

# GRANITE MASTER GAUGE



Granite Master Gauges come with new innovative design in structural quality, functionality, and accuracy, a total upgrade to satisfy your upmost demand.

- Accuracy** ➤ German DIN 876/00 inspection grade:  $2+L/500\mu\text{m}$  & DIN 876/0 :  $4+L/250\mu\text{m}$
- Manufacturing** ➤ Germany century-old inheritance technology, china OEM precision hand polishing & grinding, Taiwan precision components & parts manufacturing
- Stone** ➤ China special high grade natural "Jinahchin" black granite, formation from millions of years, and India natural pure black high hardness granite
- Quality** ➤ Developed and designed in Taiwan, inspected and calibrated by Jingstone Calibration Center (JCC). All specifications in accordance to German TUV CERT DIN ISO9001, and ISO/IEC17025 standards
- Guarantee** ➤ Warranty under normal usage: product will never deform in shape. It is stable, non-corrosive, acid resistant, wear-and-tear resistant, and non-magnetic.
- Characteristic** ➤ Specific Gravity :  $3000\text{Kg}/\text{m}^3$   
Compressive Strength :  $245\text{N}/\text{mm}^2$   
Elastic Modular :  $1.3\text{N}/\text{mm}^2$   
Linear Expansion Coefficient :  $4.6 \times 10^{-6}/\text{C}^\circ$   
Water Absorptivity :  $<0.13\%$   
Shore Hardness :  $>\text{Hs}70\sim 90$



# GRANITE MASTER GAUGE

## ■ Granite Surface Plate

For layout of workpieces and measuring reference plane of geometric elements inspection.

Use repeat checking calibrator to check local error of plate flatness

Grade : German DIN 876/00, JCC inspection report included



Stone excavation & cutting



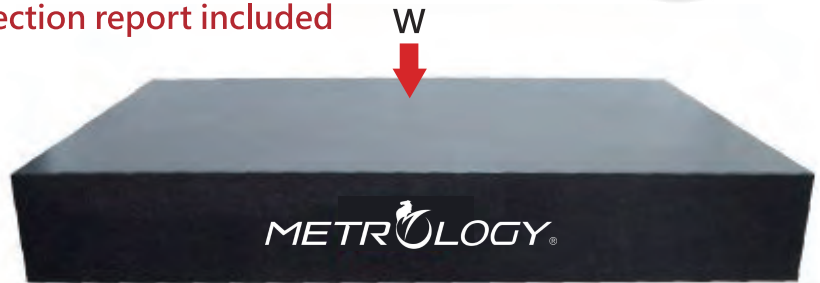
Stone milling to complete the shape



Grinding and drilling



Precision hand polishing



Model No.	Specification (L*W*T mm)	Accuracy (mm)	Weight (kg)
GN-1010	100x100x50	0.0020	1.5
GN-2020	200x200x60	0.0025	7.2
GN-3030	300x300x80	0.0030	22
GN-3045	300x450x80	0.0030	37
GN-4560	450x600x100	0.0035	83
GN-5050	500x500x100	0.0035	75
GN-5080	500x800x100	0.0040	120
GN-6060	600x600x100	0.0040	112
GN-6090	600x900x100	0.0045	162
GN-75100	750x1000x150	0.0045	338
GN-90120	900x1200x150	0.0045	486
GN-100100	1000x1000x150	0.0050	465
GN-100150	1000x1500x200	0.0060	900
GN-100200	1000x2000x200	0.0065	1200
GN-150150	1500x1500x200	0.0065	1350
GN-150200	1500x2000x200	0.0070	1800
GN-150300	1500x3000x300	0.0140	4050
GN-200200	2000x2000x300	0.0140	3600
GN-200300	2000x3000x300	0.0180	5400
GN-200400	2000x4000x350	0.0220	8400
GN-300300	3000x3000x400	0.0260	9450
GN-300400	3000x4000x400	0.0300	12600

\*Providing requirement for specific type, specification and accuracy of granite structure.

\*Accuracy is DIN 0 grade, if the specification is bigger than GN-150300 (include)

■ Granite Tri-Square Master

An economical way to accurately check squareness and straightness of X-Y-Z axis on machine tools and coordinate measuring machines.

Grade : German DIN 876/00, JCC inspection report included



METROLOGY®

Model No.	Specification (L*W*T mm)	Accuracy (mm)	Weight (kg)
GN-250T	250x160x40	0.0025	2.4
GN-300T	300x200x40	0.0030	3.6
GN-400T	400x250x40	0.0035	6
GN-630T	630x400x50	0.0045	18.9
GN-800T	800x500x60	0.0050	35
GN-1000T	1000x630x80	0.0060	70
GN-1500T	1500x1000x100	0.0075	200

\*Above products with two-faces straightness, flatness, squareness, precision machining.

\*Providing requirement for specific type, specification and accuracy of granite structure.

\*Optional: wooden with leather box packaging.



