



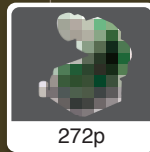
272p~273p



272p~273p



272p~273p



272p



274p



274p



275p



275p



276p



277p



277p



277p



278p



278p



279p



279p

STANDARD TOOL



280p



280p



280p



281p



281p



282p



282p



283p



283p



283p



284p



284p



284p



285p



285p



286p



286p



287p



287p



288p



288p



288p



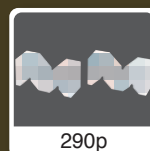
288p



289p



289p



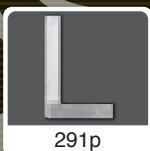
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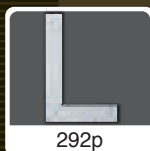
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290p



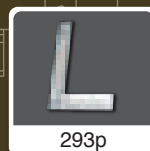
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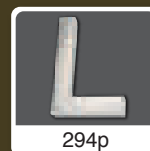
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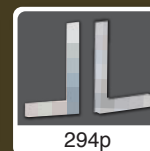
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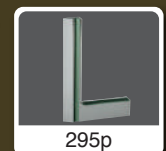
293p



294p



294p



295p



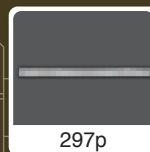
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296p



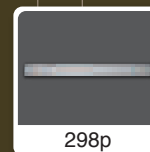
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297p



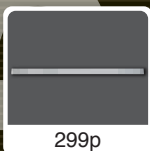
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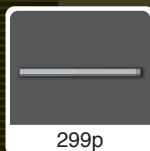
298p



298p



299p



299p



300p

COMPARATOR

GRANITE
PRODUCTSCAST IRON
SURFACE
PLATEPARALLEL
BLOCK

V BLOCK

SQUARE

STRAIGHT
EDGEPARALLEL
CLAMP



RUN-OUT GAUGE SYSTEM



MADE IN JAPAN.

Run-out gauge system with a roller applicable to small work pieces of OD $\phi 1 \sim 8\text{mm}$ is now available.

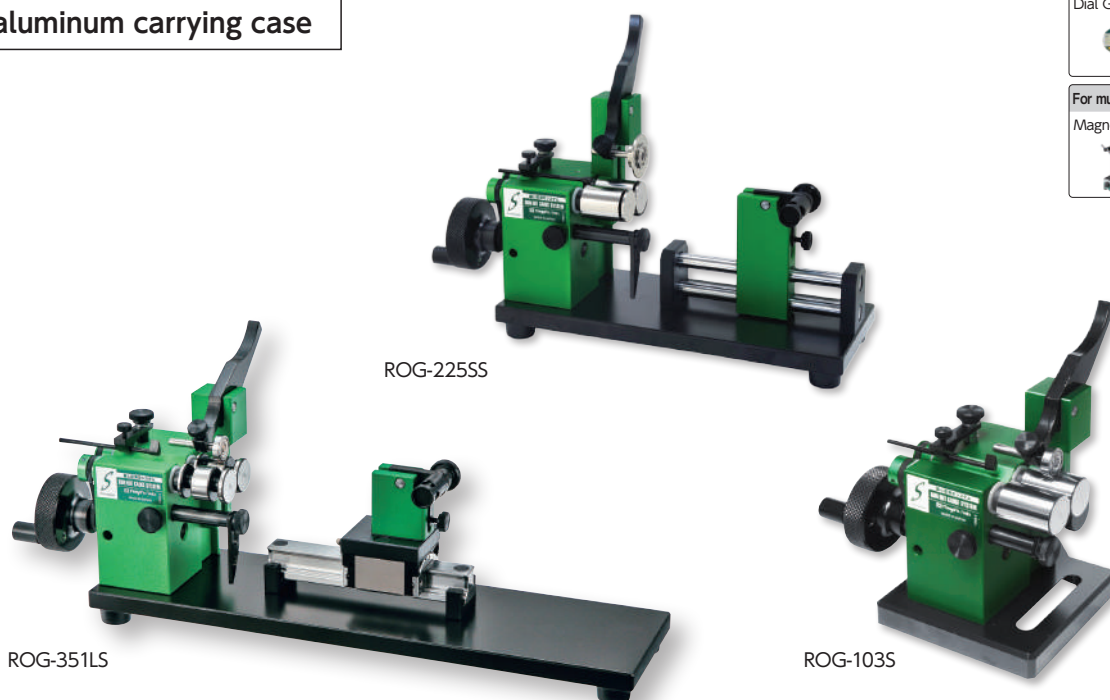
Concentricity measurement by mounting your current indicator or electronic micrometer to this system.

With aluminum carrying case

Measuring instruments ▶
Electronic Micrometer
 P165

Measuring instruments ▶
Dial Gauge - Indicator
 P233
~246

For multiple measurement ▶
Magnetic Base
 P247
~255



【Slit roller (for small diameter)】

ADJUSTABLE ROLLER HOLDER **NEW!**

Combined with S-LINE RUN-OUT GAUGE SYSTEM, it enables measurement of long or stepped workpieces!

USE

- Measurements that require a S-LINE RUN-OUT GAUGE SYSTEM to be held in fixed position

MATERIAL

- Body: Aluminum
- Roller: Stainless steel
- Base: Rolled steel for general structure

FEATURES

- With fine adjust for easy height adjustment
- With ON/OFF switchable magnet on the base

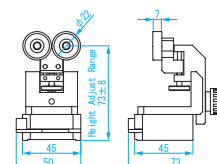
SPECIFICATIONS

- Applicable products: ROG-221S, 223S, 225S, 351S, 353S, 355S, 101S, 103S, 105S, 251SM
- Height Adjust Range: $73 \pm 8\text{mm}$ (Base bottom surface to Roller center)
- Fine Adjust Stroke: Over 2.5mm



● DIMENSIONS

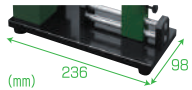
Units: mm



Order No.	Model No.	Weight
NEW! 010219	LRH-Y1	400g

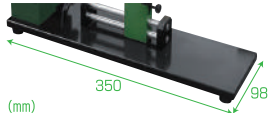
Base type (3 options)

Short Base
Compact type



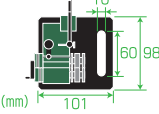
(mm) 236 98

Long Base
Allows simultaneous multiple measurements using magnetic base



(mm) 350 98

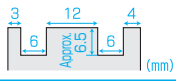
Clamp Base
Can be mounted on stage of large measuring instruments



(mm) 101 10 60 98

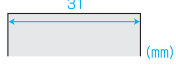
Roller type (3 options)

Slit Roller
Roller with slit. Ideal for measuring flanged workpiece.



(mm) 3 12 4 6.5

Flat Roller
Plain roller type. Ideal for a measuring round bar.



(mm) 31

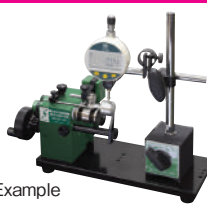
Slit Roller (for small diameter)
Roller for small workpiece sized $\phi 1 \sim 8$ mm Applicable to workpieces from $\phi 4$ to 30.



(mm) 27.5 2 1.5

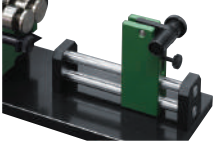
Carrier type (3 options)

No Carrier
Magnetic base can be mounted on the base

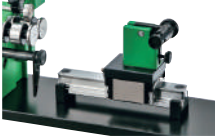


※ Usage Example

Shaft Carrier
Shaft slide carrier can be positioned along length of workpiece



Linear Carrier
Linear slide carrier provides smooth movement for accurate positioning



USE

- Concentricity measurement by mounting your current indicator or electronic micrometer to this system

FEATURES

- Three base lengths, three rollers and three carriers, total 21 product configurations available
- Up to $2\mu\text{m}$ * accuracy. Highly accurate measurement is possible.
※ When measuring $\phi 20$ mm workpiece
- Smooth measurement with grip handle and timing belt & pulley operation system
- Carrier with angle fine adjustment for easy zero-setting of measuring instruments. Free movement in Z direction enables measurement at the optimum position.
- Equipped with work retainer for holding front and rear of workpiece and to enable measurement of axial run-out
- As for the Slit Roller type for small diameter, two types of rollers are included.

MATERIAL

- Base: Carbon steel
- Roller: Tool steel

SPECIFICATIONS

- Provided with aluminum carrying case

MEASURABLE WORK CONDITIONS

- OD: Please refer to the following chart
- Length: 5~80mm
- Shape: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to roller
※ Measurement error increases at with increasing distance from rollers

Order No.	Model No.	Base Type	Roller Type	Carrier Type	Applicable Work OD (mm)	Accuracy	Weight
010201	ROG-221S	Short Base	Slit Roller	No carrier	φ4~30	Within 2~3.5μm ※2μm= when measuring φ20mm workpiece (In-house measurements)	3.6kg
010202	ROG-221SS			Shaft Carrier			4.0kg
010203	ROG-221LS			Linear Carrier			4.3kg
010204	ROG-223S		Flat Roller	No carrier			3.7kg
010205	ROG-223SS			Shaft Carrier			4.1kg
010206	ROG-223LS			Linear Carrier			4.4kg
010207	ROG-351S	Long Base	Slit Roller	No carrier			4.6kg
010208	ROG-351SS			Shaft Carrier			5.0kg
010209	ROG-351LS			Linear Carrier			5.3kg
010210	ROG-353S		Flat Roller	No carrier			4.7kg
010211	ROG-353SS			Shaft Carrier			5.1kg
010212	ROG-353LS			Linear Carrier			5.4kg
010213	ROG-101S	Clamp Base	Slit Roller	No carrier			2.5kg
010214	ROG-103S		Flat Roller				2.6kg
010224	ROG-225S	Short Base	Slit Roller (for small diameter)	No carrier	φ1~30 ※Top Roller Replaceable ●Standard Roller: φ4~30 ●Small Diameter Roller: φ1~8	Within 2~6.5 μm ※2 μm = When measuring φ20 mm workpiece ※3 μm = When measuring φ8 mm workpiece (In-house measurements)	3.7kg
010225	ROG-225SS			Shaft Carrier			4.1kg
010226	ROG-225LS			Linear Carrier			4.4kg
010227	ROG-355S	Long Base		No carrier			4.7kg
010228	ROG-355SS			Shaft Carrier			5.1kg
010229	ROG-355LS			Linear Carrier			5.4kg
010230	ROG-105S			Clamp Base			No carrier

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

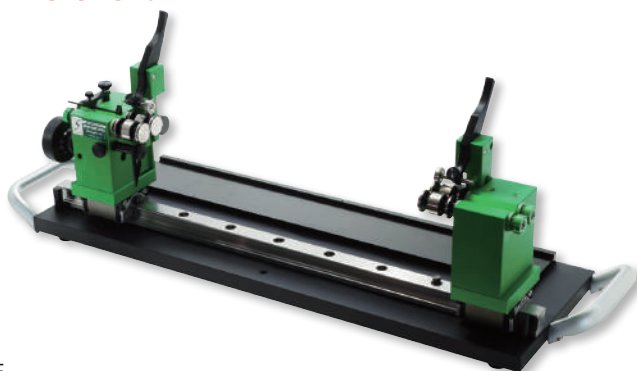
PARALLEL CLAMP



S-LINE RUN-OUT GAUGE SYSTEM (FOR LONG OBJECTS)

Capable of measuring up to 300mm length work.

Concentricity measurement by mounting your current indicator or electronic micrometer to this gaging system.



※Magnet base and indicator not included.

Measuring instruments▶

Electronic Micrometer



P165

Measuring instruments▶

Dial Gauge - Indicator



P233
~246

For multiple measurement▶

Magnetic Base



P247
~255

USE

- Concentricity measurement by mounting your current indicator or electronic micrometer to this system

MATERIAL

- Base: Aluminum, Carbon steel ●Roller: Tool steel

FEATURES

- Capable of measuring up to 300mm length work
- Up to 4μm accuracy. Highly accurate measurement is possible.
- Smooth measurement with grip handle and timing belt & pulley operation system
- Equipped with work retainer for holding front and rear of workpiece and to enable measurement of axial run-out

SPECIFICATIONS

- Accuracy: within 4μm ●Provided with aluminum carrying case

MEASURING CONDITIONS

- OD of workpiece: φ4~30mm
- Length of workpiece: 5~300mm
- Weight: Less than 1.7Kg
- Shape of workpiece: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to roller
- ※Measurement error increases at with increasing distance from rollers

※ Please refer to P273 to see parts configuration.

Order No.	Model No.	Base size (mm)	Roller type *	Carrier type *	Weight
010215	ROG-581S	580 × 190	Slit Roller	Basic type (no carrier)	13kg

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP



S-LINE RUN-OUT GAUGE SYSTEM (FOR LARGE DIAMETER)

Capable of measuring up to φ 110mm of work OD.

Concentricity measurement by mounting your current indicator or electronic micrometer to this system.



※Magnet base and indicator not included.

