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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14976-2025

Replacing GB/T 14976-2012

Seamless stainless steel pipes for fluid transport

输送流体用不锈钢无缝钢管

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1 Scope

This document specifies the classification and code, ordering content, manufacturing process, technical requirements, specimens, test methods, inspection rules, packaging, marking and quality certificate of seamless stainless steel pipes for fluid transport.

This document applies to seamless stainless steel pipes for fluid transport (hereinafter referred to as "steel pipes").

2 Normative references

GB/T 222
 GB/T 223.9
 GB/T 223.11
 GB/T 223.18
 GB/T 223.19
 GB/T 223.23
 GB/T 223.25
 GB/T 223.26
 GB/T 223.28
 GB/T 2102
 GB/T 2975
 GB/T 4334-2020
 GB/T 5777
 GB/T 6394
 GB/T 7735
 GB/T 10561-2023

GB/T 11170

GB/T 17395

GB/T 20066

GB/T 20123

GB/T 20124

GB/T 30062

3 Terms and definitions

For the purposes of this document, the following terms and definitions defined in GB/T 30062 apply.

4.1 Steel pipes are classified and coded according to their manufacturing method as

follows.

- a) Cold-rolled (drawn) steel pipes, coded as W-C;
- b) Hot-rolled (extruded, forged, expanded) steel pipes, coded as W-H.

4.2 Steel pipes are classified and coded according to dimensional accuracy as follows.

- a) Ordinary grade, coded as PA;
- b) High grade, coded as PC.

4.3 The following symbols apply to this document.

D. Outer diameter (unless otherwise specified, includes nominal outer diameter and/or calculated outer diameter, in millimeters).

Dc. Calculated outer diameter (outer diameter calculated from nominal inner diameter and nominal wall thickness, in millimeters).

d. Nominal inner diameter (in millimeters).

S. Wall thickness (unless otherwise specified, includes nominal wall thickness and/or average wall thickness, in millimeters).

Sc. Average wall thickness (the average of the maximum and minimum wall thickness values calculated from the minimum wall thickness and its allowable deviation, in millimeters).

Smin. Minimum wall thickness (in millimeters).

Sc. Average wall thickness (the average of the maximum and minimum wall thickness

values calculated from the minimum wall thickness and its allowable deviation, in millimeters).

5 Ordering content

The contract or order for steel pipes under this document shall include the following.

- a) Reference to this document;
- b) Product name;
- c) Steel designation or unified numerical designation;
- d) Dimensions;
- e) Ordered quantity (total weight, total length, or number of pieces);
- f) Delivery condition;
- g) Special requirements.

6.1 Steel smelting methods

Steel shall be smelted using an electric arc furnace with external refining, a converter with external refining, or an electroslag remelting method. Other smelting methods with higher requirements may be used upon negotiation between the supplier and the purchaser and as specified in the contract.

6.2 Steel pipe manufacturing method

Steel pipes shall be manufactured seamlessly by cold rolling (drawing) or hot rolling (extrusion, forging, expansion). If the purchaser specifies a particular manufacturing method, this shall be stated in the contract.

6.3 Delivery state

6.3.1 Steel pipes should be delivered in a heat-treated and pickled state. Steel pipes that have been through integral grinding, boring, or heat-treated in a protective atmosphere may be delivered without pickling. The recommended heat treatment schedule for steel pipes is shown in Table 1.

6.3.2 For hot-rolled (extruded) austenitic stainless steel pipes, if the steel pipes are

directly water-cooled or rapidly cooled by other means within the heat treatment temperature range specified in Table 1 after final thermal deformation, they shall be considered to meet the heat treatment requirements.