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

GB/T 11264-2025

Replacing GB/T 11264-2012

Hot-rolled light rails

热轧轻轨

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document supersedes GB/T 11264-2012 "Hot-rolled light rail", GB/T 11265-1989 "Joint plates for light rail", and GB/T 11266-1989 "Light Rail Pads". This document is based on GB/T 11264-2012, and integrates GB/T 11265-1989 and GB/T 11266-1989. Compared with GB/T 11264-2012, the main technical changes, apart from structural adjustments and editorial modifications, are as follows:

---The steel smelting method has been changed (see 5.1, 5.2 in the 2012 edition);

---The grades of hot-rolled light rail, light rail pads, and light rail joint plates have been changed (see 6.1, 5.1 in the 2012 edition);

---The different requirements for chemical composition and mechanical properties of different types of hot-rolled light rails have been removed (Tables 9 and 10 in the 2012

edition);

---The permissible length deviation of hot-rolled light rails (see Table 7, Table 6 in the 2012 edition) and the requirements for end curvature (see 6.4.1.4.1) have been revised. Table 7 (2012 edition)

---Added dimensional inspection requirements for the "flatness of the rail bearing surface" of light rail pads (see Table 9);

---The chemical composition test methods for hot-rolled light rails, light rail pads, and light rail joint plates have been revised (see 7.4, 2012 edition). Table 11);

---Added batching rules for light rail base plates and light rail joint clamps (see 8.2). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Iron and Steel Association. This document is under the jurisdiction of the National Steel Standardization Technical Committee (SAC/TC183). This document was drafted by: Hebei Iron & Steel Co., Ltd. Tangshan Branch, Hebei Yongyang Special Steel Group Co., Ltd., and Anshan Zizhu Light Special Steel. Limited Liability Company, Metallurgical Industry Information and Standards Research Institute. The main drafters of this document are: Gao Yan, Wu Yunzhe, Xie Jianjun, Wu Jiajun, Xu Haochi, Ping Yu, Han Xiaoli, Hong Ze, Liu Baoshi, and Wang Yujie. The document replaced by this document has been released in the following versions.

---GB/T 11264, first published in 1989, first revised in 2012;

---GB/T 11265, first published in 1989;

---GB/T 11266, first published in 1989. Hot-rolled light rail

1 Scope

GB/T 11264-2025 is the Chinese national standard on hot-rolled light rails, 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 29 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 March 2026. Classification: ICS 77.140.70, CCS H44. 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.

2 Normative references

The contents of the following documents, through normative references within the text,

constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 223.5 Determination of Acid-Soluble Silicon and Total Silicon Content in Iron and Steel - Reduced Molybdate Spectrophotometric Method

GB/T 223.12 Chemical Analysis Methods for Iron and Steel Alloys - Sodium Carbonate Separation-Diphenylcarbazide Spectrophotometric Determination of Chromium

GB/T 223.53 Chemical Analysis Methods for Iron and Steel Alloys-Determination of Copper Content by Flame Atomic Absorption Spectrophotometry

GB/T 223.54 Determination of Nickel Content in Iron and Steel and Alloys by Flame Atomic Absorption Spectrometry

GB/T 223.59 Determination of phosphorus content in iron and steel and their alloys - Bismuth-phosphomolybdenum blue spectrophotometric method and antimony-phosphomolybdenum blue spectrophotometric method

GB/T 223.63 Determination of Manganese Content in Iron and Steel and Alloys - Sodium (Potassium) Periodate Spectrophotometric Method

GB/T 223.68 Chemical Analysis Methods for Iron and Steel Alloys - Determination of Sulfur Content by Potassium Iodate Titration after Combustion in Tubular Furnace

GB/T 223.69 Determination of carbon content in iron and steel and their alloys - Volumetric method of gas volumetric analysis after combustion in a tubular furnace

GB/T 228.1 Metallic materials - Tensile testing - Part

GB/T 700-2006 Carbon Structural Steel

GB/T 2101 General Provisions for Acceptance, Packaging, Marking and Quality Certificate of Section Steel

GB/T 2975 Sampling Location and Specimen Preparation for Mechanical Property Testing of Steel and Steel Products

GB/T 4336 Determination of Multi-Element Content in Carbon Steel and Medium-Low Alloy Steels by Spark Discharge Atomic Emission Spectrometry (Conventional Method)

GB/T 20066 Sampling and Sample Preparation Methods for the Determination of Chemical Composition of Steel and Iron YB/T 081 Metallurgical Technical Standards. Numerical Rounding and Judgment of Test Values

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4. Order details Contracts for orders placed in accordance with this document shall include at least the following technical contents.

- a) This document number;
- b) Product Name (Light Rail, Base Plate, and Joint Clamp);
- d) Model number;
- e) Delivery length;
- g) Other requirements.

5 Manufacturing process

5.1 Smelting Method Steel should be smelted in an oxygen converter or electric furnace, and steel for light rail should be refined outside the furnace.

5.2 Delivery Status Light rails, base plates, and joint clamps are all delivered in hot-rolled condition.

6.1.1 Light Rail

6.1.1.1 The grade and chemical composition (smelting analysis) of the light rail shall conform to the provisions of Table 1. Table

Brand	Chemical composition (mass fraction)/%	C	Si	Mn	PS	50Q	0.40~0.60	0.15~0.35
>=0.40 <=0.040 <=0.040	55Q	0.50~0.60	0.15~0.35	0.60~0.90	<=0.040	<=0.040		

6.1.1.2 When Cr, Ni, and Cu are residual elements, $Cu \leq 0.25\%$, $Cr \leq 0.25\%$, and $Ni \leq 0.30\%$. This is provided the supplier can guarantee compliance with the specifications. In this way, the chemical analysis of these elements can be eliminated.

6.1.2 Pad The chemical composition (smelting analysis) of the pad conforms to the requirements for Q235B and Q275B in GB/T 700-2006.

6.1.3 Joint clamp The chemical composition (smelting analysis) of the joint clamp plate conforms to the requirements of Q235B and Q275B in GB/T 700-2006.

6.1.4 Other The above three products, upon negotiation between the supplier and the buyer and as specified in the contract, may be supplied with other grades of steel.

6.2 Mechanical and Technological Properties

6.2.1 Light Rail The mechanical properties of light rail should meet the requirements of Table 2. Table