Grade : German JFA Precision I++ and Precision Lab  
 Material : Finest Diabase black natural granite  
 Include : JFA Inspection Report, transport wooden case



Technical table									
side length - long side	mm	300	400	500	600	800	1000	1200	1500
side length - short side	mm	200	250	300	400	500	660	800	1000
width	mm	50	60	60	70	80	120	150	160
weight	kg	6	11	16	30	55	129	225	383
JFA precision I++	mm	0,002	0,002	0,002	0,002	0,004	0,004	0,004	0,004
JFA precision LAB	mm	0,001	0,001	0,001	0,001	0,002	0,002	0,002	0,002

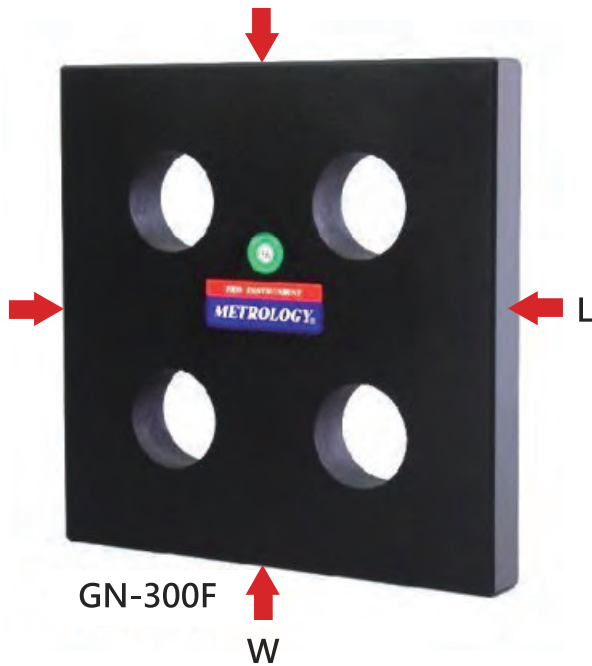
Remark : Above specs are available in both 2 faces and 4 faces precision machining.



■ Granite Four Face Square Master

For more accurate checking of squareness, parallelism and straightness of X-Y-Z axis of machine tools and CMMs.

Grade : German DIN 876/00, JCC inspection report included



METROLOGY®

Model No.	Specification (L*W*T mm)	Accuracy (mm)	Weight (kg)
GN-200F	200x200x40	0.0020	5
GN-300F	300x300x40	0.0025	12
GN-400F	400x400x50	0.0030	24
GN-500F	500x500x50	0.0035	38
GN-600F	600x600x60	0.0045	65
GN-800F	800x800x70	0.0050	134
GN-1000F	1000x1000x100	0.0075	300

- \*Above products with four-faces straightness, flatness, squareness, parallelism, precision machining.
- \*Providing requirement for specific type, specification and accuracy of granite structure.
- \*Optional: wooden with leather box packaging.



Grade : German JFA Precision I++ and Precision Lab  
 Material : Finest Diabase black natural granite  
 Include : JFA Inspection Report, transport wooden case



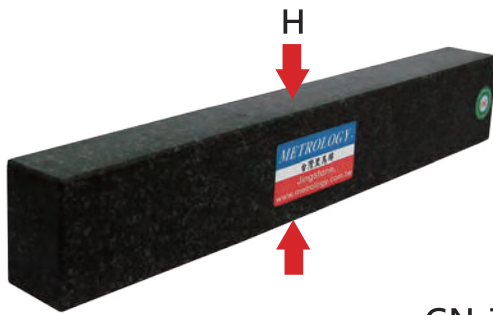
Technical table								
side lengths	mm	200 x 200	300 x 300	400 x 400	500 x 500	600 x 600	800 x 800	1000 x 1000
width	mm	40	50	50	60	70	90	120
weight	kg	4	11	21	38	65	140	300
JFA precision I++	mm	0,002	0,002	0,002	0,002	0,002	0,004	0,004
JFA precision LAB	mm	0,001	0,001	0,001	0,001	0,001	0,002	0,002

Remark: Above specs are available in 4 faces, 5 faces, and 6 faces precision machining.

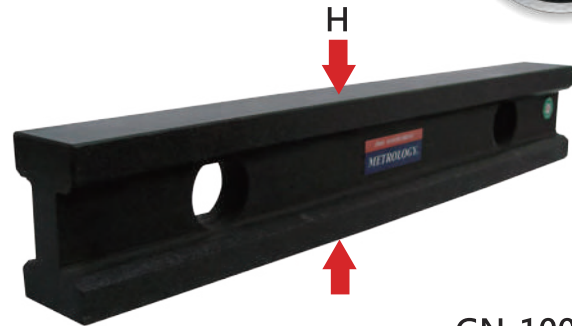
## ■ Granite Straight Edge Master

For accurate checking of straightness, parallels, and flatness of machine tools, measuring machines and workpieces.

