

# Deflection Tester

## Attachment for V Support with Rollers

### 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.

#### Assembly Example (Image)



**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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>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.</p> <p>The symbols and their meanings are as follows.</p> <ul style="list-style-type: none"> <li>● Please read the text after fully understanding the symbols and their meanings.</li> <li>● After reading, be sure to keep this manual in a place where anyone using the product can easily refer to it at any time.</li> <li>● All of these are safety-related instructions, so please be sure to follow them.</li> </ul> |                                                                                     |                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 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.<br>(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.<br>(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.<br>(The figure on the left is used for general mandatory actions or instructions without specifying details.)                               |

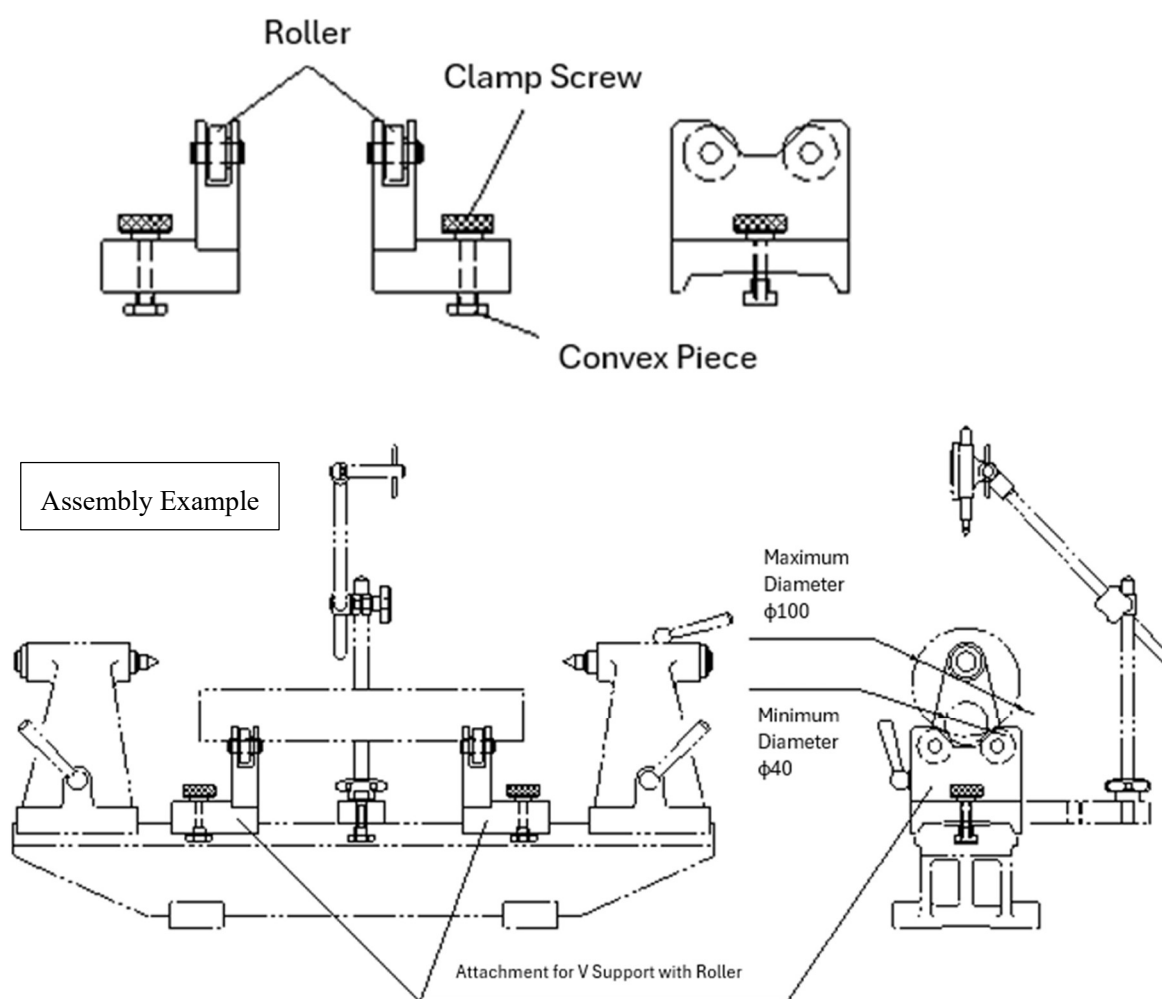
# Attachment for V Support with Rollers Instruction Manual

## 1. Product Features

- This is an attachment used for measuring based on the outer diameter.
- The rollers form a V-shape, making the contact surface of the workpiece less likely to be scratched.
- Even heavy workpieces can be rotated easily, enabling highly accurate measurement.
- Applicable workpiece size:  $\phi 40$ – $\phi 100$  mm

Note: The Deflection Tester, test bar, dial gauge stand, and dial gauge are not included. Please prepare them separately.

