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

GB/T 14173-2008

Replacing GB/T 814-1989

**Specification for manufacture, installation and acceptance of
steel gate in hydraulic and hydroelectric engineering**

水利水电工程钢闸门制造、安装及验收规范

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Foreword

This standard replaces GB/T 14173-1993 "flat steel gate technology" and GB/T 814-1989 "Radial Gate General Technology Conditions ", and incorporated by reference incorporated into SL37-1991" Eccentric - hinge Radial Gate technical conditions ", SL/T 57-1993" flat sprocket gate technology Operation condition "and DL5018-2004" hydroengineering manufacture and installation of steel gate and acceptance of "related content. The standards are compared with the original standard was mainly the following changes.

- Scope extended to all water conservancy and hydropower engineering and other engineering steel gate of manufacture, installation and acceptance;
- Amendment adds the requirements of quality steel surface and surface imperfections;
- Welding procedure qualification requirements according to the provisions of GB/T 19866 and GB/T 19868.4, GB/T 19869.1 performed;
- For the use of new materials, the head is greater than or equal to 80m complex gate structure proposed should increase the proportion of non-destructive testing inspection Claim;
- Increasing the surface of the weld NDT acceptance level of provisions;
- Increased when machined need to maintain dimensional tolerances should be taken to eliminate the stress treatment requirements;
- Increased when the structure size requirements should adopt a stable overall stress relieving heat treatment or VSR treatment should not be used locally Heat treatment requirements;
- Combination weld quality standards have been modified;
- Of steel castings and forgings quality classification;
- An increase of one or two types of steel castings surface NDT inspection requirements;
- Specifies the technical requirements and acceptance of manufacturing forgings shall comply with JB/T 6397 or JB/T 6396 requirements;
- Adds a kind of main rail surface forging NDT inspection requirements;
- Provision charge compression, compression type seal radial gate door leaf panel

processing, the panel thickness tolerances shall be not less than the local pattern size;

1 Scope

GB/T 14173-2008 is the Chinese national standard on specification for manufacture, installation and acceptance of steel gate in hydraulic and hydroelectric engineering, in the field of energy and heat transfer engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 4 November 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2009. Classification: ICS 27.140, CCS P26. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the Water Resources and Hydropower Engineering steel gates (including trash racks, the same below) technical requirements for manufacturing, installation and acceptance. This standard applies to water conservancy and hydropower engineering and other engineering steel gate manufacture, installation and acceptance.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 228 metal materials at room temperature tensile test method

GB/T 229 metal Charpy pendulum impact test method

GB/T 232 metallic materials - Bend test

GB/T 699 high-quality carbon structural steel

GB/T 700 carbon structural steel

GB/T 983 stainless steel electrode

GB/T 985 gas welding, SMAW basic form and GMAW welding groove and size

GB/T 986 submerged arc weld groove basic form and size

GB/T 1184-1999 shape and position tolerances without individual tolerance value

GB/T 1231 Steel hexagon head bolts, hexagon nuts, plain washers for high-strength

GB/T 1591 high strength low alloy structural steel

GB/T 1800.2-1998 Limits and fits the basis of Part 2. Basic tolerances, deviations and fits

GB/T 1801-1999 Limits and tolerances and fits with selection

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