Grade : German DIN 876/00, JCC inspection report included



GN-750S2



GN-1000I2

METROLOGY

Model No.	Specification (L*H*T mm)	Accuracy(mm)	Weight(kg)
GN-500S2	500x100x60	0.0020	9
GN-750S2	750x100x60	0.0025	13.5
GN-1000S2	1000x120x60	0.0030	21.6
GN-1500S2	1500x150x60	0.0045	40.5
GN-2000S2	2000x200x80	0.0055	96
GN-2500S2	2500x250x80	0.0070	150
GN-3000S2	3000x250x100	0.0085	225
GN-4000S2	4000x300x120	0.0120	432
GN-500S4	500x100x60	0.0020	9
GN-750S4	750x100x60	0.0025	13.5
GN-1000S4	1000x120x60	0.0030	21.6
GN-1500S4	1500x150x60	0.0045	40.5
GN-2000S4	2000x200x80	0.0055	96
GN-2500S4	2500x250x80	0.0070	150
GN-3000S4	3000x250x100	0.0085	225
GN-4000S4	4000x300x120	0.0120	432

Model No.	Specification (L*H*T mm)	Accuracy(mm)	Weight(kg)
GN-500I2	500x100x60	0.0020	6.5
GN-750I2	750x100x60	0.0025	10
GN-1000I2	1000x120x60	0.0030	16
GN-1500I2	1500x150x60	0.0045	30
GN-2000I2	2000x200x80	0.0055	76
GN-500I4	500x100x60	0.0020	6.5
GN-750I4	750x100x60	0.0025	10
GN-1000I4	1000x120x60	0.0030	16
GN-1500I4	1500x150x60	0.0045	30
GN-2000I4	2000x200x80	0.0055	76

I2: I type of two-faces machining

I4: I type of four-faces machining

\*Normal products with two-faces straightness, flatness, parallelism, precision machining.

\*Special style, specification, and accuracy requirements available as per client request by drawing.

\*Optional: wooden with leather box packaging.

S2: Straight type of two-faces machining

S4: Straight type of four-faces machining



Grade : German JFA Precision I++ and Precision Lab  
Material : Finest Diabase black natural granite  
Include : JFA Inspection Report, transport wooden case



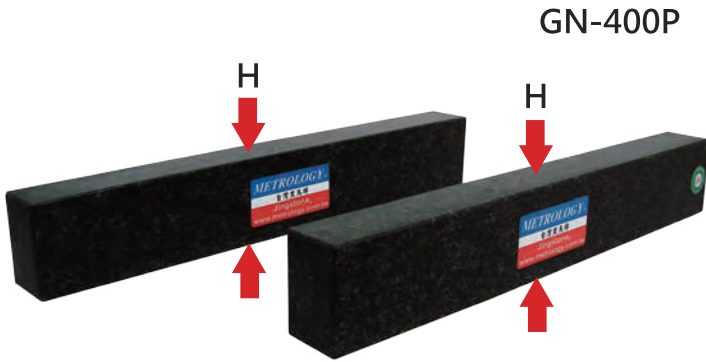
Technical table									
length	mm	500	750	1000	1250	1500	1750	2000	2500
cross-section	mm	45 x 90	50 x 140	56 x 160	60 x 190	70 x 220	75 x 235	80 x 250	90 x 280
weight	kg	6	16	27	42	67	93	115	194
JFA precision I++	mm	0,002	0,002	0,002	0,004	0,004	0,004	0,004	0,004
JFA precision LAB	mm	0,001	0,001	0,001	0,002	0,002	0,002	0,002	0,002

Remark : Above Straight type specs are available in both 2 faces and 4 faces precision machining.

## ■ Granite Parallel Master

For setting up workpiece on surface plates and machine tables for checking parallels, straightness, and flatness.

Grade : German DIN 876/00, JCC inspection report included



Model No.	Specification (L*H*T mm)	Accuracy (mm)	Weight (kg)
GN-160P2	160x25x16	0.0015	0.5
GN-250P2	250x40x25	0.0020	1.5
GN-400P2	400x63x40	0.0040	6
GN-630P2	630x100x63	0.0060	24
GN-160P4	160x25x16	0.0015	0.5
GN-250P4	250x40x25	0.0020	1.5
GN-400P4	400x63x40	0.0040	6
GN-630P4	630x100x63	0.0060	24

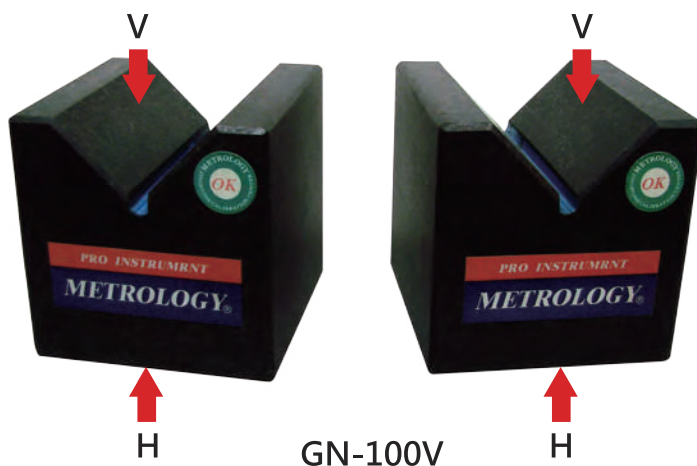
- \*Standard: 2pcs/ set
- \*Normal product is with two-faces straightness, flatness, parallelism, precision machining.
- \*Providing requirement for specific type, specification and accuracy of granite structure.
- \*Optional: wooden with leather box packaging.

P2: two-faces machining  
P4: four-faces machining

## ■ Granite V-Block Master

For measuring coaxial, concentricity, roundness and roundout of cylindrical workpieces.

