

# NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA 中华人民共和国国家标准

P GB 50683-2011

# Code for Acceptance of Field Equipment, Industrial Pipe Welding Construction Quality

现场设备、工业管道焊接工程 施工质量验收规范

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the Ministry of Housing and Urban-Rural Development (MOHURD) and the General Administration of Quality Supervision, Examination and Quarantine (AQSIQ) of the People's Republic of China

# National Standard of the People's Republic of China 中华人民共和国国家标准

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Industrial Pipe Welding Construction Quality
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施工质量验收规范

#### GB 50683-2011

# **Chief Development Department:**

China Association of Engineering Construction Standardization - Chemical Engineering Subcommittee

# **Approval Department:**

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

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Announcement on Issuing the National Standard "Code for Acceptance of Field Equipment, Industrial Pipe Welding Construction Quality"

"Code for Acceptance of Field Equipment, Industrial Pipe Welding Construction Quality" is hereby approved as national standard with the serial number as GB 50683-2011 and shall be implemented on May 1, 2012. Therein, Article 3.2.3 (4) is mandatory and must be enforced strictly.

Authorized by the Standard Rating Research Institute of the Ministry of Housing and Urban-rural Development of the People's Republic of China, this code is published and distributed by China Planning Press.

Ministry of Housing and Urban-Rural Development of the People's Republic of China February 18, 2011

# **Foreword**

This code was redeveloped based on "Code for Construction and Acceptance of Field Equipment, Industrial Pipe Welding Engineering" GB 50236-8 by the China Petroleum & Chemical Engineering Survey and Design Association and China Petroleum Jilin Chemical Engineering & Construction Co., Ltd in conjunction with the concerned departments in the industry according to the requirements of Document Jianbiao [2007] No. 126 issued by the former Ministry of Construction (MOC) - "Notice on Printing the Development and Revision Plan of Engineering Construction Standards and Codes in 2007 (the second batch). The new standard is named as "Code for Quality Acceptance of Field Equipment, Industrial Pipe Welding Construction Quality".

The drafting group of this code formulated this code by carrying out extensive investigations, earnestly summarizing the practical experiences, making reference to the related international standards and foreign advanced standards and based on also extensively soliciting opinions and the code is finalized after review finally.

This code comprises of eight chapters and one appendix. The major technical content includes: General Provisions, Terms, Fundamental Ruler, Materials, Preparation before Welding, Welding, Heat Treatment after Welding and Welding Quality Examination.

The provisions printed in bold type in this code are compulsory and must be enforced strictly.

The Ministry of Housing and Urban-Rural Development of the People's Republic of China is in charge of the administration of this code and the explanation of the compulsory provisions, the Branch on Chemical Industry of China Association for Engineering Construction Standardization is in charge of the current management of this code, and the National Administrative Center of Standardization of Chemical Construction is responsible for the explanation of specific technical contents. During the process of implementing this code, the relevant opinions and advice, whenever necessary, can be posted or passed on to National Administrative Center of Standardization of Chemical Construction (address: Room 1-1-1107, No. 28, Benevolence hotel, Huai'an East Road, Qiaodong District, Shijiazhuang City, Hebei Province, 050020, China) for reference during future update.

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China Petroleum & Chemical Engineering Survey and Design Association China Petroleum Jilin Chemical Engineering & Construction Co., Ltd.

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Beijing Electric Power Construction Company

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# Code for Acceptance of Field Equipment, Industrial Pipe Welding Construction Quality

# 现场设备、工业管道焊接工程施工质量验收规范

# 1 General Provisions

- **1.0.1** This code was formulated in order to unify the acceptance of welding quality acceptance of field equipment and industrial pipelines and strengthen the engineering quality management.
- **1.0.2** This code is applicable to the construction quality acceptance of the welding engineering of the metallic materials such as carbon steel, alloy steel, aluminium and aluminium alloy, copper and copper alloy, nickel and nickel alloy, titanium and titanium alloy as well as zirconium and zirconium alloy.
- **1.0.3** The codes shall be applied together with ""Code for Construction of Field Equipment, Industrial Pipe Welding Engineering" (GB 50236).
- **1.0.4** The requirements for the construction quality acceptance of engineering technical document and contract agreement document shall not be less than those specified in this code.
- **1.0.5** Except meeting this code, the acceptance of welding engineering construction quality shall also meet the requirements of the current relevant national standards.

# 2 Terms

#### **2.0.1** 100% examination

The entire examination of a specific item in a specified examination batch

- **2.0.2** Random sampling examination The examination is conducted on a specific item by a certain proportion of random sampling.
- **2.0.3** Local sampling examination A specific part of examination is conducted for a specific item on every piece in a specific examination batch.

# 3 Basic Requirements

### 3.1 Division for Acceptance of Construction Quality

- **3.1.1** The welding engineering quality acceptance of field equipment and industrial pipelines shall be conducted on the division into the sub-item project.
- **3.1.2** The sub-item project of field equipment welding engineering shall be divided according to the piece of field equipment and the sub-item project of industrial pipeline welding engineering shall be divided into according to the pipeline grades and materials.

#### 3.2 Acceptance of Construction Quality



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