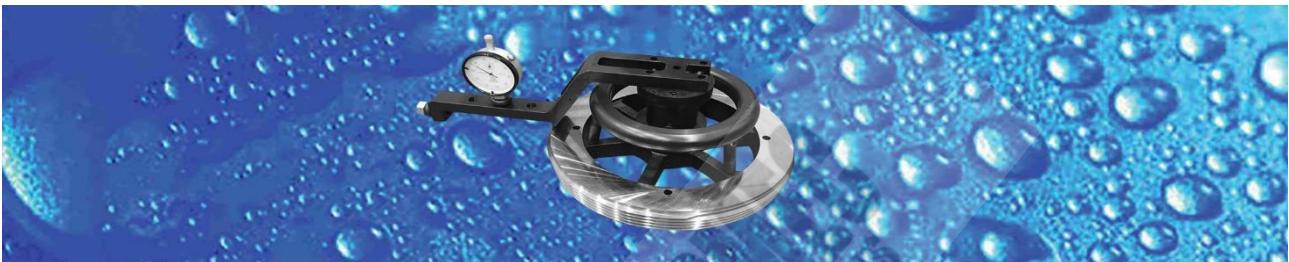


How to Measure the Angle of Taper Thread for Socket?

- a) **Measuring method** The value T_1 of a set block gauge shall be measured with a dial gauge. Then, plug gauges PA and PB are fitted to each other with the specified clamping torque as given in figure 6, the space T_1' is measured, and the difference ΔT_1 between T_1' and T_1 is calculated. However, ΔT_1 may be directly measured in the measurement of T_1' by adjusting the scale of the dial gauge to zero point in the measurement of T_1 of the set block gauge.

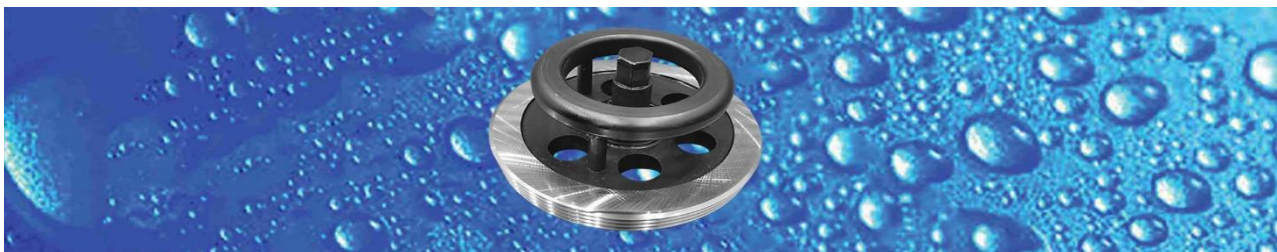


- b) **Calculation** The angle α' of taper thread to be obtained shall be calculated according to the following formula, and rounded off to the unit of minute (see figure 7).

$$\alpha' = 2 \tan^{-1} \tan \frac{\alpha}{2} \left(\frac{T_1}{T_1 - \Delta T_1} \right) \dots\dots\dots (1)$$

- where, α' : angle of taper thread to be obtained ($^{\circ}$)
 α : angle corresponding to 1/3 taper ($18^{\circ} 55' 29''$)
 T_1 : standard dimension of gauge space as given in tables 4-1 and 4-2 (mm)
 ΔT_1 : difference between T_1 and T_1' ¹⁾ (mm)

Note ¹⁾ The sign of ΔT_1 is positive when the angle α' is larger than the angle α ($18^{\circ} 55' 29''$) corresponding to 1/3 taper, and negative when smaller.



c) Illustration

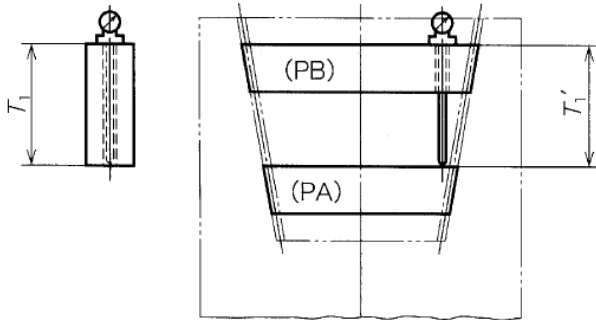


Figure 6 Combination of socket taper measuring gauges

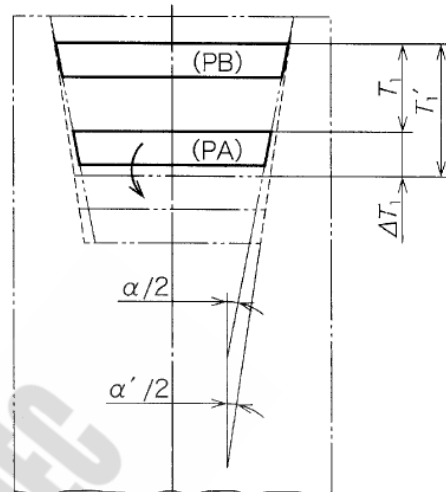
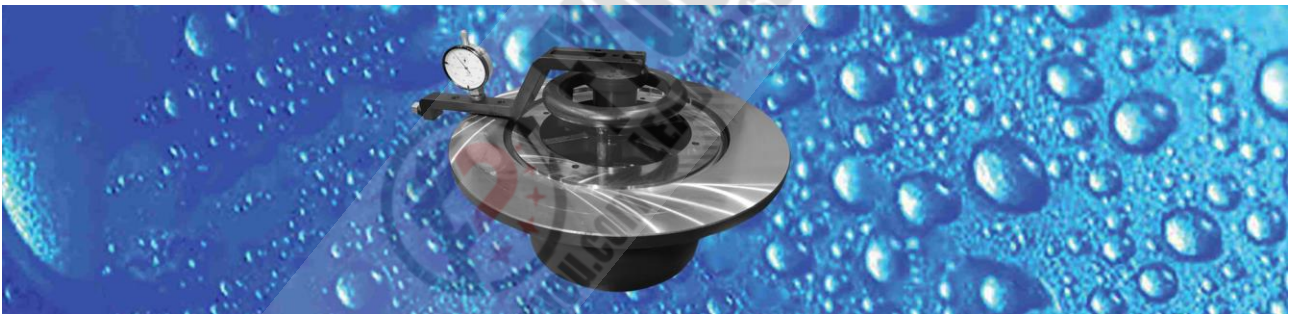


Figure 7 Taper of socket



More Details Please contact as below :

E-mail: edwin@szfy.com

WhatsApp/Wechat: +86 139 6216 8423