# Angle Plate Sine Base

# **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.

A Danger		This indicates situations where incorrect handling could result in imminent			
		risk of death or serious injury.			
Marning		This indicates situations where incorrect handling could potentially result in			
		death or serious injury.			
1 Caution		This indicates situations where incorrect handling may result in injury to			
		persons or only property damage.			
Examples of symbols	<u> </u>	The $\triangle$ 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.)			
	0	The o 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.)			
	0	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.)			

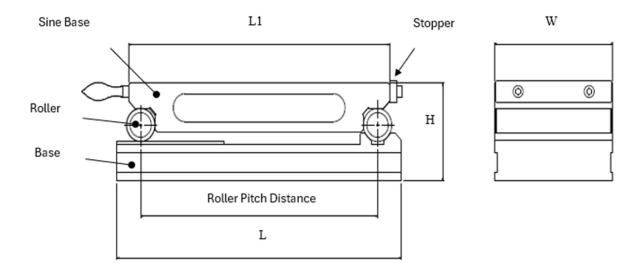
## Sine Base Instruction Manual

## 1. Product Features

- · Designed with excellent stability.
- · Can be removed from the base and used with the top surface only.
- Fully hardened product with a lapped finish.
- Use gauge blocks to set the angle.

Note: Gauge blocks are not included.

## 2. Appearance Diagram



# 3. Specifications

Code No.	Nominal	Size (L×W× H mm)	Upper Surface size (L1×W mm)	Inclination Angle	Roller Pitch Distance (mm)	Parallelism (μm)	Mass (kg)
NG101	100	130×70 ×60	115×70	0~50	100± 0.002	2	3. 5
NG102	200	240× 100×70	220×100	0~50	200± 0.003	3	10.5

#### 4. Instructions for Use

- ① Wipe the sine base, rollers, base, and the workpiece clean, and place them on the reference surface plate.
- ② Attach the gauge blocks by wringing them together to the required angle dimension.
- Wipe the workpiece clean and mount it on the upper surface of the sine base, using stoppers if necessary.
- 4 Lift the sine base and place the gauge blocks under the rollers as shown in Figure 1.Always place the gauge blocks at the center of the rollers.If they are not centered, the sine base may tilt and fall.
- ⑤ Bring the stylus of the dial gauge into contact with the workpiece and slide the stand over the surface plate to take the measurement.
- ⑥ Lift the sine base and remove the gauge blocks.
- 7 Remove the workpiece.

Note: Although this instrument can also be used as a sine bar, when used at a large inclination angle, the rollers may slip due to the weight of the workpiece, causing the instrument to topple together with the gauge blocks. Use with sufficient caution.

Note: Always implement anti-fall measures before use.

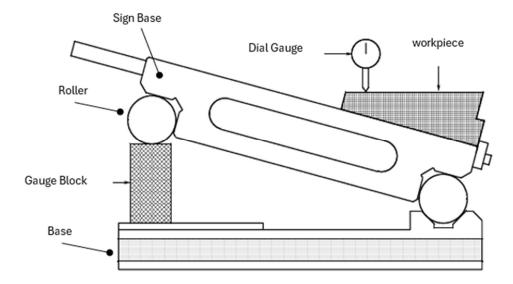


Figure 1

#### 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 apply rust prevention treatment and store the instrument in its storage case.
  - 6 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.
  - 7 Check the accuracy regularly before using the product.
- △ ⑧ If the product has sharp edges, handle it carefully to avoid injuring your fingers or other parts of your body.
- △ 9 Wear protective gloves and safety glasses as necessary to prevent injury while working.
- $\triangle$  10 Do not use this product if it is damaged or deteriorated, as it may cause injury or accidents.
- $\triangle$  ① 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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#### ISO9001 Certified (JQA-QMA11294)

Head Office and Factory

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).