Measuring instruments▶

Electronic Micrometer



P165

Measuring instruments▶

Dial Gauge - Indicator



P233
~246

For multiple measurement▶

Magnetic Base



P247
~255

USE

- Concentricity measurement by mounting your current indicator or electronic micrometer to this gaging system

MATERIAL

- Base: Aluminum, Carbon steel ●Roller: Tool steel

FEATURES

- Capable of measuring up to φ110 of work OD
- Up to 4μm accuracy. Highly accurate measurement is possible.
- Smooth measurement with grip handle and timing belt & pulley operation system
- Equipped with work retainer for holding front and rear of workpiece and to enable measurement of axial run-out

SPECIFICATIONS

- Accuracy: within 4μm ●Provided with aluminum carrying case

MEASURING CONDITIONS

- OD of workpiece: φ10~110mm
- Length of workpiece: 5~80mm
- Weight: Less than 6.0Kg
- Shape of workpiece: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to roller
- ※Measurement error increases at with increasing distance from rollers

※ Please refer to P273 to see parts configuration.

Order No.	Model No.	Base size (mm)	Roller type *	Carrier type *	Weight
010216	ROG-307S	300 × 160	Flat Roller	Basic type (no carrier)	13kg

S-LINE RUN-OUT GAUGE SYSTEM (DOUBLE CARRIER TYPE)

Capable of simultaneous measurement for front and rear of workpiece.
Concentricity measurement by mounting your current indicator or electronic micrometer to this system.



USE

- Concentricity measurement by mounting your current indicator or electronic micrometer to this system

MATERIAL

- Base: Carbon steel ● Roller: Tool steel

FEATURES

- Capable of simultaneous measurement for front and rear of workpiece
- Up to $2\mu\text{m}^*$ accuracy. Highly accurate measurement is possible.
- ※ When measuring $\phi 20\text{mm}$ workpiece
- Smooth measurement with grip handle and timing belt & pulley operation system
- With carrier stopper for repeated measurements at the same location
- Carrier with angle fine adjustment for easy zero-setting of measuring instruments
- Free movement in XYZ directions enables measurement at the optimum position
- Equipped with work retainer for holding front and rear of workpiece and to enable measurement of axial run-out

SPECIFICATIONS

- Accuracy: Within $2\sim 3.5\mu\text{m}$ ※ $2\mu\text{m}$ =when measuring $\phi 20\text{mm}$ workpiece
- Provided with aluminum carrying case

MEASURABLE WORK CONDITIONS

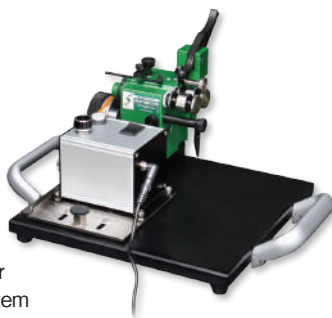
- OD: $\phi 4\sim 30\text{mm}$
- ※ Precision roller for measurements under $\phi 4$ workpiece is also available on request
- Length: $5\sim 80\text{mm}$
- Weight: Less than 450g
- Shape: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to roller
- ※ Measurement error increases at with increasing distance from rollers

※ Please refer to P273 to see type configurations

Order No.	Model No.	Base Size (mm)	Roller Type *	Callier Type *	Weight
010217	ROG-241SSW	236×185	Slit Roller	Shaft Callier	6.3kg

S-LINE RUN-OUT GAUGE SYSTEM (MOTOR TYPE)

Motor drive enables repeated run-out measurement. (Motor drive or manual is switchable)
Concentricity measurement by mounting your current indicator or electronic micrometer to this system.



USE

- Concentricity measurement by mounting your current indicator or electronic micrometer to this system

MATERIAL

- Base: Carbon steel ● Roller: Tool steel

FEATURES

- Up to $2\mu\text{m}^*$ accuracy. Highly accurate measurement is possible.
- ※ When measuring $\phi 20\text{m}$ workpiece
- When motor drive is on, rotation speed of workpiece is adjustable and rotation direction is switchable (forward/ reverse)
- Manual operation with handle by loosening the belt

SPECIFICATIONS

- Accuracy: Within $2\sim 3.5\mu\text{m}$ ※ $2\mu\text{m}$ =when measuring $\phi 20\text{mm}$ workpiece
- Power: AC100~240V 50/60Hz (Use the included AC adapter)
- Power consumption: Max. 5W
- Speed setting range of main roller: $5.5\sim 9.5\text{min}^{-1}$ (OD of Main roller: $\phi 21.9\text{mm}$)
- AC adaptor code length: Approx. 1.5m ● Provided with aluminum carrying case

MEASURABLE WORK CONDITIONS

- OD: $\phi 4\sim 30\text{mm}$
- ※ Precision roller for measurements under $\phi 4$ workpiece is also available on request
- Length: $5\sim 80\text{mm}$
- Weight: Less than 450g
- Shape: Cylindrical
- Reference portion of the workpiece must have enough length to clamp to roller
- ※ Measurement error increases at with increasing distance from rollers

※ Please refer to P273 to see type configurations

Order No.	Model No.	Base Size (mm)	Roller Type *	Callier Type *	Weight
010218	ROG-251SM	250×240	Slit Roller	No Callier	10kg

Measuring instruments▶
Electronic Micrometer
 P165

Measuring instruments▶
Dial Gauge • Indicator
 P233 ~246

For multiple measurement▶
Magnetic Base
 P247 ~255

Measuring instruments▶
Electronic Micrometer
 P165

Measuring instruments▶
Dial Gauge • Indicator
 P233 ~246

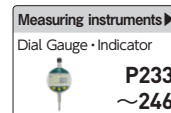
For multiple measurement▶
Magnetic Base
 P247 ~255



RUN-OUT GAUGE SYSTEM P-TYPE

Made in Japan.

Concentricity measurement on granite surface plate or work table by mounting your indicator to this unit.



BCPG-380J (P-1)



※Indicator is not included

● DIMENSIONS

USE

- For eccentricity check of cylindrical work piece and cutting tool

MATERIAL

- Main body: Cast iron (FC250)
- Other: Machine grade carbon steel

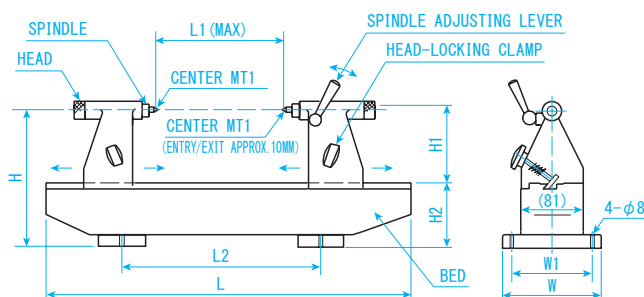
FEATURES

- Concentricity measurement on granite surface plate or work table by mounting your indicator to this unit
- Distance between the center and head is short for convenience when measuring cutting tool
- Dedicated stand included

※Dial gauge or test indicator is not included

SPECIFICATIONS

- Parallelism between upper surface of the bed and center: within $5\mu\text{m}$
- Flatness of the surface of the bed: within $5\mu\text{m}$
- Parallelism of side surface of center: $10\mu\text{m}$
- Spindle ravel distance: approx. 10mm



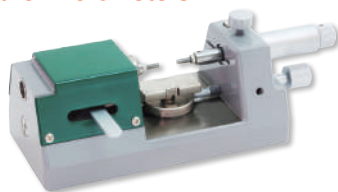
Units: mm

Model No.	L	H	L1	L2	H1	H2	W	W1
BCPG-380J	380	175	150	200	110	65	120	100
BCPG-420J	420	182	200	240		72		
BCPG-530J	530	200	300	280		90		

Order No.	Model No.	Center Distance L1 (mm)	Weight
010221	BCPG-380J (P-1)	150	14kg
010222	BCPG-420J (P-2)	200	16kg
010223	BCPG-530J (P-3)	300	20kg

BENCH TABLE FOR OUTSIDE **NEW!**

Great news for those struggling with in-House inspection of pin gauges and plug gauges!
High-precision measurement of mass-produced products is possible by attaching digital precision indicators or electric micrometers.



USE●Enables high-precision measurement of mass-produced items by attaching digital precision indicators or electric micrometers.

MATERIAL●Body: Cast Iron ●Probe Tip: Carbide

FEATURES●An outer diameter measuring device that supports high-precision comparative measurements by attaching optional dial gauges or indicators.

●Compact and portable, allowing for space-saving usage.

●Equipped with a lever for moving the probe back and forth, ensuring consistent and stable measurement force.

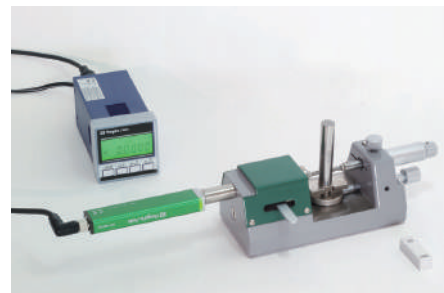
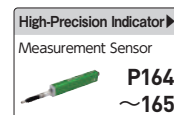
●Equipped with a stage that allows for front, back, up, and down adjustments.

Specifications●Table vertical movement range: 13 mm

●Included probe: Parallelism: Within 1.2 μm

Accessories●Probe (BTO-P3C) ●Hexagon Wrenches x2

※This product is a comparative measuring device. Please prepare a master gauge tailored to the dimensions of your workpiece.



< Connection Example >

Digital Precision Indicator DPI-1001SC,
Bench table for outside BTO-25C, LCD
display for DPI DPI-DRC,
Connection Cable for DPI (L) DPI-CL2C,
Mounting Jig BTO-SPC
BTO-SPC

Order No.	Model No.	Measuring Range (mm)	Probe Stroke (mm)	Measuring Force (N)	Weight
NEW! 152417	BTO-25C	0 ~ 25	25	Depends on the Indicator.	1.6kg

■ Optional Accessory: Mounting Jig [Required mounting jig for using the precision indicator in combination with Bench table for outside BTO-25C.]

Order No.	Model No.
NEW! 152421	BTO-SPC

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK

V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

BENCH TABLE FOR INSIDE **NEW!**

For stable inner diameter measurement of mass-produced products!
Achieve high-precision measurements by conducting comparative measurements using our ring gauges as masters.



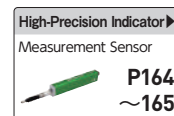
BTI-23C



BTI-67C



MTO products
(BTI-260C)



USE●Enables high-precision measurement of mass-produced items by attaching digital precision indicators or electric micrometers.

MATERIAL●Body: Cast Iron ●Probe: Carbon Tool Steel

FEATURES●An inner diameter measuring device that supports high-precision comparative measurements by attaching optional dial gauges or indicators.

●Equipped with a lever for moving the probe back and forth, ensuring consistent and stable measurement force.

●Achieve high-precision measurements by conducting comparative measurements using our ring gauges as masters.

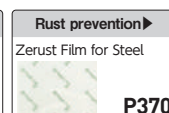
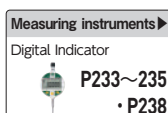
●The BTI-260C comes with four types of probes, making it versatile enough to handle both small and large components.

※This product is a comparative measuring device. Please prepare a ring gauge tailored to the dimensions of your workpiece.

Order No.	Model No.	Measuring Range (mm)	Probe Stroke (mm)	Measuring Force (N)	Measurement Depth (mm)	Table Size (mm)	Weight
NEW! 152419	BTI-23C	$\phi 2 \sim \phi 20$ (Maximum $\phi 23$ with optional probe replacement)	1	1.47	0 ~ 2 (Maximum $\phi 5$ with optional probe replacement)	$\phi 50$ (Center plate)	1.3kg
NEW! 152418	BTI-67C	$\phi 4 \sim \phi 59$ (Maximum $\phi 67$ with optional probe replacement)	3	0.98 ~ 2.94	0 ~ 7 (Maximum $\phi 12$ with optional probe replacement)	170 × 140	6kg
NEW! 152420	BTI-260C	$\phi 10 \sim \phi 260$	5	0.98 ~ 2.94	0 ~ 28	303 × 220	30kg

MEASURING BENCH SET

Ideal for measuring outer diameter of small precision parts.
Use with electric micrometer or digital indicator.



USE

- Enables measurement of small and precision parts by attaching digital precision indicators (stem diameter: $\phi 8\text{mm}$) or electric micrometers.

FEATURES

- Compact and light weight for carrying and saving space
- Equipped with two retraction levers
- XYZ stage with fine adjustment
- Adjustable measuring force (0.3~1.0N)
- Bench table can also be installed vertically

SPECIFICATIONS

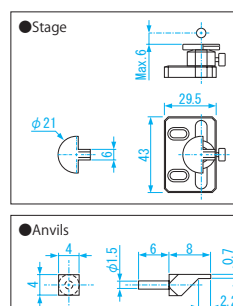
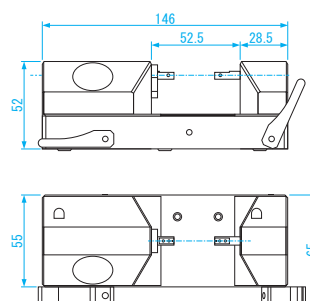
- Standard probe: blade probe (0.7mm thickness)
 - Repeatability: within $1\mu\text{m}$
 - ※ This product is a Measuring Comparison Tool and therefore it will require a gauge that has the same precision measurement for comparison standard
 - ※ The probe attachment of this product is in parallel condition when produced in factory.
- Parallel adjustment by using wrapping device (Model LD-SET) is required when the probe angle or the attachment.
- Also the direction of anvil is able to be adjusted to requested specification when ordered.



