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Replacing GB/T 912-1989

Hot-rolled Sheets and Strips of Carbon Structural Steels and High Strength Low Alloy Structural Steels

碳素结构钢和低合金结构钢热轧薄钢板和钢带

(ISO 4995:2001 (E), ISO 4996:1999 (E) NEQ)

Issued on: October 24, 2008 **Implemented on: October 1, 2009**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ);

Standardization Administration (SAC) of the People's Republic of China.

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Foreword

This standard is the compulsory-provisions standard; 5.1.2, 5.4.1, 5.4.3 and 8.2 are the compulsory clauses.

This standard is not equivalent to "Hot-rolled Steel Sheet of Structural Quality" (ISO 4995: 2001 (E)) and "Hot-rolled Steel Sheet of High Yield Stress Structural Quality" (ISO 4996:1999 (E)).

This standard replaces "Hot-rolled Sheets and Strips of Carbon Structural Steels and High Strength Low Alloy Structural Steels" (GB/T 912-1989). Compared with GB/T 912-1989, the main changes of this standard are as follows:

— Change from voluntary standard to standard with compulsory-provisions;

— Delete the content related to ply-rolling steel plate in the former standard;

— Adjust the thickness range of products;

— Add the "ordering information";

— Change the delivery state;

— Modify the requirements of surface quality.

This standard was proposed by China Iron and Steel Association.

This standard shall be under the jurisdiction of the National Technical Committee on Iron and Steel of Standardization Administration of China.

Chief drafting organizations of this standard: Guangdong Entry-Exit Inspection and Quarantine Bureau, Metallurgical Information and Standardization Institute and Benxi Iron & Steel (group) Co. Ltd.

Chief drafting staffs of this standard: Li Chengming, Peng Xiaogang, Wang Xaiohu, Zhang Zhenkun, Zhou Qi, Zhang Xianfeng, Liu Jianbin, Cao Biao and Pei Yu.

The previous edition replaced by this standard is as follows:

— GB/T 912-1989.

Hot-rolled Plates and Strips of Carbon Structural Steels and High Strength Low Alloy Structural Steels

1 Scope

This standard specifies the ordering information, size, appearance, weight and permissible deviation, technical requirements, test methods, inspection rules, packing, marking and quality certificate of hot-rolled plates and strips of carbon structural steels and high strength low alloy structural steels.

This standard is applicable to hot-rolled plates and strips of carbon structural steels and high strength low alloy structural steels with thickness less than 3 mm.

2 Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. For dated reference, subsequent amendments to, or revisions of, any of these publications do not apply. However, all parties coming to an agreement according to this standard are encouraged to study whether the latest edition of these documents is applicable. For undated references, the latest edition of the normative document is applicable to these specifications.

GB/T 222 Permissible Tolerances for Chemical Composition of Steel Products

GB/T 223.3 Methods for Chemical Analysis of Iron, Steel and Alloy - The Diantipyrylmethane Phosphomolybdate Gravimetric Method for the Determination of Phosphorus Content

GB/T 223.5 Steel and Iron - Determination of Acid-soluble Silicon and Total Silicon Content - Reduced Molybdosilicate Spectrophotometric Method

GB/T 223.10 Methods for Chemical Analysis of Iron, Steel and Alloy - The Cupferron Separation-chrome Azurol S Photometric Method for the Determination of Aluminium Content

GB/T 223.11 Methods for Chemical Analysis of Iron, Steel and Alloy - The Ammonium Persulfate Oxidation Volumetric Method for the Determination of Chromium Content

GB/T 223.14 Methods for Chemical Analysis of Iron, Steel and Alloy - The

N-benzoy-N-phenylhydroxylamine Extraction Photometric Method for the Determination of Vanadium Content

GB/T 223.17 Methods for Chemical Analysis of Iron Steel and Alloy - The Diantipyrylmethane Photometric Method for the Determination of Titanium Content

GB/T 223.1 8 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium Thiosulfate separation Iodimetric Method for the Determination of Copper Content

GB/T 223.19 Methods for Chemical Analysis of Iron Steel and Alloy - The Neocuproine-chloroform Extraction Photometric Method for the Determination of Copper Content

GB/T 223.23 Iron Steel and Alloy - Determination of Nickel Content - The Dimethylglyoxime Spectrophotometric Method

GB/T 223.32 Methods for Chemical Analysis of Iron, Steel and Alloy - The Hypophosphite Reduction-iodimetric Method for the Determination of Arsenic Content

