

Surface Plates

Surface Plates for Lapping

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.



No.107 Lapped Finish



No.107 Scraped Finish



No.108 Grooved and Lapped Finish

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 made of cast iron.

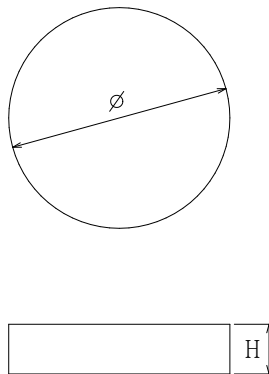
No. 107

- There are two types without grooves: Lapped Finish and Scraped Finish.
- The Scraped Finish type is convenient for hand scraping work such as fitting flanges.

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- There is also a grooved type for lapping.
- The precision surface has a Lapped Finish.

2. Appearance Diagram



【Installation Precautions】

- A location with minimal temperature changes and humidity.
- A location with little dust or vibration.
- A solid foundation that will not deform or twist under the weight of the surface plate.
- Install the instrument level on a stable stand, ensuring that there is no looseness or twisting.

3. Specifications

Size ($\phi \times H$ mm)	Flatness (μ m)	No. 108		Mass (kg)
		Grooved and Lapped Finish		
		Code No.	Groove Pitch (mm)	
200×45	2.0	BF101	20×20	5
250×55	2.0	BF102	20×20	8.5
300×65	2.5	BF103	25×25	17
500×120	4.0	BF104	30×30	71
600×130	5.0	BF105	30×30	130
750×150	6.0	BF106	35×35	173
1000×210	7.0	BF107	40×40	300
Size ($\phi \times H$ mm)	Flatness (μ m)	No. 107		Mass (kg)
		Lapped Finish	Scraped Finish	
		Code No.	Code No.	
200×45	2.0	BF201	BF301	5
250×55	2.0	BF202	BF302	8.5
300×65	2.5	BF203	BF303	17
500×120	4.0	BF204	BF304	71
600×130	5.0	BF205	BF305	130
750×150	6.0	BF206	BF306	173
1000×210	7.0	BF207	BF307	300

4. 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 Install this instrument on a solid foundation in a stable location free from twisting or tilting.
- ⑥ Do not place this instrument in locations subject to vibration or similar conditions.
- ⑦ Do not apply excessive load or impact to the surface plate.
- ⑧ Avoid using only a specific area of the surface plate. Use the entire surface evenly.
- ⑨ After use, always perform rust prevention treatment on the instrument.
- ⑩ If there are scratches or damage, have the instrument repaired and inspected. Remove minor scratches on the Precision Surface locally with an Arkansas stone or similar before use.
- ⑪ 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.
- ⑫ Check the accuracy regularly before using the product.
- ⑬ Do not leave workpieces or other items on the surface plate.
- △ ⑭ If the product has sharp edges, handle it carefully to avoid injuring your fingers or other parts of your body.
- △ ⑮ For heavy products, handle placement and other operations with two or more people, and take care to avoid injury.
- ⑯ 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.
- △ ⑰ Wear protective gloves and safety glasses as necessary to prevent injury while working.
- △ ⑱ Do not use this product if it is damaged or deteriorated, as it may cause injury or accidents.
- △ ⑲ If an injury occurs, give first aid immediately and seek medical attention if necessary.

Contact Information



JIS Certified Factory

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Head Office and Factory

ISO9001
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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).