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

GB/T 3280-2015

Cold rolled stainless steel plate, sheet and strip

不锈钢冷轧钢板和钢带

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Foreword

This Standard was drafted according to the rules given in GB/T 1.1-2009. This Standard replaces GB/T 3280-2007 "Cold rolled stainless steel plate, sheet and strip". Compared

with GB/T 3280-2007, the main technical changes are as follows: - ADD "3/4 cold hardened state" in the classification; - ADD "edge state" in the order contents; - ADJUST the dimensional accuracy of steel plates, sheets and strips; - MODIFY the unevenness of roll-cut steel strips II; - ADD 23 steel designations and related technical requirements; - ADJUST the chemical composition of 5 steel designations; - ADJUST the mechanical properties of 13 steel designations, and SUPPLEMENT some HV hardness; - MODIFY the original steel designation 022Cr18NbTi to 022Cr18Nb; - MODIFY the specimens for elongation at break of steel plates, sheets and strips with a thickness of not more than 3 mm to A50 mm; - ADD 2E surface processing type; - MODIFY reinspection and determination rules; - ADD specifications for rounding off of the test results of mechanical properties and chemical composition; - ADD Annex A "Comparison table of stainless steel designations of various countries" (informative). This Standard was proposed by China Iron and Steel Industry Association. This Standard is under the jurisdiction of National Technical Committee on Steel of Standardization Administration of China (SAC/C 183). Main drafting organizations of this Standard. Shanxi Taigang Stainless Steel Co., Ltd., Baosteel Stainless Steel Co., Ltd., China Metallurgical Information and Standardization Institute, Sichuan Southwest Stainless Steel Co., Ltd., Ningbo Baoxin Stainless Steel Co., Ltd., Shandong Taishan Steel Group Co., Ltd. Main drafters of this Standard. Wu Qiang, Zhang Jingjing, Xu Zhongjie, Dong Li, Wang Jun, Yan Zhuxian, Chen Peidun, Sun Mingshan, Wang Xiaohu, Ji Dengping, Li Liuyi, Wang Chuandong, Yan Yan, Zhang Weixu. The previous editions of the standards replaced by this Standard are. - GB 3280-1984, GB/T 3280-1992, GB/T 3280-2007; - GB 4239-1984, GB/T 4239-1991. Cold rolled stainless steel plate, sheet and strip

1 Scope

China's national standard for cold rolled stainless steel plate, sheet and strip. It specifies the classification and codes, the order content, the dimensions, shape, weight and tolerances, the technical requirements, the test methods, the inspection rules and the packaging, marking and quality certificate, and it carries three informative annexes: a comparison table of stainless steel designations of various countries, the characteristics and uses of stainless steel, and the heat treatment systems. This is one of the most consulted steel standards in China, because cold rolled stainless flat product is the form in which most stainless steel is bought and because the document contains, in one place, the composition, the properties and the surface finishes of every grade the country makes. It replaces the 2007 edition and adds twenty-three steel designations with their technical requirements, adjusts the chemical composition of five grades and the mechanical properties of thirteen, adds HV hardness values where they were missing, and adds the 2E surface finish. It also adds the three-quarter cold hardened temper to the classification and the edge condition to the order content, adjusts the dimensional accuracy throughout, and changes the elongation specimen for material not more than three millimetres thick to A50 mm. The most useful

addition for anyone working across markets is Annex A, the comparison table, which sets the Chinese designations against their counterparts elsewhere - the point at which a drawing calling for one grade can be met with material certified to another. Issued on 11 September 2015 and in force since 1 June 2016.

This Standard specifies the classification, code, order contents, dimension, shape, weight and allowable deviation, technical requirements, test methods, inspection rules, packaging, marking and quality certificate of cold rolled stainless steel plates, sheets and strips. This Standard applies to corrosion-resistant cold rolled stainless steel wide steel strip (hereinafter referred to as wide steel strip) and its roll-cut cut-to-size steel plate/sheet (hereinafter referred to as roll-cut steel plate/sheet), slitting cold rolled wide steel strip (hereinafter referred to as slitting wide steel strip) and its roll-cut cut-to-size steel strip (hereinafter referred to as roll-cut steel strip I), cold rolled narrow steel strip (hereinafter referred to as narrow steel strip) and its roll-cut cut-to-size steel strip (hereinafter referred to as roll-cut steel strip II), as well as single-sheet steel plate/sheet.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 diantipyryl methane phosphomolybdate gravimetric method for the determination of phosphorus content

GB/T 223.4 Alloyed steel - Determination of manganese content - Potentiometric or visual titration method

GB/T 223.5 Steel and iron - Determination of acid-soluble silicon and total silicon content - Reduced molybdosilicate spectrophotometric method

GB/T 223.8 Methods for chemical analysis of iron, steel and alloy - The sodium fluoride separation - EDTA titration method for the determination of aluminium 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 223.16 Methods for chemical analysis of iron, steel and alloy - The chromotropic acid 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 223.19 Methods for chemical analysis of iron, steel and alloy - The neocuproine-chloroform extraction photometric method for the determination of copper content

3 Classification, code

3.1 Classification according to hardening state is as follows:

3.2 Classification according to edge state is as follows:

3.3 Classification according to dimension and shape accuracy is as follows:

4 Order content

Contracts or orders placed under this Standard shall include the following.

- a) standard number;
- b) product name;
- c) steel designation or unified digital code;
- d) dimension and precision;
- e) weight (amount) of delivery;
- f) surface processing type;
- h) delivery state;

5.1 Dimension and tolerances

5.1.1 Dimension range of steel plates, sheets and strips The nominal dimension range of steel plates, sheets and strips is shown in

5.1.3 Width tolerances

5.1.3.1 The width tolerances for cut-edge (EC) wide steel strips and roll-cut steel plates (sheets), slitting wide steel strips and roll-cut steel strips I shall comply with the specifications of general precision (PT.A) in Table

4.If required by the demand party and specified in the contract, higher precision (PT.B) in Table 4 may be implemented.

5.1.3.2 The width tolerances for mill-edge (EM) wide steel strips and roll-cut steel plates (sheets) shall comply with the specifications of Table 5.

5.1.4 Length tolerances

5.1.4.1 The length tolerances for roll-cut steel plates (sheets) and roll-cut steel strips I shall