UDC

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

P GB 50567-2010

Technical code for shell structure of ironmaking furnace

炼铁工艺炉壳体结构技术规范

Issued on May 31, 2010 Implemented on December 01, 2010

Jointly issued by Ministry of Housing and Urban-Rural Development of the People's Republic of China

General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China

National Standard of the People's Republic of China

Technical code for shell structure of ironmaking furnace

GB 50567-2010

Chief Editorial Department: China Metallurgical Construction Association

Approval Department: Ministry of Housing and Urban-Rural Development of the People's Republic of China

Implemented on: December 1, 2010

China Planning Press

2010 Beijing

Announcement of Ministry of Housing and Urban-Rural Development of the People's Republic of China

No. 617

Notice on the issuance of the national standard *Technical code for shell structure of ironmaking furnace*

Hereby approve *Technical code for shell structure of ironmaking furnace* as national standard, with No. of GB 50567-2010, which shall come into force from December 1, 2010. Wherein, Article (Clause) 3.0.6 (1, 2, 3, 4), 5.1.8, 7.2.3, 8.5.7(2), and 10.1.5 are mandatory requirements and must be performed strictly.

The Code is organized by Standard Rating Research Institute of our department and published and distributed by China Planning Press.

Ministry of Housing and Urban-Rural Development of the People's Republic of China

May 31, 2010

Foreword

The Code, according to the requirements of the *Notice on Issuing of〈Formulation and Revision Plan of Code for 2006 Project Construction Standards〉(the Second Batch)* (JB [2006] No. 136), was jointly prepared and completed by CISDI Engineering Co., Ltd. in conjunction with other relevant units.

In the formulation process, the code compilation group has carried out several thematic research and necessary experimental verification; Conducted investigation and analysis; Summarized practical experience about the design, construction, production and use of shell structure in China for many years; Learned the scientific research achievements in recent years; Compared with the advanced standard specification of foreign countries; Coordinated with related standards and specifications. On this basis, we extensively solicited opinions from units concerned in a variety of ways and carried out tentative design, made repeated modification on key chapters, and finally finalized this code upon verification.

This Code includes 10 chapters and 9 annexes, and main technical contents include general provisions, terms and symbols, basic requirement, loads, material, shell structural design, requirements on construction, welding, derusting and painting, construction, erection and inspection, etc.

The articles in bold-face marked in the Code are mandatory articles, which shall be performed strictly.

The Ministry of Housing and Urban-Rural Development is responsible for the management of this code and the interpretation of the statutory provisions in this code, China Metallurgical Construction Association is responsible for the daily management, and CISDI Engineering Co., Ltd. is responsible for the interpretation of the technical contents.

All relevant organizations are kindly requested to sum up and accumulate your experiences in actual practices during the process of implementing this Code. Please send any comments or suggestions to CISDI Engineering Co., Ltd. Administrative Group

of national standard of *Technical code for shell structure of ironmaking furnace* (address: No. 1, Shuanggang Road, Yuzhong District, Chongqing City; Postal Code: 400013; Fax: :023-63548888), for the reference of future revision.

Chief editorial organizations, participated organizations, main drafters and main examiners of the Code:

Chief editorial organizations: CISDI Engineering Co., Ltd.

Participated editorial organizations: China Metallurgical Construction Research Institute Co., Ltd.

Chongqing University

MCC Capital Engineering & Research Incorporation Limited

WISDRI Engineering & Research Incorporation Limited

Wuhan Metallurgic Equipment Manufacturing Company

Shanghai Baoye Group Co., Ltd.

Xi'an University of Architecture and Technology

BERIS Engineering & Research Corporation Baoshan Iron & Steel Co., Ltd.

Angang Steel Company Limited

MCC Shijiu Construction Co., Ltd.

Shanghai Sixin Construction Steel Structure Products Co., Ltd.

Chengdu Tianhe Hongye Technology Development Co., Ltd.

Main drafters: Dan Zeyi, Duan Bin, Xue Shangling, Dai Guoxin, Cui Jia, Wang Jian, Wɑng Yuetao, Ma Liehai, Shi Menglin, Li Shubin, Luo Fucheng, Hao Jiping, Li Tie, Yan Peng, Li Chengzhi, Deng Yusun, Zhang Fengbao, Chen Jianrong, Liu Xuyuan, Li Sheng, Ren Haiming, Wang Xiao'ou

Main examiners: Guo Qijiao, Mu Haisheng, Duɑn Muxiang, Su Ping, Lu Lixiang, Yin

Changsheng, Li Hongguang, Yan Hongli, Luo Jin

Contents

1. General provisions

1.0.1 This Code is formulated to achieve advanced technology, reasonable economy, safe, available and ensure the quality during the design and construction of the shell structure of ironmaking furnace.

1.0.2 This Code applies to shell structural design, construction and quality inspection of blast furnace newly built, renovated and expanded with effective volume of Level 1000m^3-5000m^3, hot stove (internal-combustion type, top combustion type and external combustion type), uptake, downcomer, 5-channel sphere or tee pipe, dust catcher.

1.0.3 In addition to accord with this specification, the design, construction and quality inspection of the shell structure shall comply with the provisions of the current related national standards.

2 Terms and symbols

2.1 Terms

2.1.1 Shell structure

A shell has two or more flake objects defined by the surface. The shell structure is composed of several flake objects. If the ratio between the thickness of the shell structure of ironmaking furnace and the surface's minimum radius of curvature is less than 1/50, it belongs to thin shell structure.

2.1.2 Dead load

During the service period of shell structures, a variable load does not varies with the time, or varies in a magnitude that can be neglected as compared with the mean value.

2.1.3 Live load

During the service period of shell structures, a variable load varies with the time, or varies in a magnitude that cannot be neglected as compared with the mean value.

2.1.4 Accidental load

During the service period of shell structures, an accidental load will not definitely occur but once occur, will be characterized by a great magnitude and very short time duration.

2.1.5 Load effect

The reaction of the shell structure caused by the load, such as internal force and deformation, etc.

2.1.6 Load combination

While calculate according to the allowable stress, the regulation for various standard values of the load appeared at the same time in order to ensure the reliability of the shell structure.

2.1.7 Stress intensity

The difference between the maximum and minimum value among the three principal

北京文心雕语翻译有限公司
Beijing Lancarver Translation Inc.

完整版本请在线下单/Order Checks Online for Full version

联系我们/or Contact:

TEL: 400-678-1309

QQ: 19315219 | Skype: Lancarver

Email：info@lancarver.com

http://www.lancarver.com

线下付款方式：

I. 对公账户：

单位名称：北京文心雕语翻译有限公司

开 户 行：中国工商银行北京学清路支行

账　　号：0200 1486 0900 0006 131

II. 支付宝账户：info@lancarver.com

III. Paypal: info@lancarver.com

注: 付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！

NOTE All documents on the store are in electronic Adobe Acrobat PDF format, there is not sell or ship documents in hard copy. Mail the order and payment information to info@lancarver.com , you will shortly receive an e-mail confirming your order.