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

GB/T 31922-2015

**Hot-rolled steel sheets and strips of higher yield strength with
improved formability**

改善成形性热轧高屈服强度钢板和钢带

(English Translation)

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Table of Contents

Foreword...	3
1 Scope...	5
2 Normative references...	5
3 Classification and code...	7
4 Required ordering information...	8
5 Dimension, shape, weight and allowable deviation...	8
6 Technical requirements...	8
7 Test methods...	11
8 Inspection rules...	12
9 Packaging, marks and quality certificate...	12
10 Rounding off for numerical values...	12

Foreword

This Standard is drafted according to the rules given in the GB/T 1.1-2009.

This Standard uses redrafting method to modify ISO 5951.2013 (E) Hot-rolled steel sheet of higher yield strength with improved formability.

Compared with ISO 5951.2013, this Standard makes many adjustments in structure. Clause numbers of this Standard and ISO 5951.2013 are listed in the control list in Appendix A.

There are technical differences between this Standard and ISO 5951.2013. The clauses involved in these differences have been indicated via the vertical single lines (|) drawn at the outer margin positions. The list of corresponding technical differences and causes is given in Appendix B.

This Standard makes the following editorial modifications.

- DELETE the contents in the table of contents, references and foreword of the ISO 5951.2013. REWRITE the foreword in accordance with the standard practice of our country.
- MODIFY the word "this International Standard" to "this Standard" or "this

document".

- In the normative references, this Standard makes direct reference to the corresponding national standards.
- USE the decimal point "." to replace the comma "," used as decimal point.
- According to the expression in our national standards, RE-INDUCE the expression on the required ordering information, dimension, shape, weight, allowable deviation, delivery status, oiling, test methods, surface quality and inspection rules.
- Clearly REQUEST to use the upper yield strength ReH as minimum yield strength.
- ADD Appendix A (Informative) "Structural changes of this Standard compared with the ISO 5951.2013".
- ADD Appendix B (Informative) "List of the corresponding technical differences between this Standard and ISO 5951.2013 and the causes".

This Standard was proposed by China Iron and Steel Association.

Hot-rolled steel sheets and strips of higher yield strength with improved formability

1 Scope

This Standard specifies the classification and code, ordering information, dimension, shape, weight, allowable deviation, technical requirements, test methods, inspection rules, packaging, marks and quality certificate of the hot-rolled steel sheets and strips of higher yield strength with improved formability. This Standard is applicable to the hot-rolled steel strips of higher yield strength with good formability and the thickness of 1.0mm to 6.0mm, the steel sheets produced by the crosscutting of steel strips, and the steel strips produced by rip cutting (hereinafter referred to as "steel sheets and strips").

2 Normative references

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

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 223.9 Iron, steel and alloy - Determination of aluminium content - Chrom azurol S photometric method

GB/T 223.11 Iron, steel and alloy - Determination of chromium content - Visual titration or potentiometric titration method (GB/T 223.11-2008, ISO 4937.1986, MOD)

GB/T 223.14 Methods for chemical analysis of iron, steel and alloy - The N-Benzoyl-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 223.18 Methods for chemical analysis of iron, steel and alloy - The sodium thiosulfate separation iodimetric 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 223.26 Iron, steel and alloy - Determination of molybdenum content - The thiocyanate spectrophotometric method

GB/T 223.40 Iron, steel and alloy - Determination of niobium content by the

sulphochlorophenol S 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 223.68 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 223.69 Iron, steel and alloy - Determination of carbon contents - Gas-volumetric method after combustion in the pipe furnace

GB/T 223.75 Iron, steel and alloy - Determination of boron content - Methanol distillation-curcumin photometric method

GB/T 223.76 Methods for chemical analysis of iron, steel and alloy - The flame atomic absorption spectrometric method for the determination of vanadium content

GB/T 228.1 Metallic materials - Tensile testing - Part 1. Method of test at room temperature (GB/T 228.1-2010, ISO 6892-1:2009, MOD)

GB/T 247 General rule of package mark and certification for steel plates (sheets) and strips

GB/T 709 Dimension, shape, weight and tolerances for hot-rolled steel sheets and strips (GB/T 709-2006, ISO 7452:2002, ISO 16160:2000, NEQ)

4.1 During ordering, the requisitioning party shall provide the following information.

- a) Standard No.;
- b) product name (steel sheet or strip);
- c) designation;