Grade : German DIN 876/00, JCC inspection report included



Model No.	Specification (L*W*H mm)	Accuracy (mm)	Weight (kg)
GN-60V	60x60x60	0.0015	1.2
GN-100V	100x100x80	0.0020	4
GN-160V	160x160x100	0.0025	14
GN-200V	200x200x120	0.0030	28
GN-300V	300x300x150	0.0045	80

- \*Standard: 2pcs/ set , Normal product is with precision machining of flatness on both sides of bottom & V-shaped surfaces.
- \*Providing requirement for specific type, specification and accuracy of granite structure.
- \*Optional: wooden with leather box packaging.



■ Granite Measuring Stand

Pair with dial indicators, digital indicators, level-type indicators, or comparators. For direct measuring or indirect comparing height, depth, thickness, step, flatness, parallelism, roundness of workpeices, or as measuring reference of geometric element.

Grade : German DIN 876/00, JCC inspection report included

Standard type

Model No.	Specification (mm)
GN-MS1515N	150x150x40
GN-MS2015N	200x150x40
GN-MS3020N	300x200x50
GN-MS4530N	450x300x50
GN-MS6045N	600x450x60



GN-MS2015N



- \*Main column: hardened chrome steel  $\Phi 25 \times L250\text{mm}$
- \* $\Phi 8\text{mm}$  indicator holder with aluminum alloy material

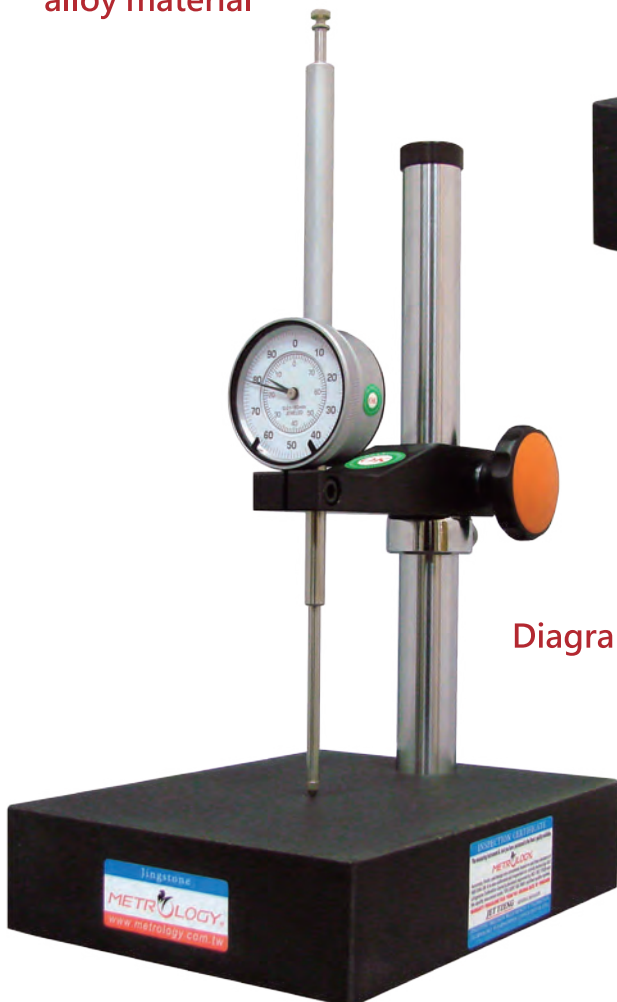


Diagram of indicator installation



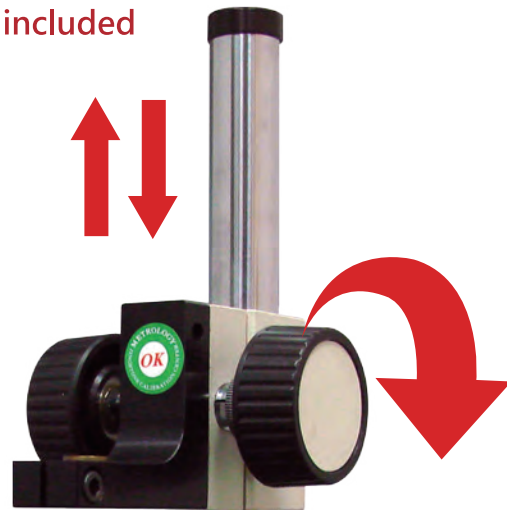
■ Granite Measuring Stand

Pair with dial indicators, digital indicators, level-type indicators, or comparators. For direct measuring or indirect comparing height, depth, thickness, step, flatness, parallelism, roundness of workpieces, or as measuring reference of geometric element.

