
Zhejiang Jinyuan Copper MFG. Co., LTD.

Angle valve standard

1 Purpose

Through the diagonal valve (commonly known as "triangle valve") of the finished product quality inspection and test, to ensure that the quality of the finished product meets the requirements of the product standard. Note: The Angle valves referred to in this standard are through valves and right Angle valves used in sanitary ware.

2 Scope

It is suitable for the production and inspection of Angle valves for sanitary ware with water as medium, medium temperature $\leq 90^{\circ}\text{C}$ and nominal pressure of 1.0MPa.

3 Technical Requirements

3.1 Appearance

3.1.1 The plating surface shall have uniform luster, and shall not have peeling, cracking, scorching, outcropping, peeling, obvious pitting, burring and other defects.

3.1.2 The polished surface shall be smooth and shall not have obvious burrs or scratches.

3.1.3 The casting surface shall not have obvious sand holes, shrinkage holes, cracks, pores and other defects.

3.1.4 The surface of the plastic parts shall not have any defects such as spillage, shrinkage mark, warpage and weld mark.

3.1.5 There shall be no dents, broken teeth and other defects on the surface of the thread.

3.2 Coating and plating

The coating passed the acetate spray test for 12 hours according to QB/T 382 to meet the requirements of grade 10 in QB/T3832.

3.3 Processing and Assembly

3.3.1 The thread of the product installation pipe shall meet the requirements of the corresponding thread gauge: pass gauge pass, and the external thread shall meet the requirements of Class B accuracy.

3.3.2 The inner cavity of the product shall not contain copper chips and other impurities.

3.3.3 The connection between the handle and the stem shall be firm and not loose.

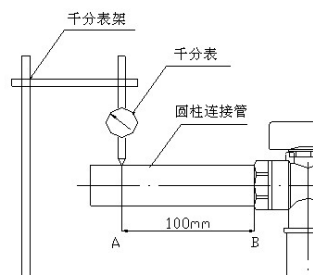
3.3.4 Rotating The product switch should be light, stable and free of blockage. Clockwise rotation is off, and counterclockwise rotation is on.

3.3.5 The direction, color, position and content of the trademark or logo are correct and firmly installed.

3.3.6 The limit deviation of the Angle between the axes of the two connecting threads of the valve body shall not exceed 2°. The detection is carried out according to the method shown in Figure 1. The values of A and B are measured respectively and calculated according to the following formula.

$$\alpha = \text{tg}^{-1} (A - B) / 100$$

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The product with ceramic valve core is installed in the state of use. The pipeline is not supplied with water. The product is closed.

3.4.2 The thread of the connecting pipe of the product shall be able to bear the torsional torque. The nominal size is DN15: the torsional torque is 61 Nm; Nominal size DN20: torque 88 Nm; Nominal size DN25: torque 129Nm. After torsion moment test, there should be no crack and damage.

3.5 Strength test

The product is installed in the state of use. The water outlet is closed, the valve core is opened, and the hydrostatic pressure of 1.5MPa±0.05MPa is introduced from the water inlet, and the pressure is kept at (60±5)S. The valve body should be free from deformation and leakage by visual inspection, and the connection parts should not leak.

3.6 Upper seal test

The product is installed in the state of use. The water outlet is closed, the valve core is opened, and the hydrostatic pressure of 1.1MPa±0.05MPa is introduced from the water inlet, and the pressure is kept at (60±5)S.

3.7 Seal test

The product is installed in the state of use. The valve core is closed, and the hydrostatic pressure of 1.1±0.05MPa is introduced from the water inlet, and the pressure is kept at (60±5)S. Or the specified air pressure, and keep the pressure (15±5)S, visual inspection of the water outlet shall not leak.

3.8 Flow Rate

Flow test method and requirements: the product is installed in the state of use, 0.3±0.02MPa is introduced from the water inlet to form a stable and continuous water flow, and the handle is

opened to the maximum flow position. The flow rate of the test product should not be less than 0.25L/S, and the measured value of Jinyuan Angle valve is 0.43L/S.

3.9 Life span

The product is installed according to the use state, the water pressure from the inlet is (0.3 ± 0.02) MPa, the handle is opened and closed for a life, the time of each opening and closing is (5 ± 1) S respectively, and the residence time after closing is (5 ± 1) S, reaching 10,000 times, meeting the requirements of 3.6 and 3.7.