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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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Hot-rolled twin roll cast steel sheets and strips of structural quality and high strength steel

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules of Standardization Documents"

Drafting.

This document uses the redrafting method to modify and adopt ISO 15179.2012 "Structural Grade and High Strength Grade Hot-rolled Twin-roll Cast-rolled Thin Steel Plates".

Compared with ISO 15179.2012, this document has technical differences.

The set vertical single line (|) is marked, and a list of technical differences and their reasons is given in Appendix A for reference.

This document has made the following editorial changes.

--- Modify the standard name from "Structural Grade and High-strength Grade Hot-rolled Twin-roll Casting Steel Sheet" to "Structural Grade and High-Strength Twin-roll Casting

Rolling thin steel plates and steel strips, change the standard name in order to be consistent with my country's standard system;

---Informative Appendix B has been added, which provides the process of the twin-roll casting and rolling process.

1 Scope

This document specifies the characteristics of structural grade and high-strength hot-rolled thin steel plates and steel strips produced by the twin-roll casting-rolling process, the twin-roll casting-rolling process

See Appendix B. This product is suitable for applications with special mechanical performance requirements. This product is usually used in the delivery state and is used for

Bolted, riveted or welded structure. This product is usually produced on a narrow strip mill rather than a thick plate mill.

Structural grade double-roll cast-rolled hot-rolled thin steel sheet and steel strip are

produced into carbon steel with specified mechanical properties, which can be purchased to obtain many grades

(See Table 5).

High-strength twin-roll cast-rolled hot-rolled thin steel sheets and steel strips are strengthened by microalloys, and their production is manufactured to have the specified mechanical properties, and at the same time

Procurement obtains many grades and categories (see Table 6).

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to that date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 223.12 Methods for chemical analysis of iron, steel and alloy. The sodium carbonate separation-diphenylcarbazide photometric method for the determination of chromium content

GB/T 223.14 Methods for chemical analysis of iron, steel and alloy-The tantalum reagent extraction spectrophotometric method for the determination of vanadium content

GB/T 223.18 Methods for chemical analysis of iron, steel and alloy. The sodium thiosulfate separation-iodometric method for the determination of copper content

GB/T 223.23 Iron, steel and alloy-Determination of nickel content-Dimethylglyoxime spectrophotometric method

GB/T 223.26 Steel and alloy determination of molybdenum content-Thiocyanate spectrophotometric method

GB/T 223.40 Steel and alloy determination of niobium content-Chlorosulfonol 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 223.62 Methods for chemical analysis of iron, steel and alloy-The butyl acetate extraction spectrophotometric method for the determination of phosphorus 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 223.69 Steel and alloy carbon content determination after combustion in tube furnace

gas volume method

GB/T 223.72 Determination of Sulfur Content in Iron and Steel and Alloy Gravimetric Method

GB/T 223.84 Iron, Steel and Alloy Determination of Titanium Content Diantipyrine Methane Spectrophotometric Method

GB/T 228.1 Tensile test of metallic materials Part 1.Room temperature test method (GB/T 228.1-2010, ISO 6892-

1.2009, MOD)

GB/T 247 General Provisions for Packaging, Marking and Quality Certificates of Steel Plates and Strips

GB/T 709 Hot-rolled steel plate and steel strip size, shape, weight and allowable deviation

GB/T 2975 Steel and steel product mechanical properties test sampling location and sample preparation (GB/T 2975-2018, ISO 377.

2017, MOD)

GB/T 4336 Carbon steel and low- and medium-alloy steel determination of multi-element content Spark discharge atomic emission spectrometry (conventional method)

GB/T 8170 Numerical rounding rules and the expression and determination of limit values

GB/T 17505 General technical requirements for delivery of steel and steel products (GB/T 17505-2016, ISO 404.2013, MOD)

GB/T 20066 Sampling and sample preparation methods for the determination of the chemical composition of steel and iron (GB/T 20066-2006, ISO 14284.