Grade : German DIN 876/00, JCC inspection report included

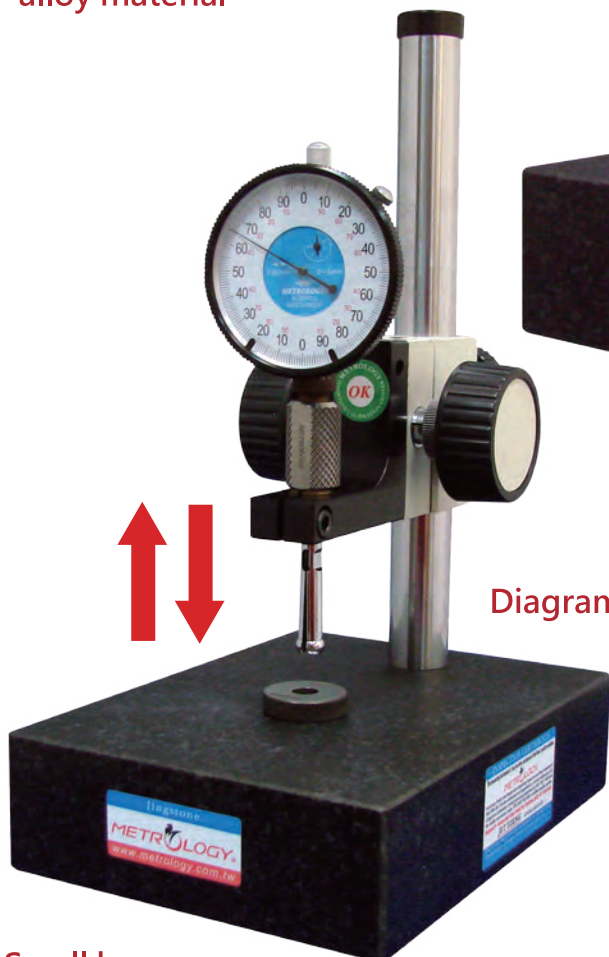
Fine travel type

Model No.	Specification (mm)
GN-MS2015F	200x150x40
GN-MS3020F	300x200x50
GN-MS4530F	450x300x50
GN-MS6045F	600x450x60



GN-MS2015F

- \*Main column: hardened chrome steel  $\Phi 25 \times L250\text{mm}$
- \*Fine adjustment travel: 50mm (double-wheel)
- \* $\Phi 8\text{mm}$  indicator holder with aluminum alloy material



Small bore gauge internal measurement

Diagram of indicator installation





■ Granite Measuring Stand

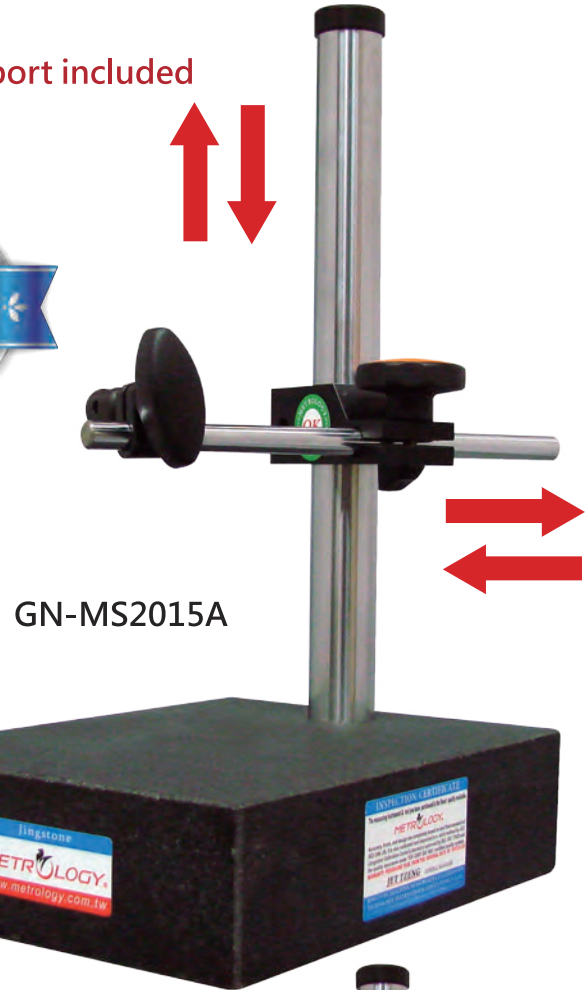
Pair with dial indicators, digital indicators, level-type indicators, or comparators. For direct measuring or indirect comparing height, depth, thickness, step, flatness, parallelism, roundness of workpieces, or as measuring reference of geometric element.

Grade : German DIN 876/00, JCC inspection report included

Arm type

Model No.	Specification (mm)
GN-MS2015A	200x150x40
GN-MS3020A	300x200x50
GN-MS4530A	450x300x50
GN-MS6045A	600x450x60

- \*Main column: hardened chrome steel  $\Phi 25 \times L250\text{mm}$
- \* $\Phi 6$  &  $\Phi 8\text{mm}$  indicator fixed clamp
- \*The length of vice rod is followed with the size of granite plate.



GN-MS2015A

Diagram of indicator installation



■ Granite Measuring Stand

Pair with dial indicators, digital indicators, level-type indicators, or comparators. For direct measuring or indirect comparing height, depth, thickness, step, flatness, parallelism, roundness of workpieces, or as measuring reference of geometric element.