※ Indicator NOT included

● DIMENSIONS

Units: mm



Order No.	Model No.	Measuring Range (mm)	Weight
151771	BT-10-SET	0-10	1.9kg

MEASURING BENCH OPTIONAL ACCESSORIES

■ BLADE PROBE FOR MEASURING BENCH

USE

- Replacement knife-shaped probe 0.7mm thickness for BT-10-SET.
- Standard anvils of BT-10-SET.

MATERIAL

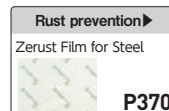
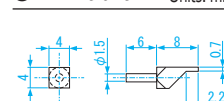
- Carbide

SPECIFICATIONS

- Knife-shaped probe (0.7mm thickness) (2 pcs/set)

● DIMENSIONS

Units: mm



※ After replacing probe, parallelism adjustment of anvils is required with dedicated lapping device (Model No.LD-SET)

Order No.	Model No.	Weight (per piece)
151774	BT-KA07	1g

■ BLADE PROBE FOR MEASURING BENCH

USE

- Replacement knife-shaped probe 0.4mm thickness for BT-10-SET

MATERIAL

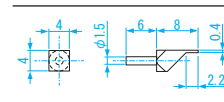
- Carbide

SPECIFICATIONS

- Knife-shaped probe (0.4mm thickness) (2 pcs/set)

● DIMENSIONS

Units: mm



※ After replacing probe, parallelism adjustment of anvils is required with dedicated lapping device (Model No.LD-SET)

Order No.	Model No.	Weight (per piece)
151775	BT-KA04	1g

■ PIN PROBE FOR MEASURING BENCH

USE

- Replacement cylindrical probe ($\phi 1.5\text{mm}$) for Bench Table BT-10-SET

MATERIAL

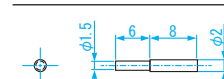
- Carbide

SPECIFICATIONS

- $\phi 1.5\text{mm}$ cylindrical probe (tip: flat face, 2 pcs/set)

● DIMENSIONS

Units: mm



※ After replacing probe, parallelism adjustment of anvils is required with dedicated lapping device (Model No.LD-SET)

Order No.	Model No.	Weight (per piece)
151776	BT-CA20	0.5g

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK

V BLOCK

SQUARE

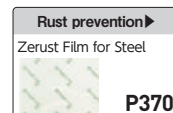
STRAIGHT EDGE

PARALLEL CLAMP

0

LAPPING MACHINE

Worn probe, parallel adjustment after probe replacement



USE

- After replacement of BENCH TABLE probes, used to parallel adjustment after probe replacement when it worn out

FEATURES

- Easy operation with built-in motor

INCLUDED IN SET

- Lapping device (Power: AC100V~240V)
- Lapping stone LD-LB30×3pcs
- Lapping liquid #4-8 LD-LL48
- Blow case

REPLACEMENT LAPPING STONE

Order No.	Model No.	Material	Weight
151778	LD-LB30	Cast iron	45g

LAPPING LIQUID #4-8

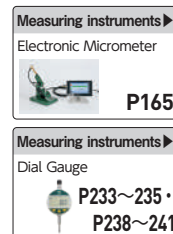
Order No.	Model No.	Content	Weight
151779	LD-LL48	30ml	30g

Order No.	Model No.	Weight
151777	LD-SET	2.4kg

CERAMIC COMPARATOR STAND

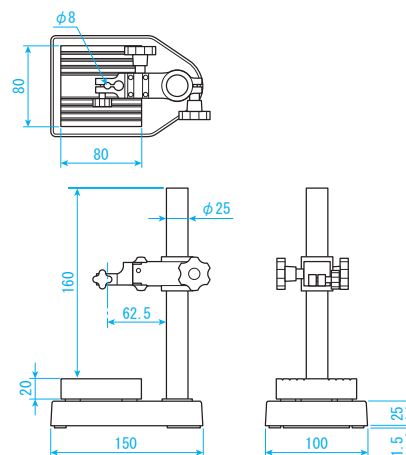
Ceramic measuring table is used! Highly resistant to rust and corrosion, and easy maintenance!

0



DIMENSIONS

Units: mm



USE

- Provides flat measuring surface for measurement using dial gauge or other instrument

MATERIAL

- Base: Cast iron ● Main Post: Stainless steel
- Bracket: Aluminum ● Table: Ceramic

SPECIFICATION

- Compact and convenient in comparison measurement using dial gauge, etc.
- Groove finished table to prevent wringing between the table and objects to be measured
- Highly resistant to rust and corrosion, and easy maintenance after use

Order No.	Model No.	Vertical Stroke Length (mm)	Table Size (mm)	Table Flatness (μm)	Stem Mounting Hole (mm)	Fine Adjust Vertical Stroke Length (mm)	Weight
150995	WCC-80	120	80 × 80	3	φ8	1 and more	2.0kg

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK

V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

GRANITE COMPARATOR STAND

Made in Japan. As a precise measurement table by mounting measuring device such as dial gauge.

USE

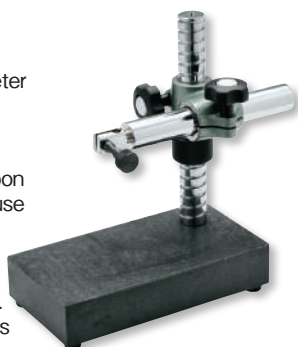
- Provides flat measuring surface for measurement using dial gauge or other instruments
- Suitable for comparison measurement of outer diameter or thickness of round parts

MATERIAL

- Base: Granite
- Main post and bracket: Carbon steel for machine structural use

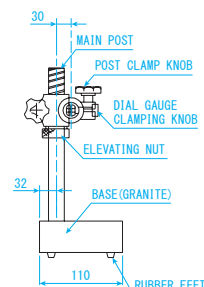
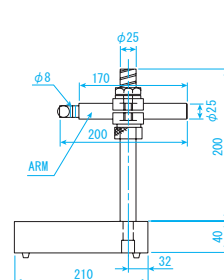
FEATURES

- This precise measurement table use granite.
- Granite is abrasion resistant. Unlike cast iron, granite does not rust or deteriorate with time.



● DIMENSIONS

Units: mm



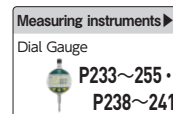
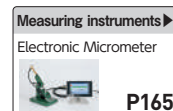
Order No.	Model No.	Measuring Range (mm)	Base Flatness (μ m)	Dial Indicator Mounting hole (mm)	Weight
150969	GC-110CJ	0 ~ 150	5	ϕ 8	4.6kg

GRANITE COMPARATOR STAND **NEW!**

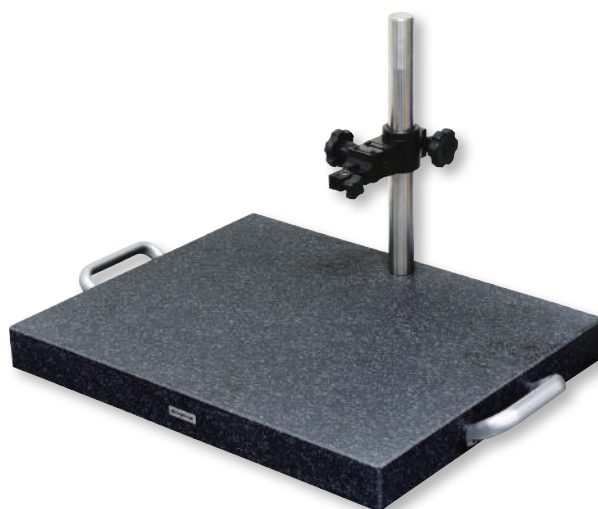
(151679)

0

As a precise measurement table by mounting measuring device such as dial gauge

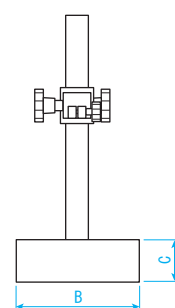
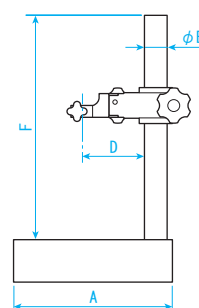
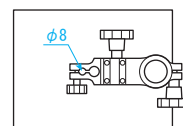


WGC-150



WGC-400

● DIMENSIONS



USE

- Provides flat measuring surface for measurement using dial gauge or other instruments

MATERIAL

- BASE: Granite
- Main Post: Stainless steel
- Bracket: Aluminum

FEATURES

- This precise measurement table use granite.
- Granite is abrasion resistant. Granite does not rust or deteriorate with time.
- Can be used with a handle attached for easy carrying (WGC-400)

Units: mm

Model No.	A	B	C	D	E	F
WGC-150	150	100	40	62.5	25	180
WGC-200	200	150	50	80	30	300
WGC-400	400	500	50	80	30	300

Order No.	Model No.	Measuring Range (mm)	Base Flatness (μ m)	Dial Indicator Mounting hole (mm)	Fine Adjust Vertical Stroke Length (mm)	Weight
150953	WGC-150	0 ~ 135	2	ϕ 8	1 and more	3.0kg
150954	WGC-200	0 ~ 250				6.9kg
NEW! 151679	WGC-400	250	4			34.5kg

STEEL COMPARATOR STAND

Made in Japan. As a precise measurement table by mounting measuring device such as dial gauge.



USE

- Provides flat measuring surface for measurement using dial gauge or other instruments
- Suitable for comparison measurement of outer diameter or thickness of round parts

MATERIAL

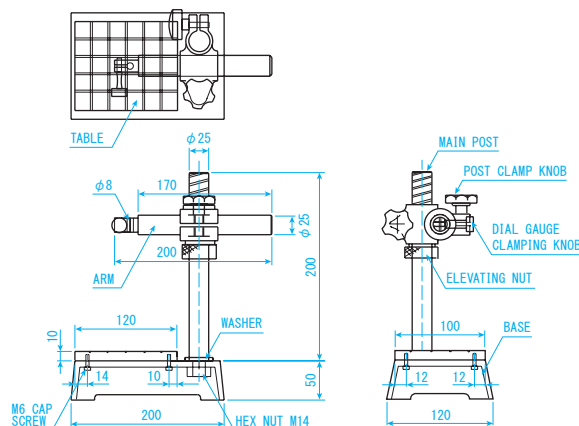
- Base: Cast iron (FC250)
- Table: Carbon tool steel

FEATURES

- Groove finished hardened table to prevent wringing between the table and objects to be measured

● DIMENSIONS

Units: mm



Measuring instruments▶
Electronic Micrometer
 P165

Measuring instruments▶
Dial Gauge
 P233~255 · P238~241

Rust prevention▶
Zerust Film for Steel
 P370

Order No.	Model No.	Measuring Range (mm)	Table size (mm)	Table Flatness (μm)	Dial Indicator Mounting hole (mm)	Weight
150968	SC-120CJ	0 ~ 145	120 × 100	5	φ 8	6kg

STEEL COMPARATOR STAND

As a precise measurement table by mounting measuring device such as dial gauge



USE

- Provides flat measuring surface for measurement using dial gauge or other instruments

MATERIAL

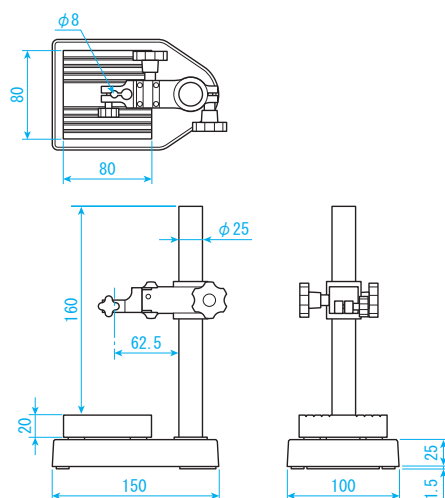
- Base: Cast iron
- Main Post: Stainless steel
- Bracket: Aluminum

FEATURES

- Compact and convenient in comparison measurement using dial gauge
- Groove finished hardened table to prevent wringing between the table and objects to be measured

● DIMENSIONS

Units: mm



Measuring instruments▶
Electronic Micrometer
 P165

Measuring instruments▶
Dial Gauge
 P233~255 · P238~241

Rust prevention▶
Zerust Film for Steel
 P370

Order No.	Model No.	Vertical Stroke Length (mm)	Table Size (mm)	Table Flatness (μm)	Stem Mounting Hole (mm)	Fine Adjust Vertical Stroke Length (mm)	Weight
150955	WSC-80	120	80 × 80	3	φ 8	1 and more	2.5kg

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK

V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

S-LINE SNAP GAUGE AND SNAP GAUGE STAND

0

For high precision inspection by using electric micrometer probe and display, and digital indicator (each sold separately)



Usage Example



ALD-040



ALD-4080



ALD-080



ALD-80150

SNAP GAUGE STAND
ASD-1

Master for standard setting ▶
Block Gauge · Pin Gauge
 **P32 ~51**

Measuring instruments ▶
Electronic Micrometer
 **P165**

Measuring instruments ▶
Digital Indicator
 **P233~235 · P238**

Rust prevention ▶
Zerust Film for Steel
 **P370**

COMPARATOR

GRANITE
PRODUCTSCAST IRON
SURFACE
PLATEPARALLEL
BLOCK

USE

- Outer measurement

MATERIAL

- Body: Steel
- Probe sensor: Carbide steel

FEATURES

- Electric micrometer probe EM-PHTS and EM-PHTL or indicators can be attached
- Compatible with sensors (for electronic micrometer and liner sensor) a mounting dimension of $\phi 8\text{mm}$.
- Optional stand ASD-1 (sold separately)

SPECIFICATIONS

- Parallelism: Under $1\mu\text{m}$
- Flatness: Under $0.2\mu\text{m}$
- Repeat accuracy: Under $0.5\mu\text{m}$
- Sensor mount: $\phi 8\text{mm}$

Order No.	Model No.	Measuring range (mm)	Probe sensor movement range (mm)	Measurement unit (mm)	Weight
151901	ALD-040	0-35	6	$\phi 2 \text{ L6}$	380g
151905	ALD-040W	0-35		$\phi 8$	380g
151902	ALD-4080	35-75		$\phi 9$	630g
151903	ALD-080	0-70		$\phi 11$	650g
151904	ALD-80150	75-140			1.78kg

■ SNAP GAUGE STAND

Order No.	Model No.	Material	Base size (mm)	Applicable Models	Weight
151900	ASD-1	Steel	80 × 120	ALD-040, ALD-040W, ALD-4080, ALD-080, ALD-80150	1.3kg

GRANITE SURFACE PLATE



Granite does not rust or deteriorate with time

GRANITE SURFACE PLATE

USE

- Measurement of flatness, parallelism and squareness
- For tooling set up, precision inspection etc.

