UDC 621.643.414:669.14-462

JIS

JAPANESE INDUSTRIAL STANDARD

Screwed Type Steel Pipe Fittings

JIS B 2302—1990

Translated and Published

by

Japanese Standards Association

Printed in Japan

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

UDC 621.643.414:669.14-462

JAPANESE INDUSTRIAL STANDARD J I S

Screwed Type Steel Pipe Fittings B 2302-1990

1. Scope

This Japanese Industrial Standard specifies the screwed type steel pipe fittings ([1]), hereafter referred to as the "fittings", to be used for general piping for water, oil, steam, air, gas, etc.

Note ([1]) These fittings are used for carbon steel pipes for the piping specified in JIS G 3452. Fittings coated with resin are used mainly for the resin-lined steel pipe for waterworks.

Remark: The units and numerical values given in { } in this Standard are based on the traditional units system and are currently the criteria in force.

2. Classification

The classification of fittings shall be as given in the following.

(1) Four classes of barrel nipple, close nipple, long nipple and socket according to shape.

(2) Three classes of without plating, plating and coating according to surface condition.

3. Designation of Size

The designation for indicating the size of the fitting shall be made by designating the screw threads of the fittings so as to meet the designation provided in JIS B 0203, provided that this designation shall not be accompanied with symbols of R or R_p.

Furthermore, the size of long nipple is given by nominal size × length (L).

4. Quality

4.1 Threads The threads of the fittings shall be tapered external threads specified in JIS B 0203. The threads of the socket, however, shall be the parallel internal threads specified in JIS B 0203.

4.2 Deviation of Axial Line of Threads The deviation of the angle between the axial lines of threads of barrel nippel and close nipple shall be not more than 2 mm for a distance of 300 mm.

Applicable Standards and Corresponding International Standard: See page 7.

4.3 Leakage The fittings shall be free from leakage of air when subjected to the air pressure of 0.5 MPa (2) {5.1 kgf/cm^2}.

Note (2) 1 MPa = 10 bar

4.4 Pressure Resistance When added with the hydrostatic pressure of 2.5 MPa{25.5 kgf/cm^2}, the fittings shall be free from breakage or other abnormalities.

4.5 Plating When plating to the fittings, the material shall be plated by the hot-dip galvanizing process prior to thread cutting. The plated surface shall have a uniform layer of coating thereon, provided that the nipples may be plated before cutting the material. The frequency of immersion of the cupric sulfate test for inspecting the minimum film thickness of the plated fittings shall be not less than five times.

4.6 Resin Coating The resin coating for the inside of fittings shall be carried out after the screw working and the method and quality shall be in accordance with 5.6 of JIS B 2301.

4.7 Shape and Dimensions The shape and dimensions of fittings shall be in accordance with Attached Tables 1 to 3.

4.8 Appearance The inside and outside surfaces of the fittings shall be smooth and free from defects such as cracks, detrimental flaws and burrs.

Furthermore, the complete thread part of fittings shall be free from defects such as thin threads, broken thread crest, etc.

5. Materials

The material of fittings shall be the steel pipe specified in JIS G 3452 or those equal or superior to this in quality.

6. Inspection

6.1 Class of Inspection and Inspection Items The inspection of the fittings shall be divided into the type inspection and the delivery inspection, and the inspection items shall be as given in the following respectively.

Furthermore, the sampling inspection plan of type inspection and delivery inspection plan shall be in accordance with agreement between the parties concerned with delivery.

(1) Items of Type Inspection

(a) Screw thread inspection

(b) Deviation inspection of axial line of screw thread

(c) Leakage inspection

(d) Pressure resistance inspection

(e) Plating inspection