Grade : German DIN 876/00, JCC inspection report included

Universal type

Model No.	Spec. (mm)	Arm
GN-MS2015U	200x150x40	Mechanical universal type With fine-adjustment device
GN-MS3020U	300x200x50	
GN-MS4530U	450x300x50	
GN-MS6045U	600x450x60	

- \*The mode of the universal mechanism will be configured according to the size of the measuring stand
- \*Suitable for installation on level type indicator dovetail of any brand



GN-MS2015U



■ Granite Measuring Stand

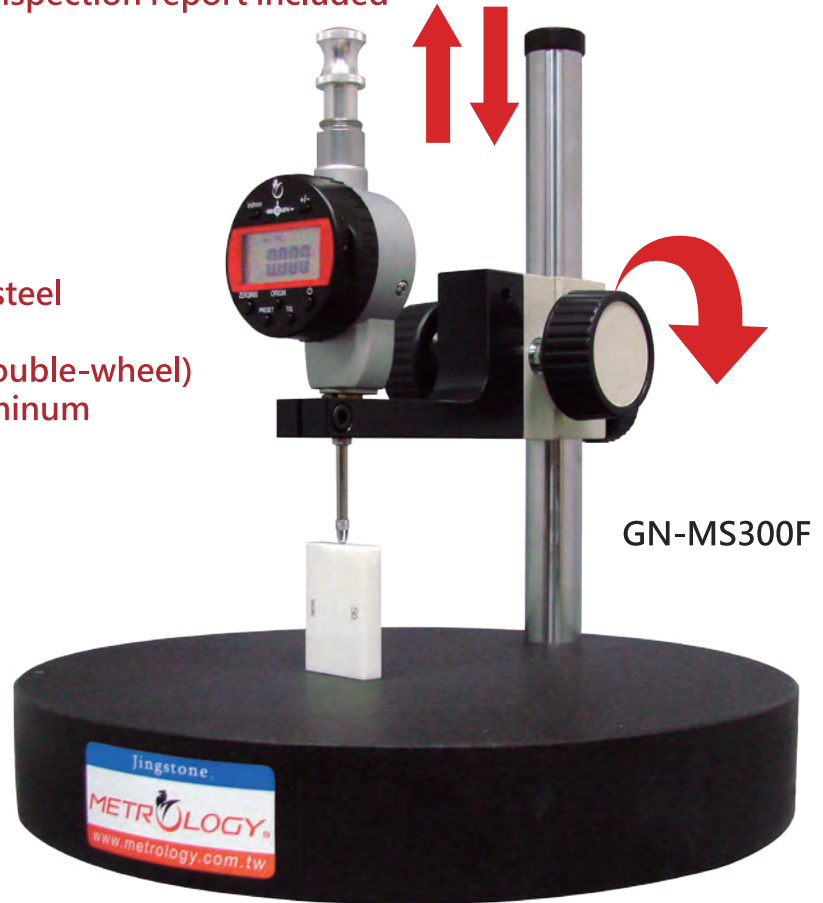
Pair with dial indicators, digital indicators, level-type indicators, or comparators. For direct measuring or indirect comparing height, depth, thickness, step, flatness, parallelism, roundness of workpieces, or as measuring reference of geometric element.

Grade : German DIN 876/00, JCC inspection report included

Round base type

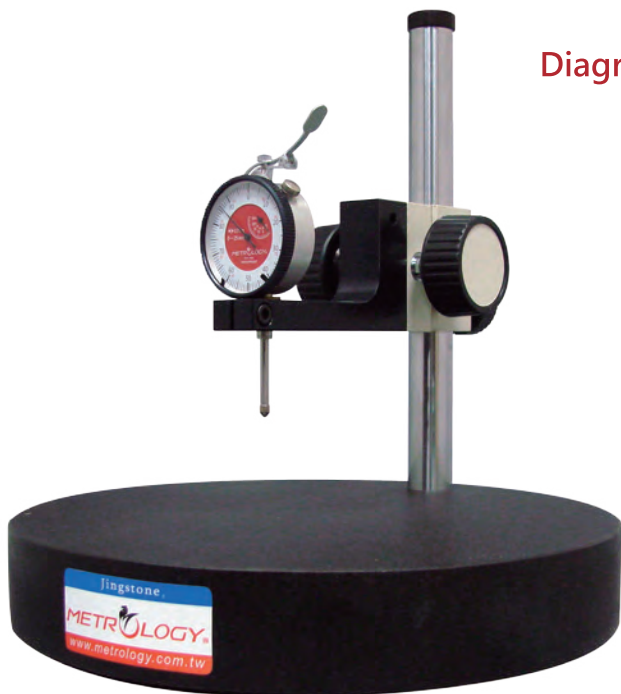
Model No.	Spec. (mm)
GN-MS300F	Φ300xT50

- \*Main column: hardened chrome steel Φ25 x L250mm
- \*Fine adjustment travel: 50mm (double-wheel)
- \*Φ8mm indicator holder with aluminum alloy material



