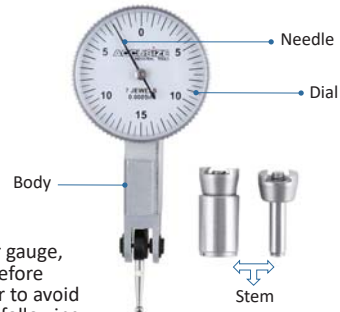




Accusize Industrial Tools Testing Indicator

Dial test indicators are precision measuring tools that can be used to check the alignment, flatness, roundness, or runout of parts or machines. They have a lever-type arm with a contact point that moves along an arc when pressed against a surface. The dial face shows the amount and direction of deflection of the contact point.

To ensure the long-term durability of this lever gauge, please read this instruction manual carefully before starting to measure. At the same time, in order to avoid errors during measurement, please follow the following precautions.



Specification

Model	Range	Resolution	Size of Dovetail Clamps
P900-S108	0.03"	0.0005"	3/8" & 5/32"

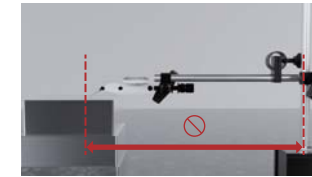
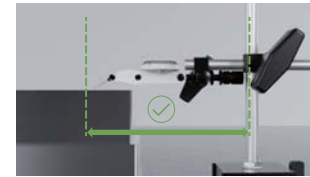
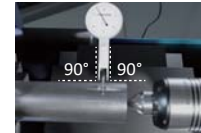
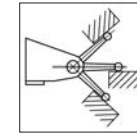
To use a test indicator, follow these steps

- After cleaning the dovetail groove, install the clamping rod at the desired position and tighten it.
- Check that the tip of the indicator is securely attached.
- Attach the indicator to a stable support, such as a magnetic base. Use a dovetail connection to join the indicator to a magnetic base or an adapter.



During Setup

- Place the base on a clean and flat surface, such as the spindle face.
- Align the needle of the indicator parallel to the surface to be measured, otherwise the measurement will be inaccurate. Touch the ball of the needle to the part and make sure no other part of the needle is in contact. Set the indicator to the middle of its range. Turn the bevel to set the indicator to zero, and adjust if necessary. Read the measurement. Repeat the measurement to verify its consistency.

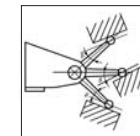


During Setup

- Keep the indicator as close as possible to the main shaft of the base.
- The farther away the indicator is from the base, the more it will be affected by vibrations, deflections and droop in the different arm connections. This can cause errors in the measurement.

Exception

- If the measuring head axis and the surface are angled, lever length drops and reading rises. Use the following table to correct the reading after measuring.



Angle and Corr. Factor

- Meas. Value = Reading Value x Correction factor $\cos\beta$
- Example:
 - Angle (β): 30° (estimated)
 - Reading Value on Dial: 0.005in
 - Correct Value: 0.0043in = 0.866in (the correction factor $\cos\beta$ at 30°) x 0.005in (reading value).

Angle(β)	Corr. Factor($\cos\beta$)
10°	0.984
20°	0.939
30°	0.866
40°	0.766
50°	0.642
60°	0.500

Maintenance and Care

- Handle with care during use and maintenance.
- Do not let dust, oil, iron filings, etc. enter the lever dial indicator, otherwise it will affect the product life and accuracy.
- If not use the indicator for a long time, wipe the lever dial indicator clean, and do anti-rust work on the measuring head, clamping rod and other accessories before putting them into the original packaging box.
- Do not disassemble or loosen the measuring head at will.
- The product accuracy should be checked periodically to ensure the accuracy of the measurement value.
- Optimal working environment temperature: 20°C (+/-1°C).



Accusize Industrial Tools
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