MATERIAL

- Granite

FEATURES

- Granite is abrasion resistant and unlike cast iron, granite does not rust or deteriorate with time
- Equivalent to JIS Grade 0



G6060



Order No.	Model No.	W × D × H (mm)	Flatness (μm)	Weight
151102	G1520	150 × 200 × 50	3	5kg
151103	G2020	200 × 200 × 50		7kg
151104	G2525	250 × 250 × 70		14kg
151001	G3030	300 × 300 × 100		29kg
151002	G3045	300 × 450 × 100	4	43kg
151007	G5050	500 × 500 × 100		79kg
151003	G4560	450 × 600 × 100	5	85kg
151008	G5075	500 × 750 × 130		152kg
151004	G6060	600 × 600 × 130	7	146kg
151005	G75100	750 × 1000 × 150		350kg
151006	G10100	1000 × 1000 × 150	8	466kg
151000	G10150	1000 × 1500 × 200	9	930kg
151105	G10200	1000 × 2000 × 200	12	1240kg

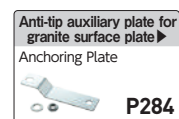
GRANITE SURFACE PLATE STEEL STAND



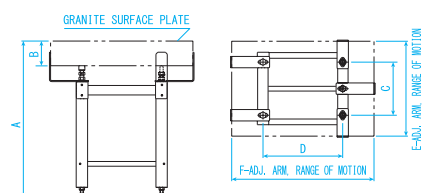
GT-5075J + G5075



GT-75100J



● DIMENSIONS



Units: mm

Model No.	A	B	C	D	E	F
GT-5050J	Approx. 800 ~ 850	100	280	280	485 ~ 515	485 ~ 515
GT-4560J	Approx. 800 ~ 850	100	252	336	435 ~ 465	585 ~ 615
GT-5075J	Approx. 800 ~ 850	130	280	420	485 ~ 515	735 ~ 765
GT-6060J	Approx. 800 ~ 850	130	336	336	585 ~ 615	585 ~ 615
GT-75100J	Approx. 800 ~ 850	150	420	560	735 ~ 765	985 ~ 1015
GT-10100J	Approx. 800 ~ 850	150	560	560	985 ~ 1015	985 ~ 1015
GT-10150J	Approx. 800 ~ 850	200	560	840	985 ~ 1015	1485 ~ 1515

< Combination examples >

USE

- This is steel stand manufactured according to the size of our GRANITE SURFACE PLATE

MATERIAL

- Hot rolled mild steel plate (Gray painted finish)

FEATURES

- Assembly type
- Leveling bolts for horizontal adjustment
- With anti-shake arm

※ Please prepare spanner (24mm, 27mm) for assembly

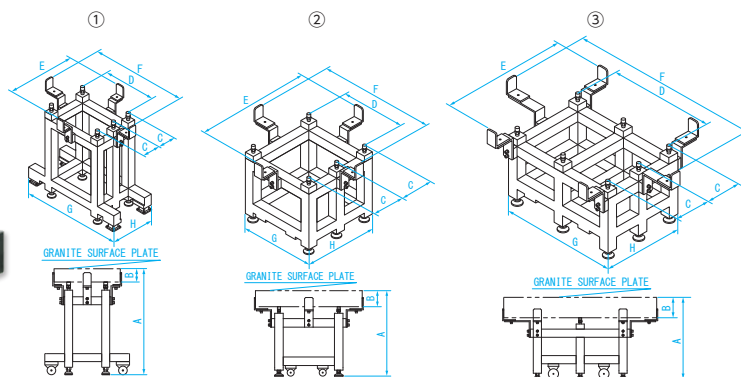
Order No.	Model No.	Applicable Surface Plate Size (mm)	Weight
151241	GT-5050J	500 × 500 × 100	17kg
151242	GT-4560J	450 × 600 × 100	17kg
151243	GT-5075J	500 × 750 × 130	18kg
151244	GT-6060J	600 × 600 × 130	18kg
151245	GT-75100J	750 × 1000 × 150	30.5kg
151246	GT-10100J	1000 × 1000 × 150	32.5kg
151247	GT-10150J	1000 × 1500 × 200	35.5kg

GRANITE SURFACE PLATE STAND WITH CASTER

With heavy duty casters for smooth moving



● DIMENSIONS



Units: mm

< Combination examples >

USE

- This is steel stand manufactured according to the size of our GRANITE SURFACE PLATE

MATERIAL

- Square steel pipe for general structure (Gray painted finish)

FEATURES

- The legs are pre-completed, so there is little shaking and robust.
- Casters for easy movement
- Leveling bolts for horizontal adjustment
- With anti-shake arm

DIMENSIONS	Model No.	A	B	C	D	G	H
①	GTW-5050J	Approx. 800 ~ 850	100	140	280	640	330
①	GTW-4560J	Approx. 800 ~ 850	100	126	336	696	302
①	GTW-6060J	Approx. 800 ~ 850	130	168	336	696	386
①	GTW-5075J	Approx. 800 ~ 850	130	140	420	780	330
②	GTW-75100J	Approx. 800 ~ 850	150	210	560	620	480
②	GTW-10100J	Approx. 800 ~ 850	150	280	560	620	620
③	GTW-10150J	Approx. 800 ~ 850	200	280	420	915	635
③	GTW-10200J	Approx. 800 ~ 850	200	280	560	1195	635

Order No.	Model No.	Surface Plate Size (mm)	Anti-shake arm range of motion (mm)		Weight
			E	F	
151253	GTW-5050J	500 × 500 × 100	Approx. 485 ~ 515	Approx. 485 ~ 515	29kg
151254	GTW-4560J	450 × 600 × 100	Approx. 590 ~ 615	Approx. 440 ~ 465	30kg
151255	GTW-6060J	600 × 600 × 130	Approx. 590 ~ 615	Approx. 590 ~ 615	33kg
151256	GTW-5075J	500 × 750 × 130	Approx. 735 ~ 765	Approx. 485 ~ 515	31kg
151257	GTW-75100J	750 × 1000 × 150	Approx. 980 ~ 1020	Approx. 730 ~ 770	43kg
151258	GTW-10100J	1000 × 1000 × 150	Approx. 980 ~ 1040	Approx. 980 ~ 1040	50kg
151259	GTW-10150J	1000 × 1500 × 200	Approx. 1480 ~ 1540	Approx. 980 ~ 1040	77kg
151260	GTW-10200J	1000 × 2000 × 200	Approx. 1980 ~ 2040	Approx. 980 ~ 1040	102kg

ANCHORING PLATE

Prevention of GRANITE SURFACE PLATE from tipping over



USE

Fall prevention aid for GRANITE SURFACE PLATE

MATERIAL

- Standard steel plate

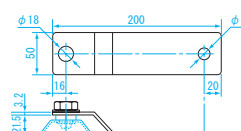
SPECIFICATIONS

- 4 pcs
- Applicable steel stand model:
GT-4560J, GT-5050J, GT-5075J, GT-6060J, GT-75100J,
GT-10100J, GT-10150J, GTW-4560J, GTW-5050J, GTW-5075J,
GTW-6060J, GTW-75100J, GTW-10100J, GTW-10150J, GTW-10200J

Order No.	Model No.
151250	GPL-13

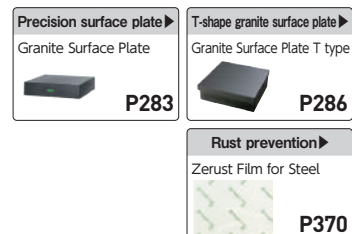


● DIMENSIONS Units: mm



LEVELLING JACK

Levelling for smaller granite surface plate



USE

- For levelling of smaller SK GRANITE SURFACE PLATE which does not have its dedicated stand

MATERIAL

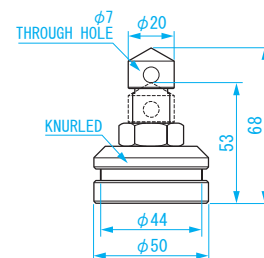
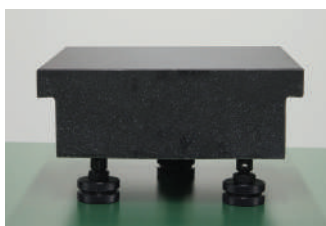
- Main body: Carbon steel for machine structural use
- Fixing nut: Carbon steel for cold heading

FEATURES

- To be used 3pcs in 1 set
- Easy for precise levelling by through-adjustment hole
- With nut for fixing the height after adjustment

DIMENSIONS

Units: mm



Order No.	Model No.	Quantity	Applicable Product	Stroke (mm)	Allowable Load (N)	Weight / Each
150648	LVJ-1	1	G1520 • G2020 • G2525	15	16,520 ※ When using 1 set	417g
150649	LVJ-3	3 (1 set)	G3030 • G3045 • G5050 G3030T • G3045T			

GRANITE SURFACE PLATE COVER

Protect the plate from scratches or dust. Simply place the cover over it at the end of the workday or when not in use to protect it.



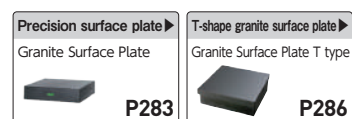
CV-G3030

USE

- Protected surface plate from scratches or dust while not in use
- Suitable for covering board materials

MATERIAL

- Flexible PVC



Order No.	Model No.	Applicable surface plate
150630	CV-G1520	G1520
150631	CV-G2020	G2020
150632	CV-G2525	G2525
150633	CV-G3030	G3030, G3030T
150634	CV-G3045	G3045, G3045T
150635	CV-G5050	G5050
150636	CV-G4560	G4560, S4560C
150637	CV-G5075	G5075
150638	CV-G6060	G6060
150639	CV-S3030	S3030C
150640	CV-S5050	S5050C

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

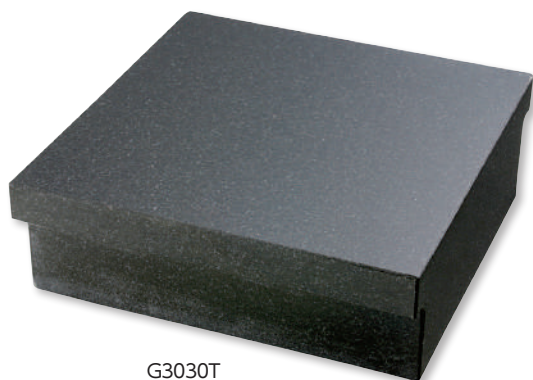
STRAIGHT EDGE

PARALLEL CLAMP

GRANITE SURFACE PLATE T TYPE



Convenient size for portable use



G3030T



T-shape for easy lifting

Plate protection▶ Granite Surface Plate Cover P285	Leveling of surface plate▶ LEVELLING JACK P285
Cleaning surface of granite surface plate▶ GRANITE PLATE CLERNER P288	Slip improvement and abrasion resistance▶ GRANITE SURFACE PLATE LIQUID WAX P288

USE

- Measurement of flatness, parallelism and squareness
- For tooling set up, precision inspection, etc.

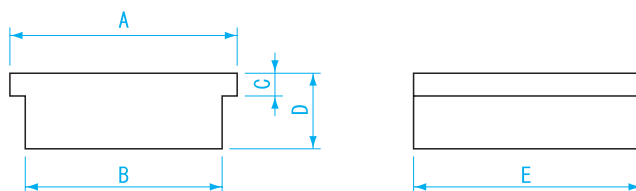
MATERIAL

- Granite

FEATURES

- T-shape for convenient to lift and move
- Granite is abrasion resistant and unlike cast iron, granite does not rust or deteriorate with time

● DIMENSIONS



Units: mm

Model No.	A	B	C	D	E
G3030T	300	260	30	100	300
G3045T	450	410	30	100	300

Order No.	Model No.	W × D × H (mm)	Flatness (μm)	Weight
150710	G3030T	300 × 300 × 100	3.5	22kg
150711	G3045T	300 × 450 × 100	4.5	40kg

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

VACUUM CLAMPING BASE

Dial gauge or test indicator can be used on the precision surface plate



Measuring instruments▶ Dial Gauge · Indicator P233 ~246	Precision surface plate▶ Granite Surface Plate P283
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USE

- For mounting dial gauge and dial indicator

MATERIAL

- Main body: Aluminum
- Suction cup: Rubber

FEATURES

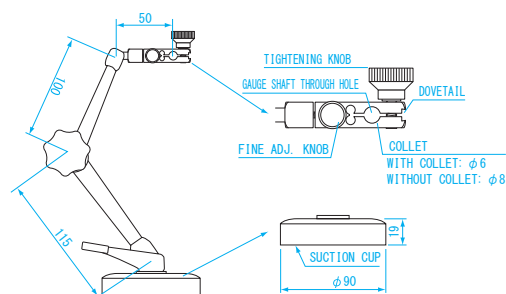
- Suction cup for fixing to non-magnetic surface such as granite surface plate

SPECIFICATIONS

- Holding force: **Approx. 200N**
- Stem holder: $\phi 6$, $\phi 8$ mm
- With dovetail groove

● DIMENSIONS

Units: mm



Order No.	Model No.	Base Dimension (mm)	Weight
011756	VB-200	$\phi 90 \times 19$	540g

GRANITE SURFACE PLATE WITH THREADED INSERTS



Screw holes in the granite surface.
Fixtures and tools can be fixed onto it.

