clamp
(Detail specification see J13)



X-Y measuring table and micrometer head
(Detail specification see J30)

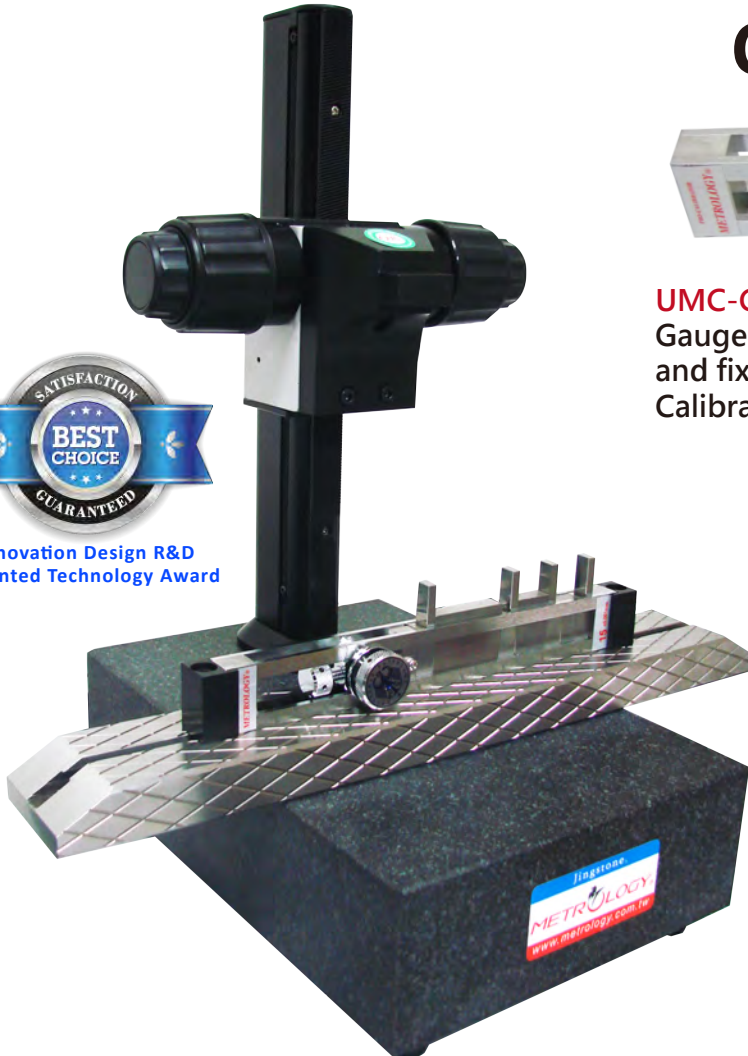
■ Universal Measuring & Calibration Instrument

Calibration function

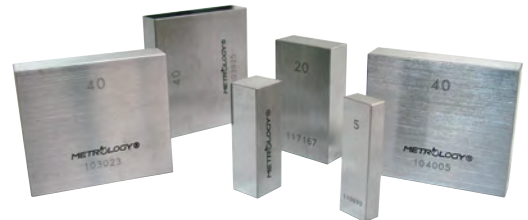
Can be used for calibrating inside, outside of calipers, outside micrometer, inside micrometer, bore gage and etc.