GN-MS300F

Diagram of indicator installation





■ Granite Measuring Stand

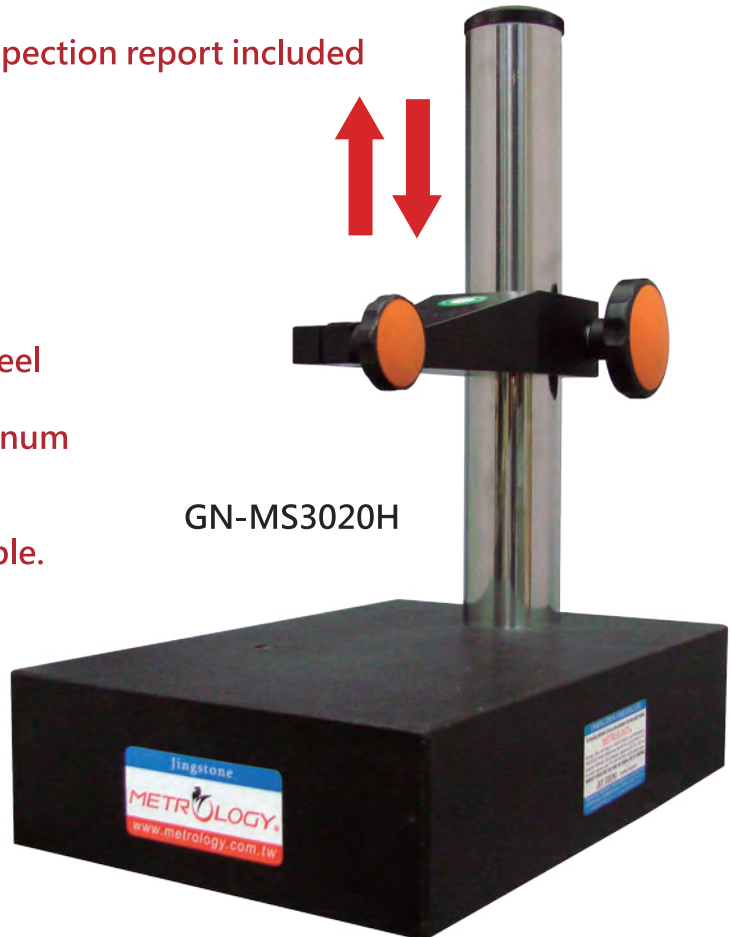
Pair with dial indicators, digital indicators, level-type indicators, or comparators. For direct measuring or indirect comparing height, depth, thickness, step, flatness, parallelism, roundness of workpieces, or as measuring reference of geometric element.

Grade : German DIN 876/00, JCC inspection report included

Heavy type

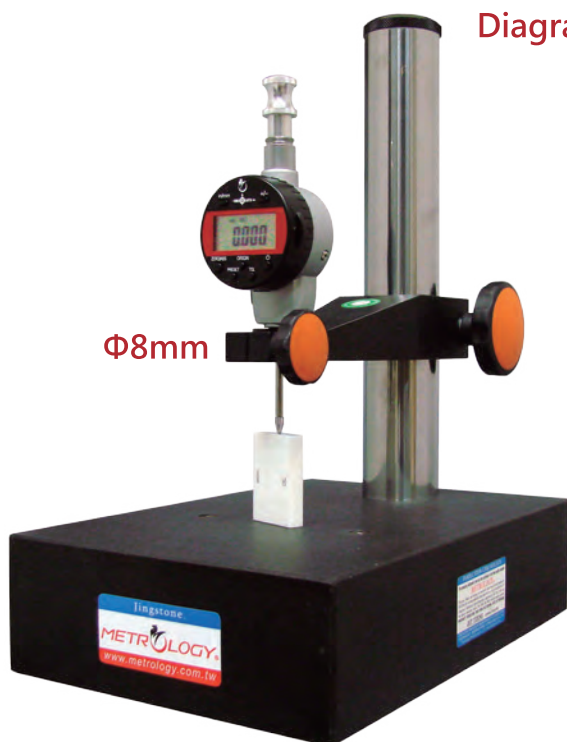
Model No.	Spec. (mm)
GN-MS3020H	300x200x75

- \*Main column: hardened chrome steel  $\Phi 50 \times L300\text{mm}$
- \* $\Phi 8\text{mm}$  indicator holder with aluminum alloy material
- \*Standard holder hole  $\Phi 8\text{mm}$ , also custom hole diameters available.

