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

GB/T 11251-2025

Replacing GB/T 11251-2020

Alloy structural steel plate, sheet and strip

合金结构钢钢板和钢带

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Table of Contents

1	Scope
2	Normative references
3	Terms and definitions
4	Ordering details
5	Manufacturing process
5.2	Delivery condition
5.2.1	Single-rolled steel plate/sheet
6	Technical requirements
6.1	Designation and chemical composition
6.2	Mechanical properties
6.2.1	Single-rolled steel plate/sheet
7	Test methods...
8	Inspection rules...

1 Scope

GB/T 11251-2025 is the Chinese national standard on alloy structural steel plate, sheet and strip, in the field of metallurgy. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 October 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2026. Classification: ICS 77.140.50, CCS H 46. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the ordering details, manufacturing process, technical requirements, test methods, inspection rules, packaging, marking, and quality certificates for alloy structural steel plate/sheet and strip. This document applies to single-sheet hot-rolled steel plate/sheet with a nominal thickness of

3.0 mm ~ 250 mm (hereinafter referred to as single-rolled steel plate/sheet); hot-continuously-rolled steel plate/sheet and strip with a nominal thickness not greater than 25.4 mm, including hot-continuously-rolled wide steel strip, sheared steel plate/sheet, and

slit steel strip with a nominal width not less than 600 mm, and hot- continuously-rolled narrow steel strip and sheared steel plate/sheet with a nominal width less than 600 mm (hereinafter referred to as steel plate/sheet and strip). NOTE. Single-rolled steel plate/sheet, steel plate/sheet and strip are collectively referred to as steel products in this document.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 222 Steels and alloys - Permissible deviations of product analyzed chemical composition

GB/T 223 (all parts) Methods for chemical analysis of iron, steel and alloy

GB/T 224 Determination of the depth of decarburization of steels

GB/T 228.1 Metallic materials - Tensile testing - Part

3 Terms and definitions

For the purpose of this document, the terms and definitions defined in GB/T 709-2019 apply.

4 Ordering details

A contract or order placed according to this document shall include the following.

- a) serial number of this document;
- b) product name;
- d) dimensions, shape, and tolerance or thickness accuracy;
- e) delivery weight (or quantity);
- f) delivery condition;
- g) edge condition;
- h) surface treatment and surface quality grade;
- i) processing purpose (if for stamping, this shall be specified);
- j) special requirements.

5 Manufacturing process

5.1 Smelting method Steel is smelted in a converter or electric furnace and refined outside

the furnace. Unless otherwise specified by the purchaser, the smelting method shall be selected by the supplier.

5.2.1 Single-rolled steel plate/sheet

5.2.1.1 Single-rolled steel plate/sheet is delivered in high-temperature tempered condition. Agreed upon between the supplier and the purchaser, and specified in the contract, delivery may also be in annealed, normalized, normalized and tempered, or quenched and tempered conditions.

5.2.1.2 If single-rolled steel plate/sheet can guarantee the mechanical properties specified in 6.2.1.3, normalized rolling may be used instead of normalizing treatment.

5.2.2 Steel plate/sheet and strip Steel plate/sheet and strip are delivered in hot-rolled condition. Agreed upon between the supplier and the purchaser, delivery may also be in heat-treated condition, and the heat treatment method shall be specified in the contract.

6.1 Designation and chemical composition

6.1.1 The designation and chemical composition of steel shall comply with the provisions of GB/T 3077. Agreed upon between the supplier and the purchaser, and specified in the contract, steel products with a sulfur content of 0.015 % ~ 0.035 % or not greater than 0.005 %, or steel products with a phosphorus content not greater than 0.015 %, may be supplied.

6.1.2 The tolerance of chemical composition of finished products of steel products shall comply with the provisions of GB/T 222.

6.2.1 Single-rolled steel plate/sheet

6.2.1.1 The surface hardness of single-rolled steel plate/sheet delivered in high-temperature tempered condition shall comply with the provisions of GB/T 3077.

6.2.1.2 The mechanical properties of single-rolled steel plate/sheet with a nominal thickness not greater than 100 mm and delivered in annealed condition shall comply with the provisions of Table

1. The mechanical properties of single-rolled steel plate/sheet with a nominal thickness greater than 100 mm and other designations not specified in Table 1 shall be determined through negotiation between the supplier and the purchaser.