TRANSFORMERS

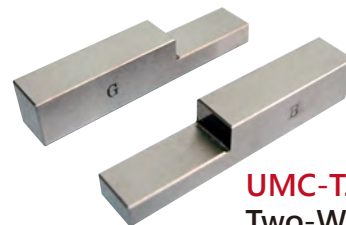
Combo accessories



UMC-GH1S
Gauge Block Hold Standard and fixture set
Calibration range 0-200mm

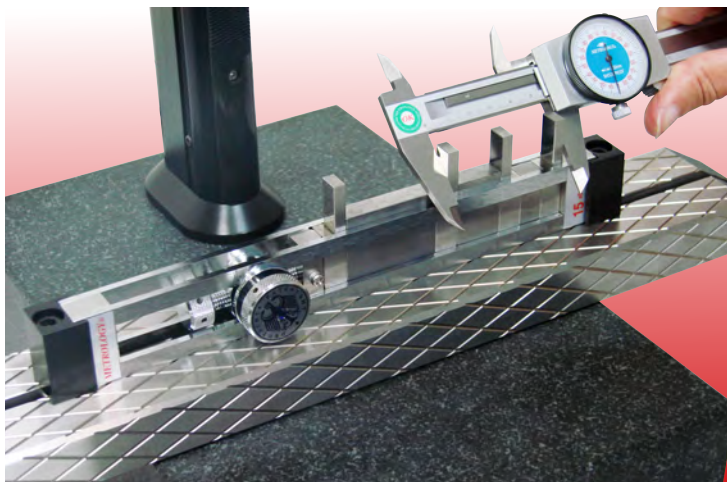


UMC-GB1
Gauge block set 5 · 10 · 20 · 40mm*3(DIN 1)



UMC-TJ1
Two-Way Measuring Jaws
5/10mm*6 pcs/pair

Unprecedented & Unbeatable Flagship



Calibrating inside and outside dimension of varies calipers
(Calibration points : 25 · 50 · 100 · 150 · 200mm)



Calibrating inside and outside micrometers
(Calibration point: 5mm per step)

■ Universal Measuring & Calibration Instrument

Calibration function

For calibrating inside, outside of calipers, outside micrometer, inside micrometer, bore gage and etc.

TRANSFORMERS

Unprecedented & Unbeatable Flagship

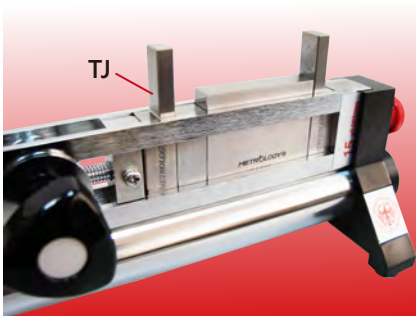
■ Outside micrometer calibration

Combo accessories : UMC-GH1S+GB1+TJ1



■ Inside micrometer calibration

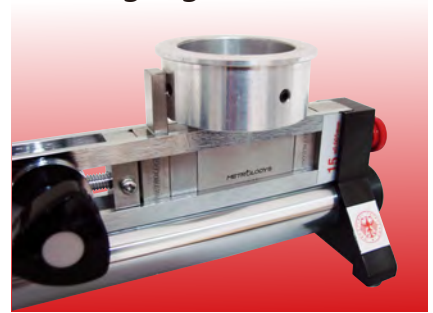
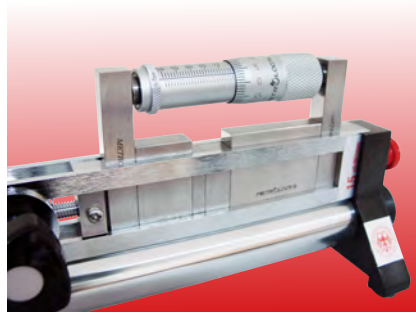
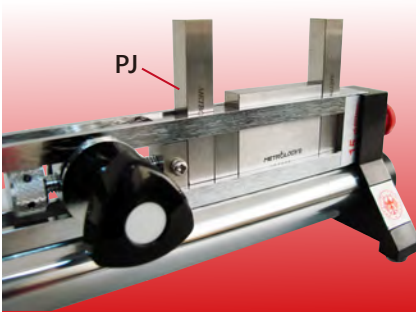
Combo accessories : UMC-GH1S+GB1+TJ1



■ Single rod and extension rod inside micrometer calibration

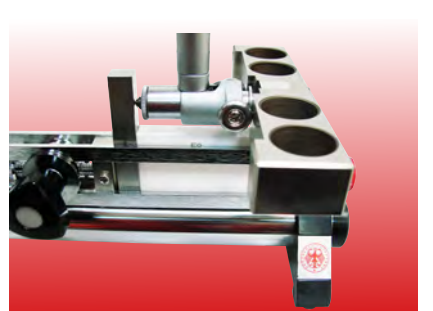
Combo accessories : UMC-GH1S+GB1+PJ

■ Set measuring limit as limit gauge



■ Bore gage calibration & zero setting

Combo accessories : UMC-GH1S+GB1+BS1



■ Universal Measuring & Calibration Instrument

Calibration function

For calibrating varies type of indicators.

