

Translated English of Chinese Standard: YB/T4623-2017
www.ChineseStandard.net → Buy True-PDF → Auto-delivery.
Sales@ChineseStandard.net

YB

FERROUS METALLURGY INDUSTRY STANDARD
OF THE PEOPLE'S REPUBLIC OF CHINA

ICS 77.140.70

H 44

YB/T 4623-2017

Cold-Formed Section Steel for Automobile Frame

汽车纵梁用冷弯型钢

Issued on: July 07, 2017

Implemented on: January 01, 2018

Issued by: Ministry of Industry and Information Technology of the People's Republic of China.

Table of Contents

Foreword.....	3
1 Scope.....	4
2 Normative References.....	4
3 Terms and Definitions.....	5
4 Ordering Contents.....	5
5 Dimension, Shape, Weight and Allowable Deviation.....	5
6 Technical Requirements.....	9
7 Test Methods.....	10
8 Inspection Rules.....	10
9 Packaging, Marking and Quality Certificate	11

Cold-Formed Section Steel for Automobile Frame

1 Scope

This Standard specifies the terms and definitions, order content, dimensions, shape, weight and allowable deviation, technical requirements, test methods, inspection rules, packaging, marks and quality certificates of cold-formed section steel for automobile frame.

This Standard is applicable to the cold-formed section steel for automobile frame (hereinafter referred to as section steel) produced by hot-rolled steel plates or steel strips with a thickness of no less than 4mm through a continuous roll-bending cold-bending forming unit for passenger and freight vehicles.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable to this document.

GB/T 228.1 Metallic Materials - Tensile Testing - Part 1: Method of Test at Room Temperature

GB/T 229 Metallic Materials - Charpy Pendulum Impact Test Method

GB/T 232 Metallic Materials - Bend Test

GB/T 709 Dimensions, Shape, Weight and Tolerances for Hot Rolled Steel Sheets and Strips

GB/T 2101 General Requirements of Acceptance, Packaging, Marking, and Certification for Section Steel

GB/T 2975 Steel and Steel Products - Location and Preparation of Test Pieces for Mechanical Testing

GB/T 3273 Hot-Rolled Steel Plates and Sheets for Automobile Frames

GB/T 20066 Steel and Iron-Sampling and Preparation of Samples for the Determination of Chemical Composition

YB/T 081 Rule for Rounding Off of Numerical Values and Judgement of Testing Values

for Technical Standards of Metallurgy

3 Terms and Definitions

3.1 Curve

Curve refers to the maximum up and down and lateral bending of a product along its length.

3.2 Twist

One surface of the section steel is placed on the same horizontal plane, and one end is pressed against the horizontal plane, and the diagonal height of the two opposite surfaces is measured along the horizontal plane.

4 Ordering Contents

The contract ordered according to this Standard shall contain the following technical contents:

- a) product name and specifications;
- b) standard number;
- c) material designation and furnace batch number;
- d) delivery quantity and weight;
- e) product length;
- f) Other special requirements put forward by the purchaser, such as: special specification requirements, special surface quality requirements, etc.

5 Dimension, Shape, Weight and Allowable Deviation

5.1 The cross-section of section steel is shown in Figure 1.

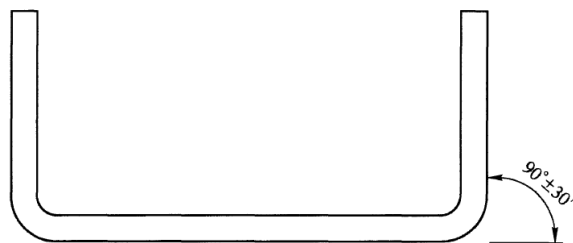


Figure 5 – Angle Deviation

6 Technical Requirements

6.1 Designation and chemical composition

The designation and chemical composition of section steel shall comply with the provisions of GB/T 3273. After negotiation between the supplier and the purchaser, and indicated in the contract, other designations can be used.

6.2 Delivery state

Section steel shall be delivered in the cold-formed state. After negotiation between the supplier and the purchaser, and indicated in the contract, other states can be used for delivery.

6.3 Mechanical properties and process properties

The mechanical properties and process properties of the section steel shall comply with the provisions of GB/T 3273.

6.4 Surface quality

6.4.1 There shall be no cracks, bubbles, inclusions, scars, folds, delamination and obvious scratches on the surface of the section steel; the section steel is allowed to be cleaned, and the cleaning depth shall not exceed half of the allowable thickness tolerance.

6.4.2 Appropriate anti-rust treatment shall be applied to the section steel; and the surface of the section steel shall not be rusted in the delivery state.

6.4.3 The inner and outer arcs of the section steel shall be smooth, and there should be no burrs on the wing.

6.4.4 Saw burrs are allowed at both ends of the section steel; and the burr height is no more than 0.5mm.

6.4.5 The section steel with the special requirements for surface quality shall be determined through negotiation between the supplier and the purchaser.

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----