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CCS H64



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

GB/T 16598-2013

Replacing GB/T 16598-1996

Titanium and titanium alloy discs and ring

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 16598-1996 "bread and titanium and titanium alloy ring," this standard and GB/T 16598-1996 compared to major change Of the following.

- Expanded its product range of sizes;
- According to the revision of commercially pure titanium grades GB/T 3620.1 and its chemical composition, industrial pure titanium grades amended accordingly to TA1, TA2, TA3 and TA4;
- Increased TA5, TA7, TA13, TA15, TC1, TC2 and TC11 and other titanium alloys;
- Amendments to the mechanical properties of the corresponding loop material cross-sectional area;
- Increased beta transition temperature testing requirements for titanium products;
- Amendments to the original titanium alloys microstructure requirements;
- Adds new grades of technical requirements;
- Revised product size tolerance requirements;
- Added Appendix B, and a standard format editing. This standard by the national non-ferrous metals Standardization Technical Committee (SAC/TC243) centralized. This standard is drafted by: Baoji Titanium Group Ltd., Baoji Titanium Industry Co., Ltd. The main drafters of this standard. Wang Yongmei, Dong Jie, Ma Zhongxian, He Shulin, Li Jian, Zhangjiang Feng. This standard replaces the standards previously issued as follows:
- GB n194-1983;
- GB/T 16598-1996. Titanium and titanium alloys and ring cake

1 Scope

GB/T 16598-2013 is the Chinese national standard on titanium and titanium alloy discs and ring, in the field of metallurgy. 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 6 September 2013 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 May 2014. Classification: ICS 77.150.50, CCS H64. 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 titanium and titanium alloy cake, ring material requirements, test methods, inspection rules, marking, packaging, transportation, storage, quality certificate And purchase order (or contract) content. This standard applies to forging and rolling process for the production of titanium and titanium alloy materials cake and loop material.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. RT Test Method.

Test Part 1

GB/T 228.1 metallic materials tensile High Temperature Test Method. Test Part 2

GB/T 228.2 metallic materials tensile Creep and endurance test methods

GB/T 2039 metal extension

GB/T 3620.1 titanium and titanium alloys and chemical composition

GB/T 3620.2 titanium and titanium alloy products of chemical composition and permissible variations

GB/T 4698 (all parts) Sponge titanium, titanium and titanium alloys

GB/T 5168 alpha-beta titanium alloy low fold inspection method

GB/T 5193 Titanium and titanium alloy products ultrasonic flaw detection method

GB/T 8180 Titanium and titanium alloy products, packaging, labeling, transportation and storage

GB/T 23605 Titanium beta transformation temperature measurement method

3 Requirements

3.1 Categories Product grades, status and specifications shall comply with the requirements of Table 1. Table

1 Grade product forms a supply state Specifications/mm The outer diameter D Diameter d sectional height H loop material wall thickness TA1, TA2, TA3, TA4, TA5, TA7, TA9, TA10, TA13, TA15, TC1, TC2, TC4, TC

11 Thermal processing state (R) Annealed (M) Cake timber 150 ~ 500 - H \u003cD - > 500 to 1000 - 50 to 0 300-- Central wood 200 ~ 500 100 ~ 40 025 ~ 30 025 ~ 150 > 500 ~ 900 300 ~ 850 110 ~ 50 025 ~ 250 > 900 ~ 1500400 ~ 1450110 ~ 70025 ~ 400 Availability aTC11 titanium alloy products generally thermal processing state (R), which annealed (M) only the thickness or height of not more than 100mm products.