



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

GB/T 5216-2004

**Structural steels subject to end-quench hardenability
requirements**

(English Translation)

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1 Scope

This standard specifies the steel dimensions, shape, weight and permissible tolerances, technical requirements, test methods, inspection rules, packaging, sign and quality certificate etc. of the hot rolling and hot forging structural steels subject to end-quench hardenability requirements.

This standard is applicable to the hot rolling and forging structural steel bars of hardenability used in machinery manufacture with its diameter or thickness no less than 30 mm. The steel hardenability is determined by edge quenching or calculated by the formula.

2 Normative References

The following documents contain provisions which, through reference in this text, constitute provisions of this standard. For dated references, subsequent amendments to (excluding amending corrigendum), or revisions of, any of these publications do not apply. However, all parties who have reached an agreement according to this standard are encouraged to study whether the latest edition of these documents is applicable. For undated references, the latest edition of the normative document is applicable to this standard.

GB/T 222-1984 Method of Sampling Steel for Determination of Chemical Composition and Permissible Variations for Product Analysis

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 223.5 Methods for Chemical Analysis of Iron, Steel and Alloy - The Reduced Molybdosilicate Spectro - Photometric Method for the Determination of Acid - Soluble Silicon Content

GB/T 223.11 Methods for Chemical Analysis of Iron, Steel and Alloy - The Ammonium Persulfate Oxidation Volumetric Method for the Determination of Chromium Content

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 223.16 Methods for Chemical Analysis of Iron, Steel and Alloy - The Chromotropic Acid Photometric Method for the Determination of Titanium Content

GB/T 223.17 Methods for Chemical Analysis of Iron, Steel and Alloy - The Diantipyryl Methane Photometric Method for the Determination of Titanium Content

GB/T 223.18 Methods for Chemical Analysis of Iron, Steel and Alloy - The Neocuproine-Chloroform Extraction Photometric Method for the Determination of Copper Content

GB/T 223.19 Methods for Chemical Analysis of Iron, Steel and Alloy - The Neocuproine-Chloroform Extraction Photometric Method for the Determination of Copper Content

GB/T 223.23 Iron, Steel and Alloy - Determination of Nickel Content - The Dimethylglyoxime Spectrophotometric Method

GB/T 223.24 Methods for Chemical Analysis of Iron, Steel and Alloy - The Extraction Separation - The Dimethylglyoxime Spectrophotometric Method for the Determination of Nickel Content

GB/T 223.25 Methods for Chemical Analysis of Iron, Steel and Alloy - The Dimethylglyoxime Gravimetric Method for the Determination of Nickel Content

GB/T 223.26 Iron, Steel and Alloy - Determination of Molybdenum Content - The

Thiocyanate Spectrophotometric Method

GB/T 223.54 Methods for Chemical Analysis of Iron, Steel and Alloy - The Flame atomic Absorption Spectrophotometric Method for the Determination of Nickel Content (GB/T 223.54-1987, eqv ISO 4940.1985, Steel and cast iron - Determination of nickel content - Flame-atomic. absorption spectrophotometric method)

GB/T 223.58 Methods for Chemical Analysis of Iron, Steel and Alloy - The Extraction - Absorption Catalytic Polarographic Method for the Determination of Manganese Content

GB/T 223.59 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium Arsenite - Sodium Nitrite Titrimetric Method for the Determination of Phosphorus Content

GB/T 223.60 Methods for Chemical Analysis of Iron, Steel and Alloy - The Perchloric Acid Dehydration Gravimetric Method for the Determination of Silicon Content

GB/T 223.61 Methods for Chemical Analysis of Iron, Steel and Alloy - The Ammonium Phosphomolybdate Volumetric Method for the Determination of Phosphorus Content

GB/T 223.62 Methods for Chemical Analysis of Iron, Steel and Alloy - The Butyl Acetate Extraction Photometric Method for the Determination of Phosphorus Content

GB/T 223.63 Methods for Chemical Analysis of Iron, Steel and Alloy - The Sodium (Potassium) Periodate Photometric Method for the Determination of Manganese Content

GB/T 223.64 Iron, Steel and Alloyed - Determination of Manganese Content - Flame Atomic Absorption Spectrometric Method

GB/T 223.68 Methods for Chemical Analysis of Iron, Steel and Alloy - The Potassium Iodate Titration Method after Combustion in the Pipe Furnace for the Determination of Sulfur Content

GB/T 223.69 Iron, Steel and Alloy - Determination of Carbon Contents - Gas-Volumetric Method after Combustion in the Pipe Furnace

GB/T 223.71 Methods for Chemical Analysis of Iron, Steel and Alloy - The Gravimetric Method after Combustion in the Pipe Furnace for the Determination of Carbon Content

GB/T 223.72 Methods for Chemical Analysis of Iron, Steel and Alloy - The Alumina Chromatographic Separation - Barium Sulfate Gravimetric Method for the Determination of Sulphur Content

GB/T 223.75 Iron, Steel and Alloy - Determination of Boron Content - Methanol

Distillation-Curcumin Photometric Method

GB/T 223.76 M...

GB/T 3086-2019 | GB 4234.1-2017 | GB/T 3203-2016 | GB/T 4172-2000 | GB/T 8731-2025
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