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

中华人民共和国行业标准

JB/T 6396-2006

Replace JB/T 6396-1992

**Specification for the heavy alloy structural
steel forgings**

大型合金结构钢锻件 技术条件

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China**

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Foreword

This standard replaces JB/T 6396-1992 *the Heavy Alloy Structural Steel Forgings*.

This standard, in comparison with JB/T 6396-1992, has the major changes as follows:

- Refine the manufacturing process and add the contents about repair welding, see 4.1;
- Revise the chemical composition of the recommended steel grades in Table 1;
- Cancel the material brand 50SiMn, and add the frequently-used material brand 28CrNi2MoV of large crankshaft and eccentric shaft;
- Add the note and footnote to Table 3;
- Add non-destructive testing, see 4.5;
- Revise the test project, the number of samples, sampling location and direction in mechanical performance test, see 5.2.2 and 5.2.3;
- Add the Brinell hardness number of each material brand corresponding to the mechanical performance;
- Delete basic open-hearth steel column in Table 5;
- The standard name is changed into *the Specification for the Heavy Alloy Structural Steel Forgings*.

Annex A of this standard may be regarded as informative annex.

This standard was proposed by China Machinery Industry Federation.

This standard is under the jurisdiction of Heavy Casting and Forging Machinery Industry Standardization Technical Committee.

This standard is drafted by: China National Erzhong Group Co.

Main drafter of this standard: You Wei

The information concerning the issuance of previous editions of the standard replaced by this standard is as follows:

——JB/T 6396-1992.

Specification for the Heavy Alloy Structural Steel Forgings

1 Scope

This standard specifies the technical requirements on ordering, manufacturing and acceptance of alloy structural steel forgings.

This standard applies to alloy structural steel forgings in general purpose.

2 Normative references

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 223 (All parts) Methods for chemical analysis of iron, steel and alloy

GB/T 228 Metallic materials--Tensile testing at ambient temperature (GB/T 228-2002, eqv ISO 6892-1998)

GB/T 229 Metallic materials-Charpy notch impact test (GB/T 229-1994, eqv ISO 148-1983)

GB/T 231.1 Metallic materials—Brinell hardness test—Part 1: Test method (GB/T 231.1-2004, ISO 6508-1: 199, MOD)

JB/T 6397 Specification for the heavy carbon structural steel forgings

3 Order requirements

3.1 The demander shall specify the name, group, material brand, delivery status and the quantity of supplies of forging in order contract.

3.2 The demander shall supply order pattern and relevant finishing pattern.

3.3 When there are supplementary requirements by the demander, it shall be agreed by both parties through consultation.

4 Technical requirements

4.1 Manufacturing process

4.1.1 Smelting

Forging steel shall adopt basic electric furnace for smelting. Through the consent of the demander, other smelting methods which can ensure the quality may also be used.