TRANSFORMERS

Unprecedented & Unbeatable Flagship



Innovation Design R&D
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Dial gauge calibration



Digital dial gauge calibration



Micro dial gauge calibration

■ **Universal Measuring & Calibration Instrument**

Calibration function

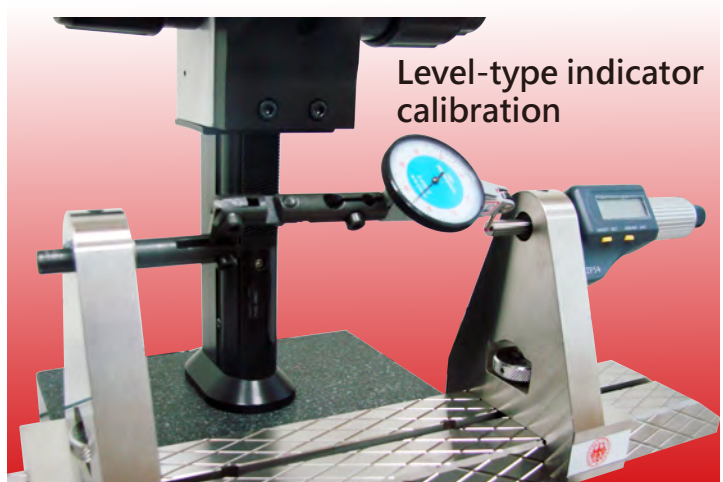
For calibrating various type of indicators.

TRANSFORMERS

Unprecedented & Unbeatable Flagship



Comparison dial gauge calibration



Level-type indicator calibration



Innovation Design R&D
Patented Technology Award



Combo accessories

■ **Universal clamp**



UMC-UC

■ **Digital micrometer head**

UMC-MH28F
Measuring range 0-25mm/0.001mm

UMC-MH31F
Measuring range 0-50mm/0.001mm



■ **Concentric slide**



UMC-CS
Concentricity 0.002mm

■ Universal Measuring & Calibration Instrument

Calibration function

For calibrating various type of bore gauges.

TRANSFORMERS

Combo accessories



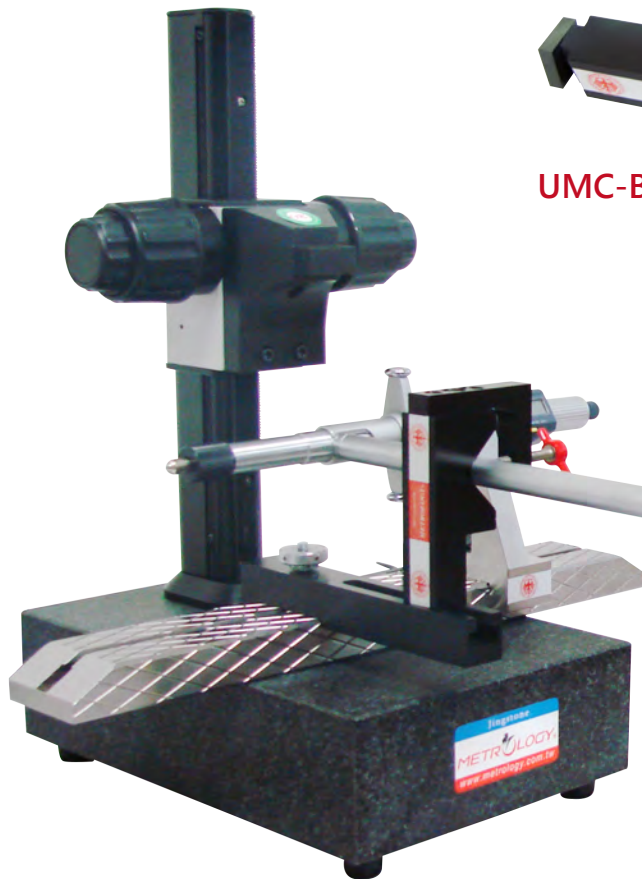
Innovation Design R&D
Patented Technology Award