※ Customization of screw hole location and size is also available on request.

Cleaning surface of granite surface plate▶
GRANITE PLATE CLEARNER

P288

Slip improvement and abrasion resistance▶
GRANITE SURFACE PLATE LIQUID WAX

P288

● DIMENSIONS



3030I-6



(Example of use)

USE

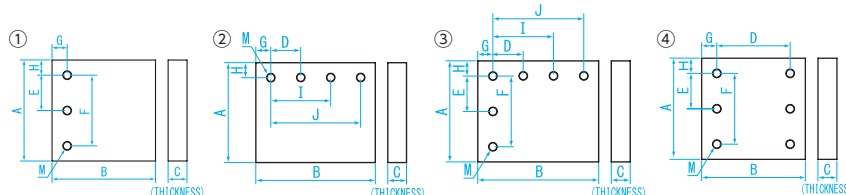
Fixed with clamps as jig plates for inspection

MATERIAL

- Granite
- Screw holes: Stainless steel

FEATURES

- Screw holes in the surface of the plate.
- Granite is abrasion resistant and unlike cast iron, granite does not rust or deteriorate with time.



Units: mm

DIMENSIONS	Model No.	A	B	C	D	E	F	G	H	I	J	M
①	2020I-3	200	200	30	—	70	140	30	30	—	—	M6×P1.0(D)12mm
④	2020I-6	200	200	30	140	70	140	30	30	—	—	M6×P1.0(D)12mm
②	2025I-4	200	250	40	60	—	—	30	30	120	180	M6×P1.0(D)12mm
③	2025L-6	200	250	40	60	70	140	30	30	120	180	M6×P1.0(D)12mm
②	2530I-4	250	300	40	80	—	—	30	30	160	240	M6×P1.0(D)12mm
③	2530L-6	250	300	40	80	95	190	30	30	160	240	M6×P1.0(D)12mm
①	3030I-3	300	300	40	—	120	240	30	30	—	—	M6×P1.0(D)12mm
④	3030I-6	300	300	40	240	120	240	30	30	—	—	M6×P1.0(D)12mm

※ Positional tolerance of screw holes: ± 1mm

※ Customization of screw hole location and size is also available on request

Order No.	Model No.	W × D × H (mm)	Flatness (μm)	Weight
151170	2020I-3	200×200×30	5	4kg
151171	2020I-6	200×200×30		4kg
151172	2025I-4	200×250×40		6kg
151173	2025L-6	200×250×40		6kg
151174	2530I-4	250×300×40		9kg
151175	2530L-6	250×300×40		9kg
151176	3030I-3	300×300×40	5	11kg
151177	3030I-6	300×300×40		11kg

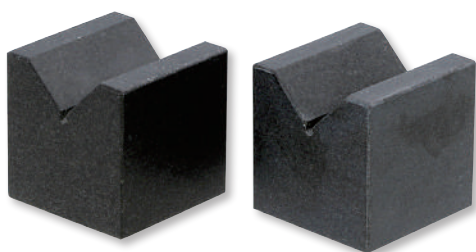
COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

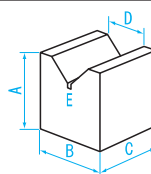
PARALLEL BLOCK

GRANITE V BLOCKS (MATCHED PAIR)



GV-75

● DIMENSIONS



Cleaning surface of granite surface plate▶
GRANITE PLATE CLEARNER

P288

Slip improvement and abrasion resistance▶
GRANITE SURFACE PLATE LIQUID WAX

P288

USE

- Tools for precise marking

MATERIAL

- Granite

FEATURES

- Granite is abrasion resistant. Unlike cast iron, granite does not rust or deteriorate with time.
- 2 pcs (matched pair)

Units: mm

Model No.	A	B	C	D	E*
GV-50	50 ± 1			40 ± 1	Approx. 4
GV-75	75 ± 1			50 ± 1	Approx. 4
GV-100	100 ± 1			63 ± 1	Approx. 6
GV-150	150 ± 1			110 ± 1	Approx. 8

※ Reference value

Order No.	Model No.	Nominal size (mm)	V groove squareness Squareness of parallel sides	Weight (per block)
150961	GV-50	50	5μm/100mm	330g
150962	GV-75	75		1.2kg
150963	GV-100	100		2.8kg
150964	GV-150	150		9.1kg

V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

GRANITE STRAIGHT EDGE

TO

For use as a straight ruler, or checking straightness on a granite surface plate. Granite does not rust or deteriorate with time.

Cleaning surface of granite surface plate▶
GRANITE PLATE CLERNER
P288

Slip improvement and abrasion resistance▶
GRANITE SURFACE PLATE LIQUID WAX
P288



● DIMENSIONS

GS-750



Units: mm

Model No.	L	H	D
GS-750	790 ± 2	100 ± 1	50 ± 1
GS-1000	1040 ± 3	125 ± 1	60 ± 1

USE

- For inspecting flatness of standards

MATERIAL

- Granite

FEATURES

- Granite is abrasion resistant.

Unlike cast iron, granite does not rust or deteriorate with time.

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Parallelism (μm)	Weight
150951	GS-750	750	3	5	12kg
150952	GS-1000	1000	4	6	25kg

GRANITE PARALLEL BLOCKS (MATCHED PAIR)

O

For use as parallel table when measuring on a surface plate. Granite does not rust or deteriorate with time.

Cleaning surface of granite surface plate▶
GRANITE PLATE CLERNER
P288

Slip improvement and abrasion resistance▶
GRANITE SURFACE PLATE LIQUID WAX
P288



GP-150

● DIMENSIONS



Units: mm

Model No.	L	W	H
GP-150	150 ± 1	20 ± 1	25 ± 1
GP-200	200 ± 1	20 ± 1	40 ± 1
GP-300	300 ± 1	35 ± 1	50 ± 1

USE

- For parallel unit

MATERIAL

- Granite

FEATURES

- Granite is abrasion resistant.

Unlike cast iron, granite does not rust or deteriorate with time.

- Precision surface on four sides
- 2 pcs (matched pair)

Order No.	Model No.	Nominal Size (mm)	Squareness/Parallelism (μm)	Weight (per block)
150965	GP-150	150	1.5	230g
150966	GP-200	200	2	490g
150967	GP-300	300	3	1.6kg

GRANITE PLATE CLERNER

Precision surface plate▶
Granite Products
P280 • P283~288

Clean dirty measurement surface



GSC-300Y



GSC-1000Y

USE

- For cleaning surface of granite surface plate

INGREDIENT

- Sodium linear alkylbenzene sulfonate and others

FEATURES

- Removes dirt and grease without damaging stone surface

SPECIFICATIONS

- pH: 6~8 (neutral)

HOW TO USE

- Estimated usage: 8 squirts per 1 m² or proper amount on wiping cloth

Order No.	Model No.	Content
150641	GSC-300Y	300mL
150642	GSC-1000Y	1000mL

GRANITE SURFACE PLATE LIQUID WAX

NEW!

For prevention of dirt adhesion and protection of granite surface plate surfaces!

Precision surface plate▶
Granite Products
P280 • P283~288



USE

- The surface of the granite surface plate can be protected.

INGREDIENT

- Carnauba wax etc.

FEATURES

- Protects the surface of the granite surface plate from dirt.
- Dirt can be easily removed even if it adheres to the surface.
- Effective in preventing wear of the granite surface plate, measuring instruments, and gauges.

SPECTIONS

- PH: liquid state
- pH: Approx. 6

HOW TO USE

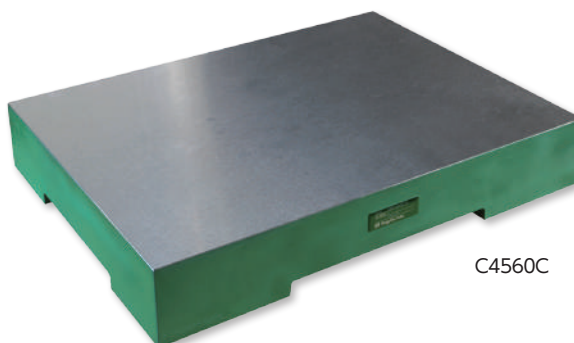
- wipe off with the proper amount by weste (cloth)

Order No.	Model No.	Content
NEW! 150644	GW-300Y2	300mL

CAST IRON SURFACE PLATE

For marking work and tooling set up.

Made with cast iron material for tasks requiring magnetic base.



C4560C

USE

- For centering and marking of workpiece, tooling set up etc.

MATERIAL

- Cast iron

FEATURES

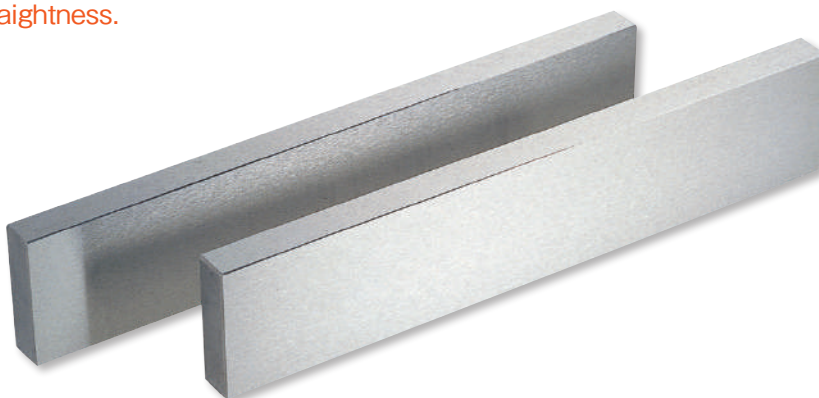
- Machine finish

Order No.	Model No.	W × D × H (mm)	Flatness (μm)	Weight
150716	C5050C	500 × 500 × 75	57	45kg
150717	C4560C	600 × 450 × 100	60	59kg

STEEL PARALLEL BLOCKS (MATCHED PAIR)

2 pcs (matched pair). For high-precision machining.

Can be maintain parallelism and straightness.



USE

- To be placed between machine table and work piece or fixture during high-precision machining to maintain parallelism and straightness
- Indispensable for inspection and layout work or for miscellaneous setup work in grinding, marking, drilling and milling, in addition to protecting machinery from blade damage

MATERIAL

- Carbon steel for machine structural use

FEATURES

- Completely hardened and high ground finish
- 2 pcs (matched pair)

SPECIFICATIONS

- Parallelism/ Straightness accuracy: 5μm
- Hardness: HV510~590

Order No.	Model No.	Dimension (mm)	Weight (per block)	Order No.	Model No.	Dimension (mm)	Weight (per block)
150651	P-1	6 × 10 × 150	70g	150661	P-11	20 × 35 × 230	1.3kg
150652	P-2	6 × 15 × 150	100g	150662	P-12	20 × 25 × 300	1.2kg
150653	P-3	6 × 20 × 150	150g	150663	P-13	20 × 30 × 300	1.4kg
150654	P-4	10 × 15 × 150	200g	150664	P-14	25 × 30 × 300	1.8kg
150655	P-5	10 × 20 × 150	235g	150665	P-15	25 × 40 × 300	2.4kg
150656	P-6	15 × 20 × 150	355g	150666	P-16	25 × 50 × 300	3kg
150657	P-7	15 × 25 × 150	440g	150667	P-17	30 × 40 × 300	2.9kg
150658	P-8	15 × 20 × 230	545g	150668	P-18	30 × 50 × 300	3.6kg
150659	P-9	15 × 25 × 230	680g	150669	P-19	40 × 50 × 300	4.8kg
150660	P-10	20 × 25 × 230	900g	150670	P-20	40 × 75 × 300	7.1kg

COMPARATOR

GRANITE
PRODUCTSCAST IRON
SURFACE
PLATEPARALLEL
BLOCK

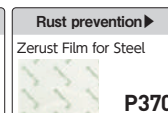
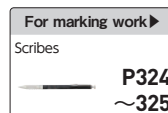
V BLOCK

SQUARE

STRAIGHT
EDGEPARALLEL
CLAMP

CAST IRON V BLOCKS (MATCHED PAIR) A TYPE • B TYPE **NEW!**

2 pcs per unit. For marking work or fixture of cylindrical parts during inspection.