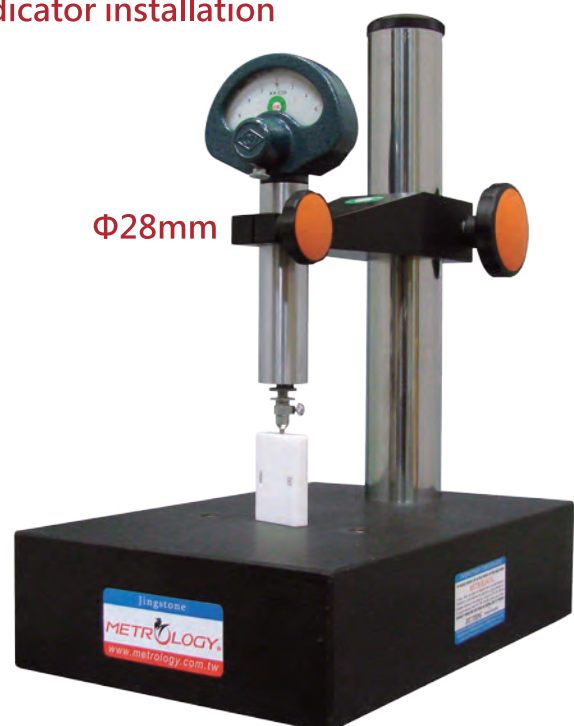


GN-MS3020H

Diagram of indicator installation



$\Phi 8\text{mm}$



$\Phi 28\text{mm}$

■ Measuring Stand Extension Rod

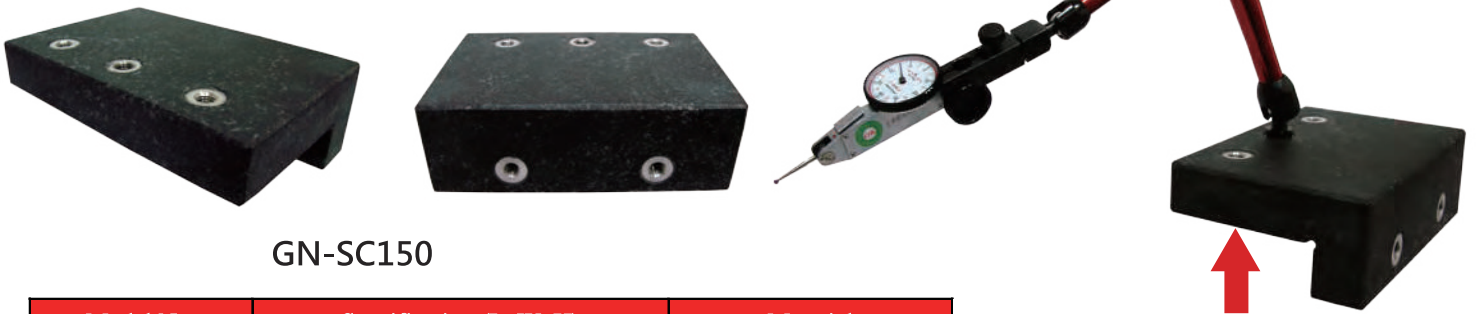


Model No.	Spec. (mm)
GN-MS400E	Length : 400 Dia. : Φ25
GN-MS600E	Length : 600 Dia. : Φ25
GN-MS900E	Length : 900 Dia. : Φ25

\*Material: Hardened chrome steel

■ Slide Guide Comparator

For measuring and inspecting straightness, parallelism, flatness, and other geometrics tolerance of machine tools slide table, linear slides, and mechanical assembly.



GN-SC150

Model No.	Specification (LxWxH)	Material
GN-SC150	150x100x50mm M8-6g	Black Granite

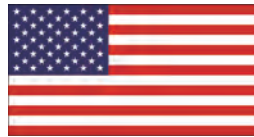
\*The types and specs of universal arms and indicators are optional as per customer's requirements.



## Granite Surface Plate Cleaner

- \*For cleaning, maintaining, lubricating granite plate surface, to reduce wear and extend service life
- \*Using granite maintenance original materials imported from Starrett brand of United States

CN-CL0.1



Model No.	Capacity
GN-CL0.1	100 ml
GN-CL1.0	1000 ml

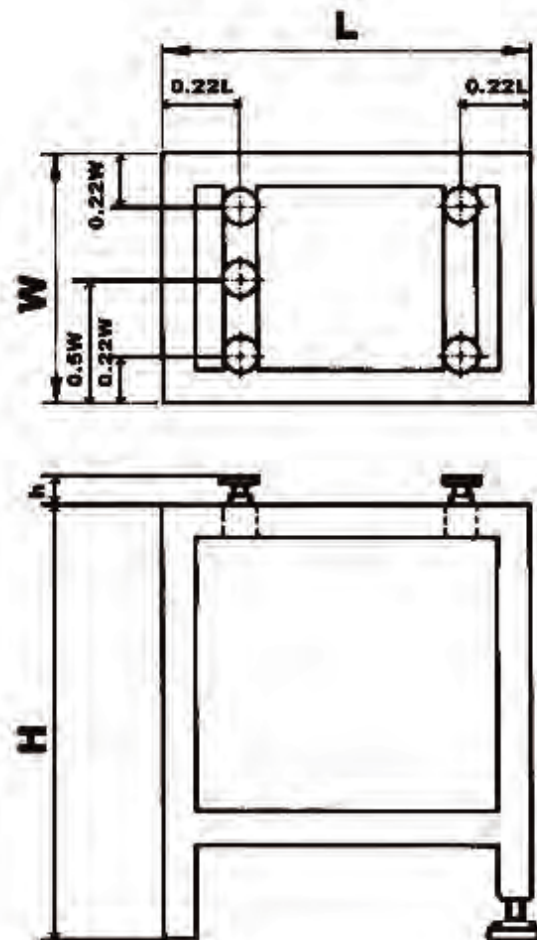


CN-CL1.0

## Steel Stands

Model No.	Specification L x W x H (mm)
GN-S3030	300x300x700
GN-S3045	450x300x700
GN-S4560	600x450x700
GN-S5050	500x500x700
GN-S5080	800x500x700
GN-S6060	600x600x700
GN-S6090	900x600x700
GN-S75100	1000x750x600
GN-S90120	1200x900x600
GN-S100100	1000x1000x600
GN-S100150	1500x1000x600
GN-S100200	2000x1000x500
GN-S150150	1500x1500x500
GN-S150200	2000x1500x500
GN-S150300	3000x1500x400
GN-S200200	2000x2000x400
GN-S200300	3000x2000x400
GN-S200400	4000x2000x300
GN-S300300	3000x3000x300
GN-S300400	4000x3000x400

Diagram of production method



- \*L type painted steel plate with leveling bolt, height adjustable 50-75mm. Total height: 750-900mm (Including granite plate).
- \*Providing specific type and specification as requirement