## 2. Names of Parts and External View



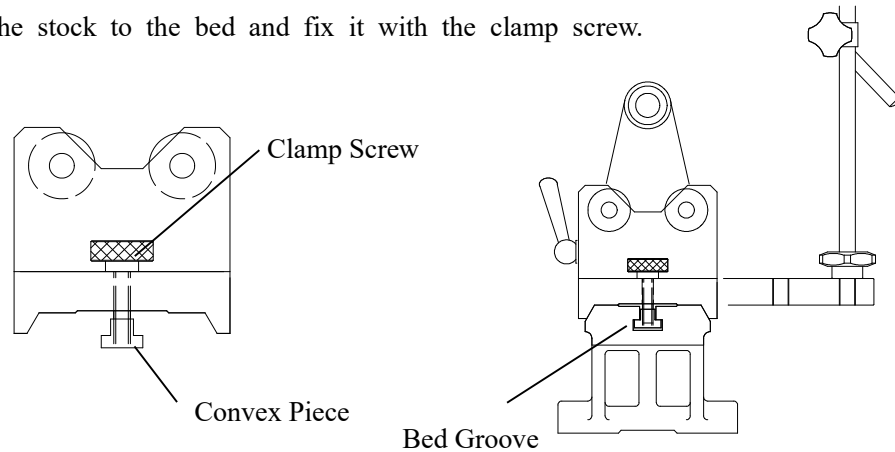
### 3. Specifications

| Code No. | Model | Applicable Bench Centers | Roller Parallelism (mm) | Roller Deflection (mm) | Mass (kg) |
|----------|-------|--------------------------|-------------------------|------------------------|-----------|
| SAR101   | SAR-1 | No. 1 ML-1               | 0.01                    | 0.003                  | 4         |
| SAR102   | SAR-2 | No. 2 ML-2               | 0.01                    | 0.003                  | 7         |

### 4. Instructions for Use

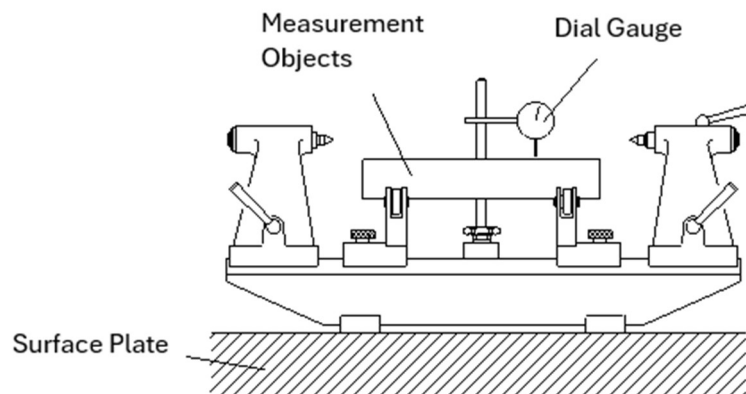
#### Attachment Mounting Method

- ① Remove the stock from the bed of the Deflection Tester.
- ② Insert the convex piece of this instrument into the groove of the bed.
- ③ Return the stock to the bed and fix it with the clamp screw.



#### Measurement Method

- ① Mount the workpiece on the instrument.
- ② Place the stand with the dial gauge on the instrument.
- ③ Lightly bring the stylus of the dial gauge into contact with the highest point of the workpiece.
- ④ Rotate the workpiece and record the needle deflection.



## 5. Precautions for Use

- ① When using this instrument, read both this instruction manual and the instruction manual for the Deflection Tester.
- ② Before use, clean the rollers and the measuring surface of the workpiece.
- ③ Do not use the rollers if they are damaged or scratched, as this may affect measurement accuracy.
- 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 Take care not to apply excessive load or impact to the rollers.
- △ ⑧ Before mounting the workpiece, always make sure that this instrument is securely fixed to the Deflection Tester.
- ⑨ After use, always apply rust prevention treatment.
- ⑩ 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.
- ⑪ Use the instrument only after regularly checking for any abnormalities.
- △ 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

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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).