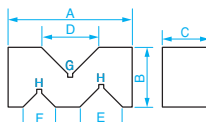
DCV-50AN



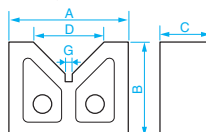
DCV-75BN

● DIMENSIONS

■ A Type



■ B Type



Units: mm

Model No.	A	B	C	D	E	F	G	H
DCV-50AN	50	24	19	24	17	13	2.5	2.5
DCV-75AN	75	35	24	37	24	16	4	4
DCV-100AN	100	52	33	50	30	20	4	4
DCV-125AN	125	69	44	63	37	26	5	5
DCV-150AN	150	80	50	75	45	30	5	5
DCV-200AN	200	110	70	100	60	40	6	6
DCV-75BN	76	60	32	45	—	—	4	—
DCV-100BN	102	67	41	55	—	—	5	—
DCV-125BN	127	79	51	60	—	—	5	—
DCV-150BN	152	89	63	80	—	—	5	—

USE

- For marking work and fixture of cylindrical parts

MATERIAL

- Cast iron

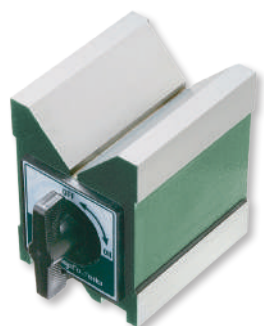
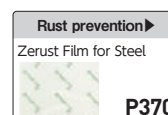
FEATURES

- Machine finish
- 2 pcs per unit
- Made in Japan

Order No.	Model No.	Type	Nominal Size (mm)	Parallelism between base and V groove/ Paired V groove height tolerance (mm)	Weight (2pcs/ set)
NEW! 150021	DCV-50AN	A type	50	0.05	300g
NEW! 150022	DCV-75AN		75		700g
NEW! 150023	DCV-100AN		100		2.2kg
NEW! 150024	DCV-125AN		125		4.8kg
NEW! 150025	DCV-150AN		150		8kg
NEW! 150026	DCV-200AN		200		19.4kg
NEW! 150027	DCV-75BN	B type	75	0.05	1.5kg
NEW! 150028	DCV-100BN		100		2.5kg
NEW! 150029	DCV-125BN		125		3.4kg
NEW! 150030	DCV-150BN		150		8.1kg

MAGNETIC V-BLOCK

Magnet can be turned ON and OFF. For using precise marking, or use as a holder of cylindrical parts during inspection.



MV-80G

USE

- Tool for precise marking
- For holding cylindrical parts

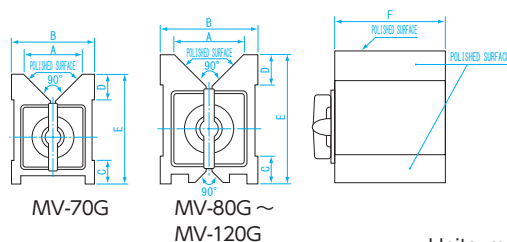
MATERIAL

- Body: Cast iron
- Magnet: Ferrite

FEATURES

- Squareness / Parallelism: 0.025mm/100mm
- The magnet can be turned ON/OFF by lever operation
- Ground finish
- ※ Due to individual differences, please be careful when using a pair of 2 pcs.

● DIMENSIONS



Units: mm

Model No.	A	B	C	D	E	F
MV-70G	38	60	10	10	73	70
MV-80G	50	70	20	22	95	80
MV-100G	50	70	20	22	95	100
MV-120G	50	70	20	22	95	120

※ Magnetic power when used with $\phi 20$ mm cylindrical workpiece

Order No.	Model No.	H × W × D (mm)	Magnetic Power ※ N	Weight
151181	MV-70G	73×60× 70	80	1.7kg
151178	MV-80G	95×70× 80	140	2.9kg
151179	MV-100G	95×70×100	180	3.7kg
151180	MV-120G	95×70×120	200	4.5kg

STEEL SQUARE (AA TYPE)

MTO products
400mm or larger

1st grade, hardened

Hardened. Convenient for measuring the squareness of any machining process and for marking work.

FIRST GRADE(Hardened)

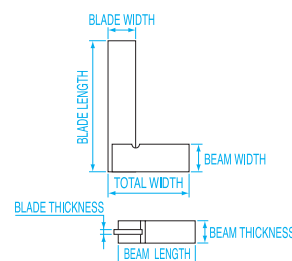


Corner



AA-F150

DIMENSIONS



USE

- Measurement of squareness

MATERIAL

- Carbon steel for machine structural use (hardened measuring face)
- Hardness: over HV450

FEATURES

- Accuracy equivalent to JIS B 7526 (*exceeds JIS)
- Hardened measuring face for abrasion resistance
- All hardened, first grade squares are provided with inspection report

$$\text{Squareness} \pm \left(10 + \frac{L}{20}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Blade Length (mm)	Blade Width (mm)	Blade Thickness (mm)	Beam Length (mm)	Beam Width (mm)	Beam Thickness (mm)	Squareness Accuracy (±mm)	Weight
002101	AA-F50	※ 50	50	16	2	37	16	10	0.013	54g
002102	AA-F75	75	75	16	2	50	16	10	0.014	72g
002103	AA-F100	100	100	20	2.5	70	18	12	0.015	150g
002105	AA-F150	150	150	24	3	100	22	18	0.018	365g
002107	AA-F200	200	200	29	3.5	130	26	22	0.02	685g
002109	AA-F300	300	300	35	4	200	32	27	0.025	1.5kg
002111	AA-F400	※ 400	400	40	5	300	40	35	0.03	2.1kg
002113	AA-F500	500	500	46	5	320	45	35	0.035	4.3kg
002114	AA-F600	※ 600	600	50	6	400	55	50	0.04	5.7kg
002115	AA-F750	750	750	58	6	550	63	65	0.048	11.3kg
002117	AA-F1000	1000	1000	65	10	600	80	80	0.06	24.5kg
002119	AA-F1500	※ 1500	1500	90	10	800	90	90	0.085	39.1kg
002121	AA-F2000	※ 2000	2000	100	10	105	105	90	0.11	72.5kg

SECOND GRADE (Non-hardened)

FEATURES

- Accuracy equivalent to JIS B 7526 (*exceeds JIS)
- Non-hardened · Ground finish

$$\text{Squareness} \pm \left(20 + \frac{L}{10}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Blade Length (mm)	Blade Width (mm)	Blade Thickness (mm)	Beam Length (mm)	Beam Width (mm)	Beam Thickness (mm)	Squareness Accuracy (±mm)	Weight
002201	AA-S50	※50	50	16	2	37	16	10	0.025	54g
002202	AA-S75	75	75	16	2	50	16	10	0.027	72g
002203	AA-S100	100	100	20	2.5	70	18	12	0.03	150g
002205	AA-S150	150	150	24	3	100	22	18	0.035	365g
002207	AA-S200	200	200	29	3.5	130	26	22	0.04	695g
002209	AA-S300	300	300	35	4	200	32	27	0.05	1.5kg
002211	AA-S400	※400	400	40	5	300	40	35	0.06	2.1kg
002213	AA-S500	500	500	46	5	320	45	35	0.07	4.3kg
002214	AA-S600	※600	600	50	6	400	55	50	0.08	5.7kg
002215	AA-S750	750	750	58	6	550	63	65	0.095	11.3kg
002217	AA-S1000	1000	1000	65	10	600	80	80	0.12	24.2kg
002219	AA-S1500	※1500	1500	90	10	800	90	90	0.17	38.2kg
002221	AA-S2000	※2000	2000	100	10	105	105	90	0.22	70.9kg

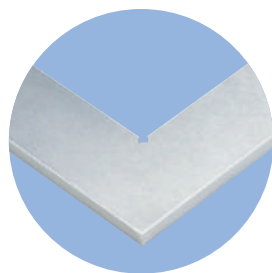
STEEL SQUARE (DD TYPE)

MTO products
400mm or larger

1st grade, hardened

Hardened. Convenient for measuring the squareness of any machining process and for marking work.

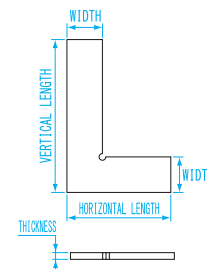
FIRST GRADE(Hardened)



Corner



DIMENSIONS



USE

- Measurement of squareness

MATERIAL

- Carbon steel for machine structural use (hardened measuring face)
- Hardness: over HV450

FEATURES

- Accuracy equivalent to JIS B 7526 (*exceeds JIS)
- Hardened measuring face for abrasion resistance
- All hardened, first grade squares are provided with inspection report

$$\text{Squareness} \pm \left(10 + \frac{L}{20}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Vertical Length (mm)	Horizontal Length (mm)	Width (mm)	Thickness (mm)	Squareness Accuracy (±mm)	Weight
002301	DD-F50	※50	50	38	16	3	0.013	27g
002302	DD-F75	75	75	50	18	3	0.014	45g
002303	DD-F100	100	100	70	20	4	0.015	94g
002305	DD-F150	150	150	100	25	5	0.018	220g
002307	DD-F200	200	200	130	30	6	0.02	360g
002309	DD-F300	300	300	200	40	8	0.025	660g
002311	DD-F400	※400	400	300	50	10	0.03	1.5kg
002313	DD-F500	500	500	400	60	12	0.035	2.0kg
002314	DD-F600	※600	600	550	70	12	0.04	3.4kg
002315	DD-F750	750	750	600	80	12	0.048	4.2kg
002317	DD-F1000	1000	1000	750	80	12	0.06	8.3kg
002319	DD-F1500	※1500	1500	1000	80	12	0.085	17.4kg

SECOND GRADE (Non-Hardened)

FEATURES

- Accuracy equivalent to JIS B 7526 (*exceeds JIS)
- Non-hardened · Ground finish

$$\text{Squareness} \pm \left(20 + \frac{L}{10}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Vertical Length (mm)	Horizontal Length (mm)	Width (mm)	Thickness (mm)	Squareness Accuracy (±mm)	Weight
002401	DD-S50	※50	50	38	16	3	0.025	27g
002402	DD-S75	75	75	50	18	3	0.027	45g
002403	DD-S100	100	100	70	20	4	0.03	94g
002405	DD-S150	150	150	100	25	5	0.035	220g
002407	DD-S200	200	200	130	30	6	0.04	360g
002409	DD-S300	300	300	200	40	8	0.05	660g
002411	DD-S400	※400	400	300	50	10	0.06	1.5kg
002413	DD-S500	500	500	400	60	12	0.07	2.0kg
002414	DD-S600	※600	600	550	70	12	0.08	3.4kg
002415	DD-S750	750	750	600	80	12	0.095	4.2kg
002417	DD-S1000	1000	1000	750	80	12	0.12	8.3kg
002419	DD-S1500	※1500	1500	1000	80	12	0.17	17.4kg

STEEL SQUARE WITH METRIC GRADUATED BLADE (C TYPE)



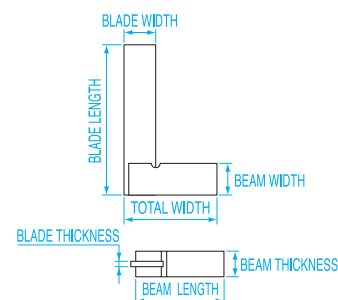
Convenient for measuring the squareness of any machining process and for marking work.

SECOND GRADE



C-150

● DIMENSIONS



USE

- Measurement of squareness

MATERIAL

- Carbon steel for machine structural use

FEATURES

- Accuracy equivalent to JIS B 7526 (※exceeds JIS)
- Graduated with 1mm division

$$\text{Squareness} \pm \left(20 + \frac{L}{10}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Blade Length (mm)	Blade Width (mm)	Blade Thickness (mm)	Base Length (mm)	Base Width (mm)	Base Thickness (mm)	Graduation Accuracy (±mm)	Squareness (±mm)	Weight
002503	C-100	100	100	20	2.5	70	19	12	0.4	0.03	150g
002505	C-150	150	150	24	3	100	22	18		0.035	365g
002507	C-200	200	200	29	3.5	130	26	22		0.04	700g
002509	C-300	300	300	35	4	200	32	27		0.05	1.5kg
002511	C-400	※400	400	40	5		40			0.06	2.1kg
002513	C-500	500	500	46		300	45	35		0.07	4.3kg
002515	C-600	※600	600	50	320	55	0.08			5.7kg	
002523	C-1000	1000	1000	65	10	550	80	65		0.12	24.2kg

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

PRECISION SQUARE WITH METRIC GRADUATED BLADE (E TYPE)



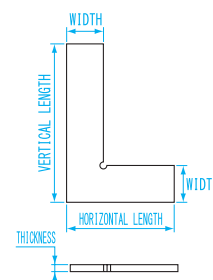
Convenient for measuring the squareness of any machining process and for marking work.

SECOND GRADE



E-150

● DIMENSIONS



USE

- Measurement of squareness

MATERIAL

- Carbon steel for machine structural use

FEATURES

- Accuracy equivalent to JIS B 7526 (※exceeds JIS)
- Graduated with 1mm division

$$\text{Squareness} \pm \left(20 + \frac{L}{10}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Vertical Length (mm)	Horizontal Length (mm)	Width (mm)	Thickness (mm)	Graduation Accuracy (±mm)	Squareness (±mm)	Weight
002603	E-100	100	100	70	20	4	0.4	0.03	94g
002605	E-150	150	150	100	25	5		0.035	220g
002607	E-200	200	200	130		6		0.04	360g
002609	E-300	300	300	200	40	8		0.05	660g
002611	E-400	※ 400	400					0.06	1.5kg
002613	E-500	500	500	300				0.07	2.0kg
002615	E-600	※ 600	600	325	50	10		0.08	3.4kg
002623	E-1000	1000	1000	550	60	12		0.12	8.3kg

HEAVY DUTY STEEL SQUARE (HDD TYPE)

Hardened. Convenient for measuring the squareness of any machining process and for marking work.