GB/T 223.37 Methods for Chemical Analysis of Iron Steel and Alloy - The Indophenal Blue Photometric Methods for the Determination of Nitrogen Content after Distillation Separation

GB/T 223.40 Iron Steel and Alloy - Determination of Niobium Content by the Sulphochlorophenol S Spectrophotometric Method

GB/T 223.58 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium Arsenite-sodium Nitrite Titrimetric Method for the Determination of Manganese Content

GB/T 223.59 Iron Steel and Alloy - Determination of Phosphorus Content-Bismuth Phosphomolybdate Blue Spectrophotometric Method and Antimony Phosphomolybdate Blue Spectrophotometric Method

GB/T 223.60 Methods for Chemical Analysis of Iron, Steel and Alloy - The Perchloric Acid Dehydration Gravimetric Method for the Determination of Silicon Content

GB/T 223.63 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium (Potassium) Periodate Photometric Method for the Determination of Manganese Content

GB/T 223.64 Iron Steel and Alloy - Determination of Manganese Content - Flame Atomic Absorption Spectrometric Method

GB/T 223.68 Methods for Chemical Analysis of Iron, Steel and Alloy - The

Potassium Iodate Titration Method after Combustion in the Pipe Furnace for the Determination of Sulfur Content

GB/T 223.71 Methods for Chemical Analysis of Iron, Steel and Alloy - The Gravimetric Method after Combustion in the Pipe Furnace for the Determination of Carbon Content

GB/T 223.7 2 Iron Steel and Alloy - Determination of Sulfur Content-Gravimetric Method

GB/T 228 Metallic Materials-Tensile Testing at Ambient Temperature (GB/T 228-2002, eqv ISO 6892:1998)

GB/T 232 Metallic Materials - Bend Test (GB/T 232-1999, eqv ISO 7438:1985)

GB/T 247 General Rule of Acceptance, Package, Mark and Certification for Steel Plates (Sheets) and Strips

GB/T 700 Carbon Structural Steels

GB/T 709 Dimension, Shape, Weight and Tolerances for Hot-rolled Steel Plates and Sheets

GB/T 1591 Low-alloy Structural Steels

GB/T 2975 Steel and Steel Products - Location and Preparation of Test Pieces for Mechanical Testing (GB/T 2975-1998, eqv ISO 377:1997)

GB/T 4336 Standard Test Method for Spark Discharge Atomic Emission Spectrometric Analysis of Carbon and Low Alloy Steel (Routine Method)

GB/T 17505 Steel and Steel Products - General Technical Delivery Requirements (GB/T 17505-1998, eqv ISO 404:1992)

GB/T 18253 Steel and Steel Products - Types of Inspection Documents (GB/T 18253-2000, eqv ISO 10474:1991)

GB/T 20066 Steel and Iron - Sampling and Preparation of Samples for the Determination of Chemical Composition (GB/T 20066-2006, ISO 14284:1996 IDT)

YB/T 081 Rule for Rounding off of Numberical Values and Judgement of Testing Values for Technical Standards of Metallurgy

3 Ordering Information

3.1 The order contract or order according to this standard shall include the following

contents:

a) Serial number of standard;

b) Product name (steel plate, steel strip or section steel);

c) Designation;

d) Size;

e) Rim condition (trimmed EC and non-trimmed EM);

f) Thickness precision (PT.A and PT.B);

g) Weight;

h) Delivery condition;

i) Usage;

j) Special requirements.

3.2 If no definite contents about e) and f) are in procurement contract, the following requirements may be used:

a) Sheet and strip are generally non-trimmed in delivered, and the steel plate sheared by the sheet and strip is generally trimmed in delivered;

b) Thickness precision is the general precision (Category PT. A).

4 Size, Appearance, Weight and Permissible Deviation

The size, shape, weight and permissible deviation for steel plate, sheet and strip shall meet the requirements of GB/T 709.

5 Technical Requirements

5.1 Designation and chemical composition

5.1.1 The designation and chemical composition of steel shall meet the requirements specified in GB/T 700 and GB/T 1591.

5.1.2 The content of arsenic in steel shall not be greater than 0.080 %. The content of arsenic in steel smelted by arsenic-bearing mineral from pig iron shall be specified by the supplier and the purchaser. The arsenic analysis may be eliminated if the material is free of arsenic.

9 Rounding off of Numerical Values

Rounding off of numerical values shall meet the requirements of YB/T 081.

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