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

GB/T 16924-2008

Replacing GB/T 16924-1997

Quenching and tempering of steel parts

钢件的淬火与回火

(English Translation)

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Foreword

This revised standard adopts JISB6913-1999 "quenched and tempered steel." the main technical differences between this standard and JISB6913-1999 are.

--- According to China's re-regulate the heat-treated condition "references" (Chapter 2);

--- Terms and definitions used in the relevant national standards (Chapter 3);

--- According to GB/T 12603 Classification and designation on metal heat treatment, re-adjust the "quenching and tempering process name, code" (see

Table 1);

--- For the heat treatment of the workpiece before processing "before the workpiece processing records" and "pre-heat treatment of the workpiece handling" of the records Adjustments (see Table 2);

--- Listed only reference material of 11 standard code, not listed specifically steel. Focus on the requirements of the workpiece material used chemical Ingredients should comply with the relevant provisions of the standard (see 5.1);

--- Press quenching and tempering process requirements, given the effective temperature deviation furnace heating zone (see Table 5);

--- Quenching and tempering were adjusted heating equipment chapter (see Table 5, Table

7 and 7.1.5);

--- Added "pending acceptance member" (see 5.4), "the work of classification" (see Chapter 6), "quality testing and measuring instruments" (see 9.2), "health and safety requirements" (see Chapter 10), "energy consumption requirements" (see Chapter 11) "informative annex" quenching and tempering of steel parts Selection Process Specification "" (see Annex A).

Other techniques are basically the same content and JISB6913-1999.

This standard replaces GB/T 16924-1997 "quenching and tempering of steel parts of the standard." Compared with GB/T 16924-1997, with the following modifications and additions.

--- Certain technical content has been adjusted (see Chapter 1, Chapter 2, Section 3, 5.1, 5.3, Table 1, Table 3 to Table 11);

--- Added "fluidized particles furnace," the relevant requirements (see 7.1.8);

--- The standard "quality" are replaced by "quality"; "Weight" are replaced by "quality";

--- Remove the original Appendix A, Appendix B was replaced by former Appendix A.

Appendix A of this standard is an informative annex.

This standard was proposed by the National Standardization Management Committee.

This standard by the National Standardization Technical Committee heat treatment.

This standard was drafted. Beijing Institute of Electrical, Chinese Mechanical Engineering Society branch heat treatment.

1 Scope

This standard specifies the technical requirements and methods of heating in a furnace quenching and tempering of steel.

This standard does not apply to heating surface hardening methods.

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.

Determination of depth of decarburization GB/T 224 steel GB/T 230.1 Metallic Rockwell hardness test - Part 1. Test methods (A, B, C, D, E, F, G, H, K, N, T scale) (GB/T 230.1-2004, ISO 6508-1:1999, MOD) GB/T 231.1 Brinell hardness test - Part 1. Test method (GB/T 231.1-2002, eqv ISO 6506-1).

1999)

GB/T 699 high-quality carbon structural steel GB/T 1182 Geometrical product specifications (GPS) geometric tolerances of form, orientation, location and runout tolerances (GB/T 1182-2008, ISO 1101:2004, IDT) GB/T 1220 stainless steel rods GB/T 1221 Steel Bars GB/T 1222 spring steel GB/T 1298 carbon tool steel GB/T 1299 alloy tool steel GB/T 3077 alloy steel GB/T 4340.1 Vickers hardness test - Part 1. Test method (GB/T 4340.1-1999, eqv ISO 6507-1).

1997)

GB/T 4341 metal Shore hardness test GB/T 5216 guaranteed hardenability structural steel GB/T 6394 Determination of average grain size of metal GB/T 7232 metal heat treatment Determination of GB/T 9452 heat treating furnace zone GB/T 9943 high-speed tool steel (GB/T 9943-2008, ISO 4957:1999, NEQ) GB/T 11352 Carbon steel castings for general engineering purposes (GB/T 11352-1989, neq ISO 3755:1991) GB/T 12603 Classification and designation on metal heat treatment GB/T 13298 metal microstructure inspection method GB/T 13324 term heat treatment equipment GB 15735 metal heat treatment production process safety and health requirements