USE

- Measurement of squareness

MATERIAL

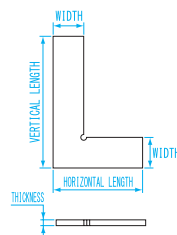
- Carbon steel for machine structural use (hardened measuring face)
- Hardness: over HV450

FEATURES

- While ordinary squares may lack stability due to their thin thickness, this product is made thicker to compensate for this
- Provided with inspection report



● DIMENSIONS



$$\text{Squareness} \pm \left(10 + \frac{L}{20}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Vertical Length (mm)	Base Length (mm)	Width (mm)	Thickness (mm)	Squareness Accuracy (±mm)	Weight
003501	HDD-50	50	50	35	15	10	0.013	82g
003502	HDD-75	75	75	50	18	12	0.014	180g
003503	HDD-100	100	100	70	20	15	0.015	350g
003505	HDD-150	150	150	100	25	20	0.018	880g
003507	HDD-200	200	200	130	30	20	0.02	1.4kg
003509	HDD-300	300	300	200	35	25	0.025	3.2kg



Rust prevention ▶
Zerust Film for Steel
P370

STEEL SQUARE WITH FLUSH MOUNTED BEAM

Convenient for measuring the squareness of any machining process and for marking work.

SECOND GRADE

USE

- Measurement of squareness

MATERIAL

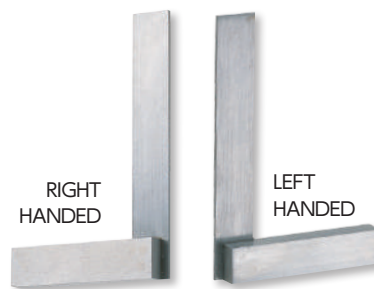
- Carbon steel for machine structural use

FEATURES

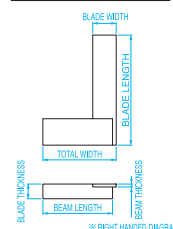
- Accuracy equivalent to JIS B 7526 (※exceeds JIS)
- Right handed: blade mounted on the right side toward the base
- Left handed: blade mounted on the left side toward the base

The product with it's accuracy equivalent to JIS Grade 1 is also available on request

(Squareness $\pm \left(10 + \frac{L}{20}\right) \mu\text{m}$) is made to order



● DIMENSIONS



$$\text{Squareness} \pm \left(20 + \frac{L}{10}\right) \mu\text{m} \quad (L: \text{Nominal Size})$$

RIGHT HANDED

Order No.	Model No.	Nominal Size (mm)	Blade Length (mm)	Blade Width (mm)	Blade Thickness (mm)	Beam Length (mm)	Beam Thickness (mm)	Squareness (±mm)	Weight
003002	TRS-R75	75	75	16	2	50	10	0.027	72g
003003	TRS-R100	100	100	20	2.5	70	12	0.03	150g
003005	TRS-R150	150	150	24	3	100	18	0.035	365g
003007	TRS-R200	200	200	29	3.5	130	22	0.04	700g
003009	TRS-R300	300	300	35	4	200	27	0.05	1.5kg
003011	TRS-R400	※ 400	400	40	5		300	0.06	2.1kg
003013	TRS-R500	500	500	46				0.07	4.3kg
003015	TRS-R600	※ 600	600	50	6	320	35	0.08	5.7kg
003018	TRS-R750	750	750	58		400		50	0.095
003023	TRS-R1000	1000	1000	65		10	550	65	0.12
003025	TRS-R1500	※ 1500	1500	90	600		80	0.17	38.2kg
003027	TRS-R2000	※ 2000	2000	100	800		90	0.22	70.9kg

LEFT HANDED

Order No.	Model No.	Nominal Size (mm)	Blade Length (mm)	Blade Width (mm)	Blade Thickness (mm)	Beam Length (mm)	Beam Thickness (mm)	Squareness (±mm)	Weight	
003102	TRS-L75	75	75	16	2	50	10	0.027	72g	
003103	TRS-L100	100	100	20	2.5	70	12	0.03	150g	
003105	TRS-L150	150	150	24	3	100	18	0.035	365g	
003107	TRS-L200	200	200	29	3.5	130	22	0.04	700g	
003109	TRS-L300	300	300	35	4	200	27	0.05	1.5kg	
003111	TRS-L400	※ 400	400	40	5		300	0.06	2.1kg	
003113	TRS-L500	500	500	46				35	0.07	4.3kg
003115	TRS-L600	※ 600	600	50		320			0.08	5.7kg
003118	TRS-L750	750	750	58	400	50	0.095		11.3kg	
003123	TRS-L1000	1000	1000	65	10	550	65	0.12	24.2kg	
003125	TRS-L1500	※ 1500	1500	90		600	80	0.17	38.2kg	
003127	TRS-L2000	※ 2000	2000	100		800	90	0.22	70.9kg	

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

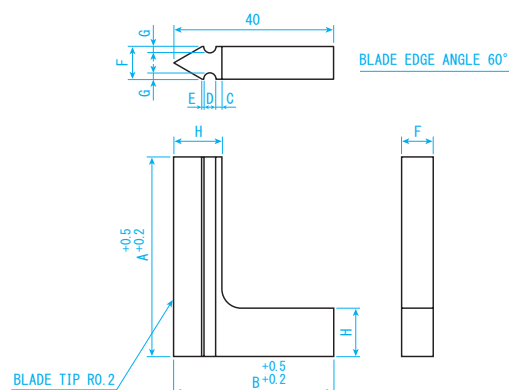
BLADE STEEL SQUARE I-TYPE

Hardened. Precise squareness check can be easily performed on the measuring face of the blade.



AAI-150K

● DIMENSIONS



USE

- For precise right angle measurement

MATERIAL

- Carbon steel for machine structural use (hardened)

FEATURES

- Knife-shaped outer blade reflects light ray on object to be measured for clearance inspection

Units: mm

Model No.	A	B	C	D	E	F	G	H
AAI-100K	100	70	2.5	6	1.5	12	2	20
AAI-150K	150	100		8		14		24

Squareness $\pm (2 + \frac{L}{100}) \mu\text{m}$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Squareness Accuracy ($\pm \mu\text{m}$)	Weight
003601	AAI-100K	100	3.0	240g
003602	AAI-150K	150	3.5	530g

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

CYLINDRICAL SQUARE

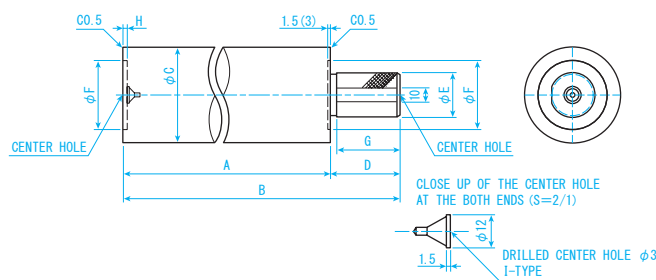
Hardened. The highest squareness accuracy in the square products.



CS-F100



● DIMENSIONS



Units: mm

Model No.	A	B	C	D	E	F	G	H
CS-F100	100	140	60	40	30	45	35	3
CS-F150	150	200	70	50	32	50	45	
CS-F200	200	260	80	60		60	55	4

Squareness and perpendicularity to the axis $\pm (2 + \frac{L}{200}) \mu\text{m}$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Squareness Accuracy ($\pm \mu\text{m}$)	Weight
003621	CS-F100	100	2.5	2.5kg
003622	CS-F150	150	2.8	4.9kg
003623	CS-F200	200	3.0	8.3kg

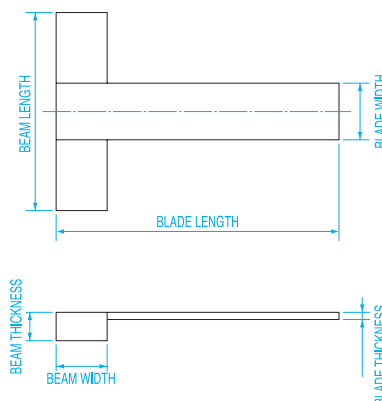
T-SQUARE



Ideal for right angle marking work from edge face.



● DIMENSIONS



USE

- For general work and marking

MATERIAL

- Carbon steel for machine structural use

FEATURES

- The blade is a square that is cut into the center side of the beam and riveted in place.

$$\text{Squareness} \pm (20 + \frac{L}{10}) \mu\text{m} \quad (L: \text{Nominal Size})$$

Order No.	Model No.	Nominal Size (mm)	Blade Length (mm)	Blade Width (mm)	Blade Thickness (mm)	Beam Length (mm)	Beam Width (mm)	Beam Thickness (mm)	Straightness (±mm)	Weight
003201	TS-100	100	100	20	2.5	70	18	10	0.03	130g
003202	TS-150	150	150	24	3	100	20	12	0.035	260g
003203	TS-200	200	200	29	3.5	140	24	14	0.04	500g
003205	TS-300	300	300	35	4	200	30	18	0.05	1.2kg
003207	TS-400	400	400	40	5	260	34	20	0.06	2.0kg
003209	TS-500	500	500	46		330	36	22	0.07	2.9kg
003211	TS-600	600	600	50		360	38	24	0.08	3.6kg
003219	TS-1000	1000	1000	65		640	45	30	0.12	10.9kg

COMPARATOR

GRANITE PRODUCTS

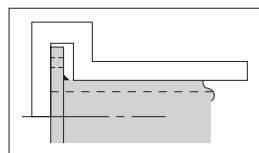
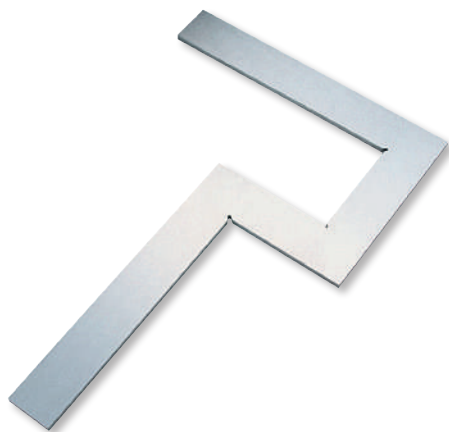
CAST IRON SURFACE PLATE

PARALLEL BLOCK

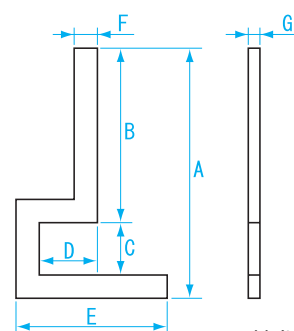
FLANGE SQUARE



Very useful for checking accuracy, squareness and inspection after flange welding.



● DIMENSIONS



Units: mm

USE

- For adjustment squareness and inspection of oil feed pipe and water pipe flange

MATERIAL

- Rolled steel for general structure

Model No.	A	B	C	D	E	F	G
FS-1	300	200	70	80	200	30	4
FS-2	400	280	90	120	300	30	4
FS-3	750	500	200	250	680	50	6

Order No.	Model No.	Nominal Size (mm)	Straightness (±mm)	Weight
003320	FS-1	200×300	0.037	520g
003330	FS-2	300×400	0.045	750g
003368	FS-3	680×750	0.071	3.7kg

I-BEAM TYPE PRECISION STRAIGHT EDGE



MTO products

A necessity for machine installation and surface plate installation. Measurement of flatness, parallelism and straightness, useful as a leveling jig

USE

- Measurement of flatness, parallelism and straightness

MATERIAL

- Carbon steel for machine structural use

FEATURES

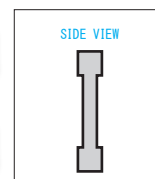
- Provided with Inspection report



Hardened



Non-Hardened



Grade A / Hardened ● Hardness: HV490 ~ 620

Straightness $(2 + \frac{L}{100}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Length (mm)	Height (mm)	Width (mm)	Weight
004113	IBM-A500H	500	7	500	50	10	1.9kg
004115	IBM-A750H	750	9.5	750	50	10	2.9kg
004117	IBM-A1000H	1000	12	1000	60	12	4.5kg
004119	IBM-A1500H	1500	17	1500	70	15	9.5kg
004121	IBM-A2000H	2000	22	2000	90	20	24kg
004122	IBM-A2500H	2500	27	2500	100	20	29kg
004123	IBM-A3000H	3000	32	3000	120	20	41kg

Grade A / Non-hardened

Straightness $(2 + \frac{L}{100}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Length (mm)	Height (mm)	Width (mm)	Weight
004013	IBM-A500	500	7	500	50	10	1.9kg
004015	IBM-A750	750	9.5	750	50	10	2.9kg
004017	IBM-A1000	1000	12	1000	60	12	4.5kg
004019	IBM-A1500	1500	17	1500	70	15	9.5kg
004021	IBM-A2000	2000	22	2000	90	20	24kg
004022	IBM-A2500	2500	27	2500	100	20	29kg
004023	IBM-A3000	3000	32	3000	120	20	41kg

RAIL TYPE PRECISION STRAIGHT EDGE



MTO products

A necessity for machine installation and surface plate installation. Measurement of flatness, parallelism and straightness, useful as a leveling jig

