

Angle Plate

Doble Type Sine Table

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.)

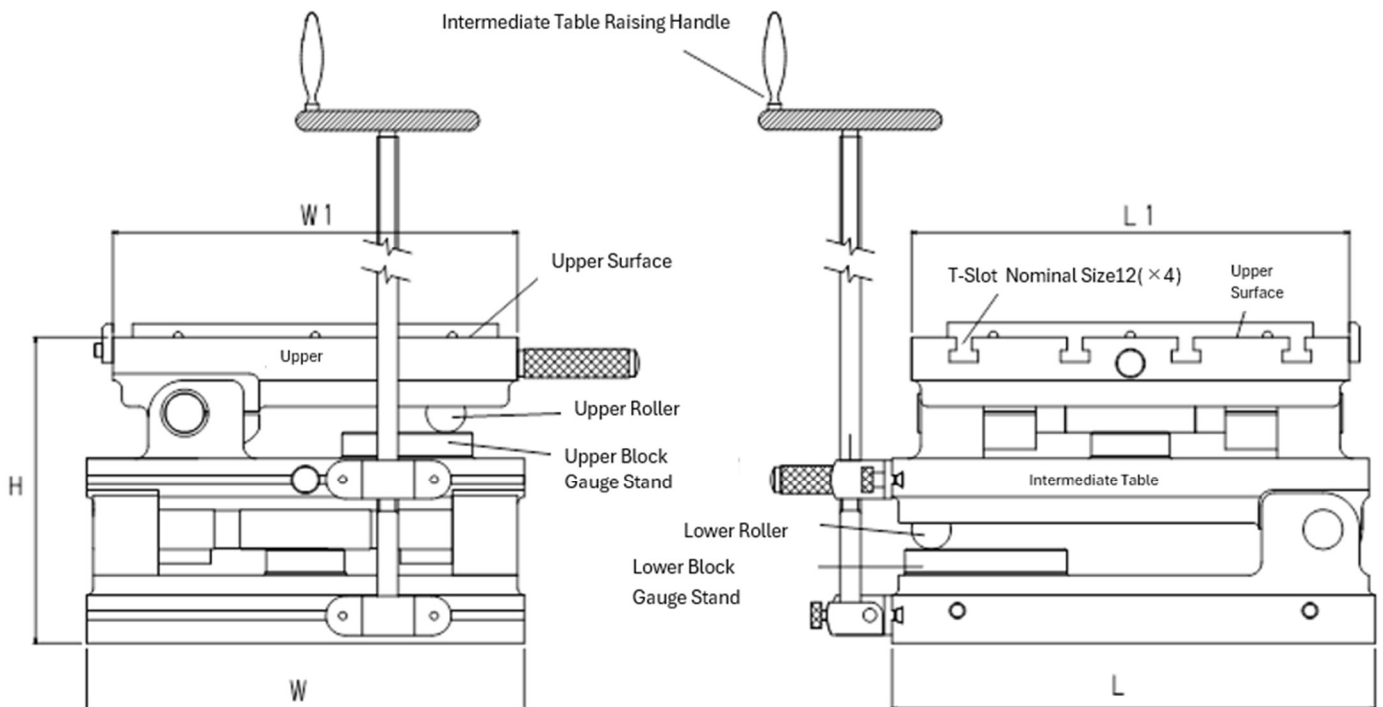
Doble Type Sine Table Instruction Manual

1. Product Features

- This is a Double Type Sine Table designed to ensure high accuracy.
- The upper table can be tilted up to 45° , and the intermediate table can also be tilted up to 45° .
- A block gauge stand is provided for high-precision measurement.
- Equipped with four T-slots (nominal size 12) for fixing the workpiece.
- The intermediate table is raised and lowered by a handle, while the upper table is lifted manually.

Note: Gauge blocks are not included.

2. Names of Parts and External View



3. Specifications

Code No.	Size (L×W×H mm)	Upper Surface size (L1×W1 mm)	Inclination Angle (°)	Roller Pitch Distance		Parallelism (μm)	Mass (kg)
				Top (mm)	Bottom (mm)		
NF101	370 × 335 × 235	335 × 310	0~45	200 ±0.01	300 ±0.01	10	103

4. Instructions for Use

- ① Wipe this instrument and the workpiece clean, and place them on the workbench or surface plate.
- ② Mount the workpiece on the top surface.
- ③ Lift the Upper Table by hand, set the gauge blocks on the upper block gauge stand, and gently lower the upper rollers onto the gauge blocks.
- ④ Turn the Intermediate Table Raising Handle (hereinafter referred to as “the handle”) to raise the angle so that the lower rollers are slightly higher than the height of the gauge blocks.
- ⑤ Set the gauge blocks on the lower block gauge stand.
- ⑥ Turn the handle to lower the table and gently place the lower rollers onto the gauge blocks.
- ⑦ Perform the measurement or machining.
- ⑧ After completing the measurement or machining, turn the handle to raise the Intermediate Table slightly and remove the lower gauge blocks.
- ⑨ Turn the handle to lower the Intermediate Table slowly until the lower rollers make contact with the lower block gauge stand.
- ⑩ Lift the Upper Table slightly by hand, remove the gauge blocks, and lower it gently.
- ⑪ Remove the workpiece.

5. Precautions for Use

- △ ① Always mount the workpiece before setting the angle with gauge blocks.
If the workpiece is mounted after the angle has been set, the gauge blocks may fall and cause injury or damage.
- ② When setting the angle with gauge blocks, always insert them from the upper side.
When removing the gauge blocks, always remove them from the lower side.
- ③ Clean the Precision Surface and the measurement surface of the workpiece before use.
- ④ Handle the instrument carefully during use and storage to avoid impact or shock.
- ⑤ Allow the instrument to acclimate to the ambient temperature before use.
- ⑥ Do not use or store the instrument in places with drastic temperature changes.
- ⑦ After use, always apply rust prevention treatment and store the instrument in its storage case.
- 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 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.
- ⑩ Check the accuracy regularly before using the product.
- ⑪ Do not apply a load greater than the specified load capacity.
- ⑫ Do not use the instrument beyond its maximum inclination range.
- △ ⑬ If the product has sharp edges, handle it carefully to avoid injuring your fingers or other parts of your body.
- △ ⑭ For heavy products, handle placement and other operations with two or more people, and take care to avoid injury.
- ⑮ 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.
- ⑯ Wear protective gloves and safety glasses as necessary to prevent injury while working.
- △ ⑰ Do not use this product if it is damaged or deteriorated, as it may cause injury or accidents.
- △ ⑱ If an injury occurs, give first aid immediately and seek medical attention if necessary.

Contact Information



JIS Certified Factory

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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).