

ICS 77.140.70
CCS H 43

YB

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

YB/T 2011-2014

Continuous casting square and rectangular blank

连续铸钢方坯和矩形坯

(English Translation)

Issued on: May 6, 2014

Implemented on: October 1, 2014

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

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Foreword

This Standard is drafted in accordance with the rules specified in GB/T 1.1-2009.

This Standard replaces YB/T 2011-2004 Continuous casting square and rectangular blank.

Compared with YB/T 2011-2004, the main differences of this Standard are as follows.

- Modify the provisions of bulges;
- Add the provisions of sinking;
- Modify the schematic diagram of shearing oblique;
- Add the provisions of furnace number classification;
- Modify the provisions of shrinkage cavity in top cutting and end cutting.
- Delete the provisions of bulge measurement.

This Standard was proposed by China Iron and Steel Association.

This Standard shall be under the jurisdiction of National Technical Committee of Steel Standardization (SAC/TC183).

Drafting organizations of this Standard. Hebei Shougang Qian An Iron & Steel Co., Ltd., Anshan Baode Iron and Steel Co., Ltd, Tianjin Iron and Steel Group Co., Ltd., China Metallurgical Information and Standardization Institute, and Shougang Group.

Main drafters of this Standard. Liu Xiaoyan, Wang Hongxin, Wang Liping, Gong Wenchao, Liu Baoshi, Zhang Bingcheng, Li Bingyi, Shi Li, and Wang Yujian.

The previous versions replaced by this Standard are. YB 2011-1983, ND YB/T 2011-2004.

Continuous casting square and rectangular blank

1 Scope

This Standard specifies the definition, order contents, dimensions, appearance, weight as well as allowable deviation, technical requirements, test methods, inspection rules, transport, storage, marks, and quality certificate of non-alloy steel, low-alloy steel, and alloy-steel continuous casting square and rectangular blank (hereinafter referred to as continuous casting blank).

This Standard is applicable to non-alloy steel, low-alloy steel, and alloy-steel (excluding tool steel) continuous casting blank which are classified in accordance with GB/T 13304.1 and GB/T 13304.2.

2 Normative references

The articles contained in the following documents have become part of this document when they are quoted herein. For the dated documents so quoted, all the modifications (including all corrections) or revisions made thereafter shall be applicable to this document.

GB/T 222 Permissible tolerances for chemical composition of steel products

GB/T 226 Etch test for macrostructure and defect of steels

GB/T 2101 General requirement of acceptance packaging marking and certification for section steel

GB/T 20066 Steel and iron-Sampling and preparation of samples for the determination of chemical composition

GB/T 13304.1 Steels classification - Part 1.Classification of according to chemical composition

3 Terms and definitions

The following terms and definitions apply to this Standard.

3.1

Continuous casting square blank

It refers to the continuous casting blank of which the four sides of the cross section are in the same length, and the four interior angles are 90°.

4 Order contents

Order contract according to this Standard shall include the following contents.

5.1.1 Dimensions and allowable deviation of continuous casting blank shall comply with

the requirements indicated in table 1.

5.2.1 Diagonal line difference, shearing oblique, and bulge of continuous casting blank

shall comply with the requirements indicated in table 1, with diagram shown in table 2.

5.2.3 The broadening at the end of the continuous casting blank due to shear deformation

shall not exceed 10% of the side-length.

5.3 Weight

Continuous casting blank shall be delivered at the actual weight, and theoretical weight delivery is also available with negotiation between both the demander and the supplier.

6.2 Pouring

Generally, continuous pouring shall be conducted with the same grade molten steel for the continuous casting blank. When pouring with different grades of molten steel, the intermediate blank shall be determined as per the actual components.

6.3 Furnace number classification

Adjacent furnace number classification method for continuous casting blank. when pouring the molten steel in the teeming ladle into the tundish, calculate the beginning of the next furnace according to the residual molten steel volume in the tundish of the weighing system.

6.5 Macrostructure

Superior non-alloy-steel, special-quality non-alloy steel, and alloy-steel continuous casting blank shall take macrostructure assessment as per YB/T 153; its conformity grade shall be determined by both the demander and the supplier after negotiation. If the supplier can ensure the conformity of the macrostructure, inspection may be exempted.

6.6.1 There shall be no visible halved joint, skull patch, scabs and impurity on the surface

of the continuous casting blank.

6.6.6 If there is any flaw as specified above which is unallowable or beyond the allowable

scope, it shall be cut away. The cutting width shall not be less than 6 times of the depth, and the cutting length shall not be less than 10 times of the depth. After the shaving, the flaw part shall be smooth without edges and corners.

6.6.7 The surface quality requirements of the continuous casting blank can be properly

adjusted after the negotiation of both the demander and the supplier.

7 Test method

The inspection items, sampling quantity, sampling method and test method of each batch of continuous casting blank shall comply with the provisions specified in table 3.

8.1 Inspection and acceptance

Inspection and acceptance of continuous casting blank shall be conducted by the quality supervision department of the supplier, and the demander has the right to conduct