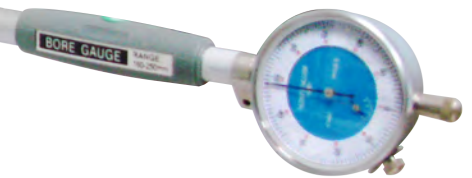
UMC-BH Bore Gauge Holder



UMC-CS Concentric slide



UMC-MH28F
Digital micrometer head
Measuring range
0-25mm/0.001mm



Unprecedented & Unbeatable Flagship

Bore gauge calibration



Small bore gauge calibration



■ **Universal Measuring & Calibration Instrument**

Calibration function

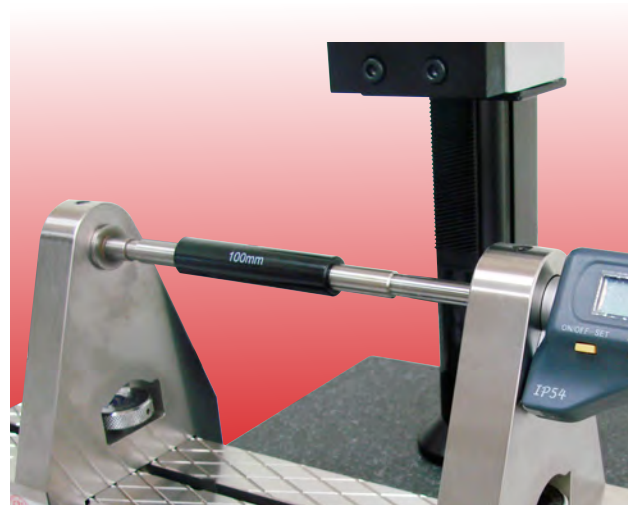
For calibrating micrometer heads, single rod inside micrometers, pin gauges, plug gauges, standard bars, thread plug gauges, and etc.

TRANSFORMERS

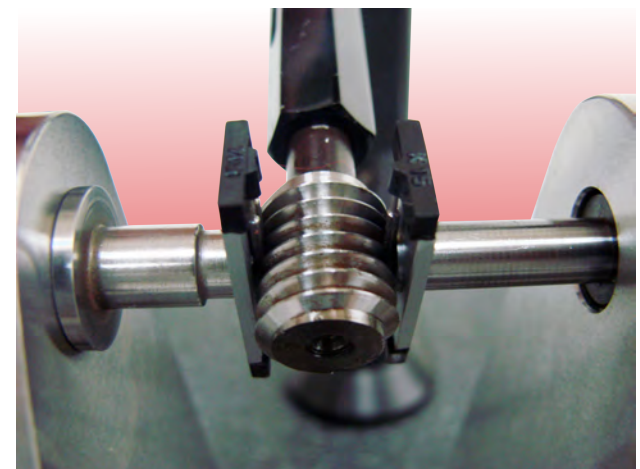
Unprecedented & Unbeatable Flagship



Micrometer head calibration



Standard bar calibration



Thread plug gauge calibration



Innovation Design R&D
Patented Technology Award



Thread plug gauge and 3-wire
thread gauge
(Detail specification see H26)

Universal Measuring & Calibration Instrument

Taiwan invention First in the world Unique and Unparalleled



Innovation Design R&D
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Innovation Research & Development Design
Manufacture Assembly Inspection



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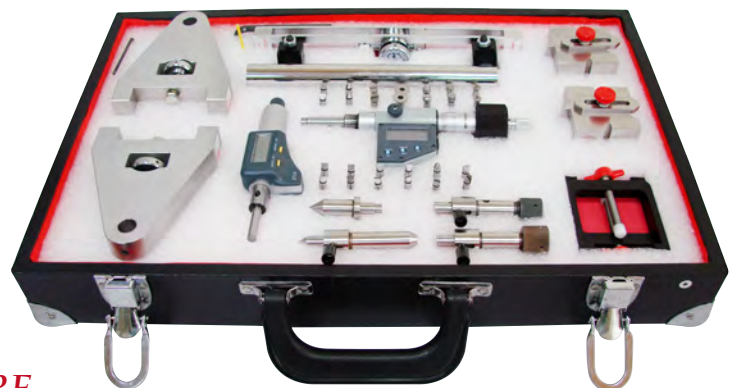
Taiwan patent



EU patent



China patent



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CALIBRATION & MEASURING FUNCTION