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

GB 23102-2008

**Implants for surgery -- Metallic materials -- Wrought titanium
-6aluminium-7niobium alloy**

外科植入物 金属材料 Ti-6Al-7Nb合金加工材

(English Translation)

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Foreword

All technical contents of this standard is mandatory.

Using the equivalent standards ISO 5832-11:1994 "metallic surgical implant materials - Part 11. Ti-6Al-7Nb alloy was added Workers material. " For ease of use, the standard of the original international standard made the following editorial changes.

- a) delete the foreword international standards;
- b) delete the introduction of international standards. Appendix A of this standard is normative.

2 Normative references

Terms of the following documents become provisions of this standard by reference in this standard. For dated reference documents, all later Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to agreements based on this standard Whether the latest versions of these documents. For undated references, the latest version applies to this standard.

GB/T 228 materials at ambient temperature tensile test method (GB/T 228-2002, eqv ISO 6892:1998)

ETTC2. 1979 (alpha + beta) microstructure of two-phase titanium alloy bars standard

3 Chemical composition

Melting analysis should meet the requirements of detecting chemical composition, the chemical composition of the product should meet the requirements of Table 1. In addition to

hydrogen in the heat treatment Pickling and outer test, other elements may be employed ingot analysis.

4 Microstructure

When tested according to the method of Table 3, the transverse annealed microstructure alpha + beta should be processed tissue, assessed in Appendix A, the type of tissue which should meet Graph A. 1 to A. 9.

5 Mechanical Properties

When tested by the method in Chapter 6, the mechanical properties shall comply with the provisions of Table 2.

If the test results of a sample from the defective or broken in an outer standard, should be the same batch of products Another two samples retest. complex Test samples were satisfactory, the penalty whole batch of qualified products. Ruofu still failed test sample case, this batch of product failure. base on needs, Production of heat-treated before reuse or resampling.

6 Test methods

Test methods should be consistent with the provisions in Table 3. Sample processing shall comply with GB/T 228 a.

Appendix A (Normative) ETTC2, (alpha + beta) microstructure of two-phase titanium alloy standards diagrams (annealed) (FIG A.1 ~ FIG A.12)

Book GB 23102-2008/ISO 5832-11:1994 Figure A. 7 x 200 Figure A. 8 x 200 Figure A. 9 x 200 Figure A. 10 x 200 Figure A. 11 x 200 Figure A. 12 x 200 4991. 11- OSI/8002-