

Precision Square plates Granite Cubic Master Block

Instruction Manual

To ensure correct use, please read this instruction manual carefully before use. After reading, keep it in a safe place where the user can always refer to it.



OBISHI KEIKI SEISAKUSHO Co., Ltd.

Safety Precautions

- ※Before use, please read this instruction manual carefully and use the product correctly.
- ※The precautions shown here are intended to ensure the safe and proper use of the product and to prevent any potential hazards to the user.
- ※The precautions are categorized into three levels — **Danger, Warning, and Caution** — to clearly indicate the severity and urgency of potential harm or damage that may occur if the product is mishandled.

For Safe and Proper Use		
This instruction manual includes various symbols and pictograms throughout the text to ensure correct use of the product and to prevent harm or damage to the user. The symbols and their meanings are as follows. ● Please read the text after fully understanding the symbols and their meanings. ● After reading, be sure to keep this manual in a place where anyone using the product can easily refer to it at any time. ● All of these are safety-related instructions, so please be sure to follow them.		
	Danger	This indicates situations where incorrect handling could result in imminent risk of death or serious injury.
	Warning	This indicates situations where incorrect handling could potentially result in death or serious injury.
	Caution	This indicates situations where incorrect handling may result in injury to persons or only property damage.
Examples of symbols		The △ symbol indicates the presence of danger, warning, or caution messages, with specific precautions described within the figure. (The left figure is used to indicate general danger, warning, or caution without specifying details.)
		The ○ symbol indicates prohibited actions, with specific precautions described within or below the figure. (The figure on the left is used for general prohibition notices without specifying particular actions.)
		The ● symbol indicates mandatory actions, with specific instructions detailed within the figure. (The figure on the left is used for general mandatory actions or instructions without specifying details.)

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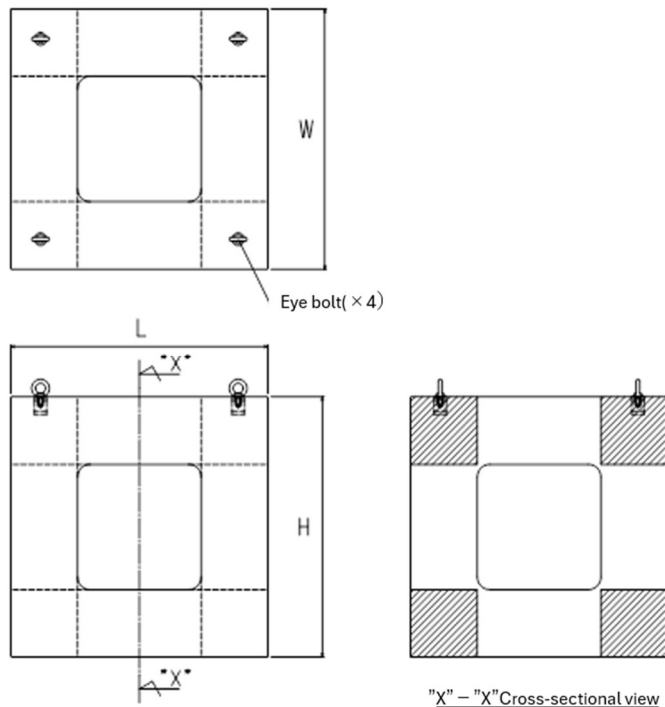
1. Product Features

- It is used as a master for measuring straightness, squareness, and parallelism of each axis on machine tools such as machining centers.
- All six faces are guaranteed as Precision Surfaces, allowing measurement across up to three axes in a single setup. This significantly reduces measurement time and improves both efficiency and reliability.
- Dimensions are available in three sizes: $500 \times 500 \times 500$ mm, $750 \times 750 \times 750$ mm, and $1000 \times 1000 \times 1000$ mm.
- The guaranteed Precision Surfaces are limited to the areas excluding 20 mm from the end faces and openings. (For the 500 mm and 750 mm sizes, 10 mm is excluded from the end faces.)

Note: Custom sizes and high-precision models can also be manufactured upon request.

Note: For nominal dimensions 500 mm and 750 mm, the openings are cylindrical.

2. External View



3. Specifications

Code No.	Nominal	Size (H x L x W mm)	Squareness, Parallelism, Flatness (μ m)	Mass (Kg)
GG101	500	520 x 520 x 520	3	250
GG102	750	770 x 770 x 770	5	1030
GG103	1000	1040 x 1040 x 1040	6	1650

4. Instructions for Use

- ① Remove the instrument from the storage case using a crane or other suitable method.
- ② Wipe the Precision Surfaces and side faces clean to remove any dirt or debris.
- ③ Slowly lower the instrument onto the workpiece and perform the measurement.

5. Precautions for Use

- ① Clean the Precision Surface and the measurement surface of the workpiece before use.
- ② Handle the instrument carefully during use and storage to avoid impact or shock.
- ③ Allow the instrument to acclimate to the ambient temperature before use.
- ④ Do not use or store the instrument in places with drastic temperature changes.
- ⑤ After use, always store the instrument in its storage case.
- ⑥ Do not concentrate usage on a single Precision Surface. Use all six faces evenly.
- ⑦ If there are any scratches or damage, repair and inspection are recommended.
- ⑧ Check the instrument for abnormalities before use in the following cases:
 - When the instrument has been dropped.
 - When an object has been dropped onto the instrument.
- ⑨ Check the accuracy regularly and use the product.
- ⑩ For heavy products, handle placement and other operations with two or more people, and take care to avoid injury.

- ⑪ Use cloth or nylon sleeves for lifting. Do not use hard materials such as metal chains or wires, as they may cause scratches or cracks on the product and pose a risk of injury to the operator.
- △ ⑫ If the product has sharp edges, handle it carefully to avoid injuring your fingers or other parts of your body.
- △ ⑬ Wear protective gloves and safety glasses as necessary to prevent injury while working.
- △ ⑭ Do not use this product if it is damaged or deteriorated, as it may cause injury or accidents.
- △ ⑮ If an injury occurs, give first aid immediately and seek medical attention if necessary.

Contact Information



JIS Certified Factory

OBISHI KEIKI SEISAKUSHO Co., Ltd.

Head Office: 1-1216-1 Nanyo, Nagaoka City, Niigata 940-1164

TEL: (0258)22-1100 FAX: (0258)22-0014

Tokyo Office: 3-5, Kanda Surugadai, Chiyoda-ku, Tokyo 101-0062

TEL: (03)3293-8881 FAX: (03)3293-8884

Nagoya Office: 2F Nichiju Bldg., 3-15 Oimachi, Naka-ku, Nagoya City, Aichi 460-0015

TEL: (052)322-4031 FAX: (052)322-5647



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Head Office and Factory

ISO9001
JQA-QMA11294

Design, development, manufacturing, and calibration services for precision measuring instruments (levels, surface plates, straight edges, reference measuring instruments, square rulers, blocks, dial gauge stands, comparators, angle measuring instruments, bench centers, squareness measuring instruments).