



National Standard of the People's Republic of China

GB/T 713—2014
Replace GB 713—2008

Steel flat for boilers and pressure vessels

锅炉和压力容器用钢板

(ISO 9328-2: 2011, Steel flat products for pressure purposes—
Technical delivery conditions—Part 2: Non-alloy and alloy steels
with specified elevated temperature properties, NEQ)

(*English Translation*)

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Foreword

SAC/TC 183 is in charge of this English translation. In case of any doubt about the contents of English translation, the Chinese original shall be considered authoritative.

This standard is drafted in accordance with the rules given in the GB/T 1.1—2009 *Directives for standardization—Part 1: Structure and drafting of standards*.

This standard replaces the GB 713—2008 (*Steel plates for boilers and pressure vessels*) in whole.

In addition to a number of editorial changes, the following technical deviations have been made with respect to the GB 713—2008 (the previous edition).

- Expand the thickness range of steel plates;
- Add grade Q420R, 07Cr2AlMoR, 12Cr2Mo1VR;
- Lower the upper limit of S and P content of each grade;
- Increase the Charpy V – notch impact energy values of each grade;
- Specify the reduction ratio of ingot and slabs made by electroslag remelting process;
- Specify the principle for test unit of large single heavy plates.

This standard has been redrafted by referring to ISO 9328-2:2011 *Steel flat products for pressure purposes—Technical delivery conditions—Part 2: Non-alloy and alloy steels with specified elevated temperature properties*. However this standard is not equivalent to ISO 9328-2:2011.

The standard was proposed by China Iron and Steel Association.

This standard was prepared by SAC/TC 183 Technical Committee on Steel of Standardization Committee of China.

The previous editions of this standard are as follows:

- GB 713—1963, GB 713—1972, GB 713—1986, GB 713—1997, GB 713—2008;
- GB 6654—1996.

Steel flat for boilers and pressure vessels

1 Scope

This standard specifies the ordering information, grade's designation, dimension, shape, mass and permissible tolerance, technical requirements, test methods, inspection rules, packing, marking, and quality certificate of steel plates and sheets for boilers and pressure vessels.

This standard is applicable to steel plates and sheets in thicknesses from 3 mm to 250 mm inclusive for pressurized parts of boiler and medium-to-ambient-temperature pressure vessels.

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 223.9, *Iron, steel and alloy—Determination of aluminium content—Chrome azurol S photometric method*

GB/T 223.11, *Iron, steel and alloy—Determination of chromium content—Visual titration or potentiometric titration method* (GB/T 223.11—2008, ISO 4937:1986, MOD)

GB/T 223.14, *Methods for chemical analysis of iron, steel and alloy—The N-benzoyl-N-phenylhydroxylamine extraction photometric method for the determination of vanadium content*

GB/T 223.17, *Methods for chemical analysis of iron, steel and alloy—The diantipyrylmethane 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 223.23, *Iron, steel and alloy—Determination of nickel content—The dimethylglyoxime spectrophotometric method*