USE

- Measurement of flatness, parallelism and straightness

MATERIAL

- Carbon steel for machine structural use

FEATURES

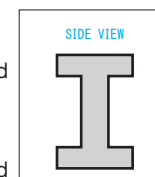
- Usable for precision machine installation, flatness inspection of surface plate etc.
- Ground finish
- Provided with Inspection report



Hardened



Non-Hardened



Grade A / Hardened ● Hardness: HV490 ~ 620

Straightness $(2 + \frac{L}{250}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Length (mm)	Height (mm)	Width (mm)	Weight
004417	R-A1000H	1000	6	1000	75	50	22kg
004419	R-A1500H	1500	8	1500	90	50	32kg
004421	R-A2000H	2000	10	2000	120	50	52kg
004422	R-A2500H	2500	12	2500	140	50	77kg
004423	R-A3000H	3000	14	3000	150	50	99kg

Grade A / Non-hardened

Straightness $(2 + \frac{L}{250}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Length (mm)	Height (mm)	Width (mm)	Weight
004317	R-A1000	1000	6	1000	75	50	22kg
004319	R-A1500	1500	8	1500	90	50	32kg
004321	R-A2000	2000	10	2000	120	50	52kg
004322	R-A2500	2500	12	2500	140	50	77kg
004323	R-A3000	3000	14	3000	150	50	99kg

Grade B / Hardened ● Hardness: HV490 ~ 620

Straightness $(4 + \frac{L}{50}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Length (mm)	Height (mm)	Width (mm)	Weight
004617	R-B1000H	1000	24	1000	75	50	22kg
004619	R-B1500H	1500	34	1500	90	50	32kg
004621	R-B2000H	2000	44	2000	120	50	52kg
004622	R-B2500H	2500	54	2500	140	50	77kg
004623	R-B3000H	3000	64	3000	150	50	99kg

Grade B / Non-hardened

Straightness $(4 + \frac{L}{50}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Straightness (μm)	Length (mm)	Height (mm)	Width (mm)	Weight
004517	R-B1000	1000	24	1000	75	50	22kg
004519	R-B1500	1500	34	1500	90	50	32kg
004521	R-B2000	2000	44	2000	120	50	52kg
004522	R-B2500	2500	54	2500	140	50	77kg
004523	R-B3000	3000	64	3000	150	50	99kg

STEEL STANDARD STRAIGHT EDGE



MTO products

Measurement of flatness, parallelism, straightness



USE

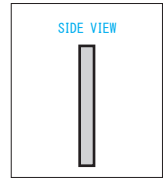
- Measurement of flatness, parallelism, straightness

MATERIAL

- Carbon steel for machine structural use

FEATURES

- Measuring face: ground finish
- Provided with inspection report



Grade A/ Hardened (Hardness: HV490-620)

Straightness $(2 + \frac{L}{100}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Weight
004913	ST-A500H	500	500	50	10	2.0kg
004915	ST-A750H	750	750	50	10	3.0kg
004917	ST-A1000H	1000	1000	60	12	5.7kg
004919	ST-A1500H	1500	1500	70	15	12kg
004921	ST-A2000H	2000	2000	80	18	23kg
004922	ST-A2500H	2500	2500	100	18	35kg
004923	ST-A3000H	3000	3000	140	25	82kg

Grade A/ Non-hardened

Straightness $(2 + \frac{L}{100}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Weight
004813	ST-A500	500	500	50	10	2.0kg
004815	ST-A750	750	750	50	10	3.0kg
004817	ST-A1000	1000	1000	60	12	5.7kg
004819	ST-A1500	1500	1500	70	15	12kg
004821	ST-A2000	2000	2000	80	18	23kg
004822	ST-A2500	2500	2500	100	18	35kg
004823	ST-A3000	3000	3000	140	25	82kg

COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK

STEEL STANDARD STRAIGHT EDGE WITH GRADUATIONS



MTO products

Measurement of flatness, parallelism, straightness or use for precision marking



USE

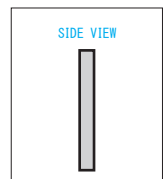
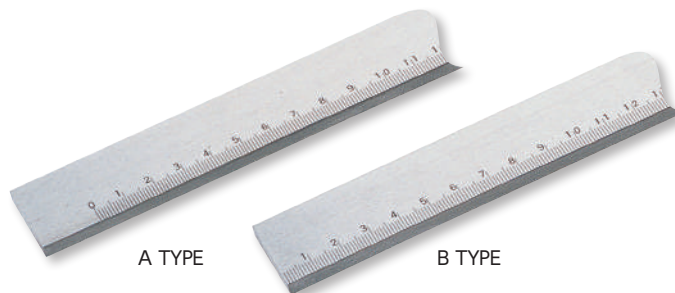
- Measurement of flatness, parallelism, straightness or use for precision marking

MATERIAL

- Carbon steel for machine structural use

FEATURES

- Measuring face: ground finish
- A type: Scale interval of 1 mm, graduated on single side (20mm blank space on both edges)
- B type: 0 point starts from left edge
- Provided with inspection report



A TYPE

A type: Straightness $(10 + \frac{L}{50}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Weight
005013	STG-A500	500	540	25	6	630g
005015	STG-A750	750	790	30	6	1.1kg
005017	STG-A1000	1000	1040	32	6	1.5kg
005019	STG-A1500	1500	1540	32	6	2.3kg
005021	STG-A2000	2000	2040	40	8	5.1kg

B TYPE

B type: Straightness $(10 + \frac{L}{25}) \mu m$ (L: Nominal Size)

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Weight
005113	STG-B500	500	500	25	6	600g
005115	STG-B750	750	750	25	6	900g
005117	STG-B1000	1000	1000	30	6	1.4kg
005119	STG-B1500	1500	1500	32	6	2.2kg
005121	STG-B2000	2000	2000	40	8	5.0kg

STRAIGHT EDGE STANDARD TYPE



MTO products

Inspection of flatness and straightness or use for precision marking
Recommended for can and sheet metal workers

USE

- Inspection of flatness and straightness or use for precision marking

MATERIAL

- Carbon steel for machine structural use

FEATURES

- Measuring face: ground finish
- Provided with inspection report (except S-A150 to S-A600)

Grade A / Hardened ● Hardness: HV490 ~ 620 ● Grade A: Straightness $(10 + \frac{L}{50}) \mu\text{m}$ ● Grade B: Straightness $(20 + \frac{L}{25}) \mu\text{m}$ ※ L: Nominal Size

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Weight
005305	S-A150H	150	150	24	3	84g
005307	S-A200H	200	200	24	3	112g
005308	S-A250H	250	250	30	4	234g
005309	S-A300H	300	300	35	4	410g
005312	S-A450H	450	450	40	5	700g
005313	S-A500H	500	500	40	5	780g
005314	S-A600H	600	600	40	5	940g
005315	S-A750H	750	750	50	6	1.8kg
005317	S-A1000H	1000	1000	50	6	2.4kg
005319	S-A1500H	1500	1500	75	6	5.3kg
005321	S-A2000H	2000	2000	85	8	10.7kg
005322	S-A2500H	2500	2500	95	8	19kg
005323	S-A3000H	3000	3000	100	10	24kg

Grade A / Non-hardened ● Grade A: Straightness $(10 + \frac{L}{50}) \mu\text{m}$ ● Grade B: Straightness $(20 + \frac{L}{25}) \mu\text{m}$ ※ L: Nominal Size

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Weight
005205	S-A150	150	150	24	3	84g
005207	S-A200	200	200	24	3	112g
005208	S-A250	250	250	30	4	234g
005209	S-A300	300	300	35	4	410g
005212	S-A450	450	450	40	5	700g
005213	S-A500	500	500	40	5	780g
005214	S-A600	600	600	40	5	940g
005215	S-A750	750	750	50	6	1.8kg
005217	S-A1000	1000	1000	50	6	2.4kg
005219	S-A1500	1500	1500	75	6	5.3kg
005221	S-A2000	2000	2000	85	8	10.7kg
005222	S-A2500	2500	2500	95	8	19kg
005223	S-A3000	3000	3000	100	10	24kg

STRAIGHT EDGE BEVELED TYPE



MTO products

Inspection of flatness and straightness or use for precision marking
Recommended for can and sheet metal workers

USE

- Inspection of flatness and straightness or use for precision marking

MATERIAL

- Carbon steel for machine structural use

FEATURES

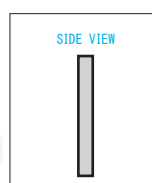
- Measuring face: ground finish
- Provided with inspection report (except B-A150 to B-A600)

Grade A / Hardened ● Hardness: HV490 ~ 620 ● Grade A: Straightness $(10 + \frac{L}{50}) \mu\text{m}$ ● Grade B: Straightness $(20 + \frac{L}{25}) \mu\text{m}$ ※ L: Nominal Size

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Taper (mm)	Blade Thickness (mm)	Weight
005505	B-A150H	150	150	24	3	5.5	0.5	78g
005507	B-A200H	200	200	24	3	5.5	0.5	105g
005508	B-A250H	250	250	30	4	8.0	0.5	215g
005509	B-A300H	300	300	35	4	8.0	0.5	370g
005512	B-A450H	450	450	40	5	10.0	0.5	640g
005513	B-A500H	500	500	40	5	10.0	0.5	710g
005514	B-A600H	600	600	40	5	12.0	0.5	860g
005515	B-A750H	750	750	50	6	12.6	0.8	1.7kg
005517	B-A1000H	1000	1000	50	6	12.6	0.8	2.2kg
005519	B-A1500H	1500	1500	75	8	14.6	1.5	5.0kg
005521	B-A2000H	2000	2000	85	8	14.6	1.5	10.1kg
005522	B-A2500H	2500	2500	95	10	19.0	1.5	18kg
005523	B-A3000H	3000	3000	100	10	19.0	2.0	23kg

Grade A / Non-hardened ● Grade A: Straightness $(10 + \frac{L}{50}) \mu\text{m}$ ● Grade B: Straightness $(20 + \frac{L}{25}) \mu\text{m}$ ※ L: Nominal Size

Order No.	Model No.	Nominal Size (mm)	Length (mm)	Width (mm)	Thickness (mm)	Taper (mm)	Blade Thickness (mm)	Weight
005405	B-A150	150	150	24	3	5.5	0.5	78g
005407	B-A200	200	200	24	3	5.5	0.5	105g
005408	B-A250	250	250	30	4	8.0	0.5	215g
005409	B-A300	300	300	35	4	8.0	0.5	370g
005412	B-A450	450	450	40	5	10.0	0.5	640g
005413	B-A500	500	500	40	5	10.0	0.5	710g
005414	B-A600	600	600	40	5	12.0	0.5	860g
005415	B-A750	750	750	50	6	12.6	0.8	1.7kg
005417	B-A1000	1000	1000	50	6	12.6	0.8	2.2kg
005419	B-A1500	1500	1500	75	8	14.6	1.5	5.0kg
005421	B-A2000	2000	2000	85	8	14.6	1.5	10.1kg
005422	B-A2500	2500	2500	95	10	19.0	1.5	18kg
005423	B-A3000	3000	3000	100	10	19.0	2.0	23kg



COMPARATOR

GRANITE PRODUCTS

CAST IRON SURFACE PLATE

PARALLEL BLOCK



V BLOCK

SQUARE

STRAIGHT EDGE

PARALLEL CLAMP

HARDENED PARALLEL CLAMP

2 pcs per unit. For clamping work piece.



PC-100

USE

- For holding or clamping work together

MATERIAL

- Carbon steel for machine structural use

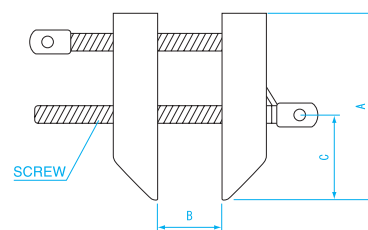
SPECIFICATIONS

- Hardness: HV390~450

FEATURES

- These parallel clamps are designed to maximize clamping leverage
- Body and screws are hardened
- 2 pcs (matched pair)

● DIMENSIONS



Order No.	Model No.	Nominal Size (mm)	A (mm)	B(Max) (mm)	C (mm)	Thread size	Weight (per unit)
006501	PC-38	38	40	20	18	M5×P0.9	67g
006502	PC-50	50	50	30	20		90g
006503	PC-65	65	65	40	25	M6×P1.0	160g
006504	PC-75	75	75	60	30		195g
006505	PC-100	100	100	60	38	M7×P1.0	325g
006506	PC-125	125	125	80	50	M8×P1.25	560g
006507	PC-150	150	150	100	58	M10×P1.5	950g
006508	PC-200	200	200	120	65	W1/2×12	2.2kg
006509	PC-250	250	250	180	100	M16×P2.0	4.35kg
006510	PC-300	300	300	230	120	M20×P2.5	7.5kg

■ SPARE PARTS - FULL THREAD

Order No.	Product Name	Nominal Size
006601	Full thread for parallel clamps	38mm
006602		50mm
006603		65mm
006604		75mm
006605		100mm
006606		125mm
006607		150mm
006608		200mm
006609		250mm
006610		300mm

■ SPARE PARTS - HALF THREAD

Order No.	Product Name	Nominal Size
006701	Half thread for parallel clamps	38mm
006702		50mm
006703		65mm
006704		75mm
006705		100mm
006706		125mm
006707		150mm
006708		200mm
006709		250mm
006710		300mm