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(JSB/JSA)

**Stainless steel based alloys for
surgical implant applications—
Part 2:Wrought high nitrogen
stainless steel**

ICS 11.040.40

Reference number : JIS T 7403-2 : 2005 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japanese Society for Biomaterials (JSB) /Japanese Standards Association (JSA), with a draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on **ISO 5832-9:1992** *Implants for surgery—Metallic materials Part 9: Wrought high nitrogen stainless steel* for the purpose of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Ministers and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

JIS T 7403 consists of the following 2 parts:

Iron based alloys for surgical implant applications—Part 1 : Wrought stainless steel

Stainless steel based alloys for surgical implant applications—Part 2 : Wrought high nitrogen stainless steel

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Contents

Page

Introduction	1
1 Scope	1
2 Normative references.....	1
3 Terms and definitions	3
4 Quality	3
4.1 Cast analysis.....	3
4.2 Microstructure in fully annealed condition	4
4.3 Mechanical properties	4
5 Test methods.....	5
5.1 Chemical analysis test of molten steel	5
5.2 Tensile test.....	6
6 Inspection	6
7 Report	6
Annex (Informative) Comparison table between JIS and corresponding International Standard	7

Stainless steel based alloys for surgical implant applications—

Part 2: Wrought high nitrogen stainless steel

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 5832-9** *Implants for surgery—Metallic materials—Part 9: Wrought high nitrogen stainless steel* published in 1992 by employing corresponding part in the International Standard without modifying the technical contents. For concretization, this part of **JIS T 7403** adds some provisions that are not specified in the International Standard.

The portions underlined with dots are the matters not stated in the original International Standard. A list of modifications with the explanations is given in Annex (informative).

1 Scope The part of **JIS T 7403** specifies the chemical components and mechanical properties of, and the corresponding test methods for, wrought high nitrogen stainless steel for use in the manufacture of surgical implants.

NOTES 1 The mechanical properties of a sample obtained from a finished product made of this wrought high nitrogen stainless steel may not necessarily comply with those specified in this part of **JIS T 7403**.

2 With regard to solution (heat) treated wires, this part of **JIS T 7403** covers the mechanical properties of only those sizes for which data are available at present. The required tensile strength and elongation values after fraction can be determined based on the agreement between the purchaser and the manufacturer.

3 The International Standard corresponding to this part of **JIS T 7403** is as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are **IDT** (identical), **MOD** (modified), and **NEQ** (not equivalent) according to **ISO/IEC Guide 21**.

ISO 5832-9:1992 *Implants for surgery—Metallic materials—Part 9: Wrought high nitrogen stainless steel* (**MOD**)

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this part of **JIS T 7403**. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS G 0201 *Glossary of terms used in iron and steel (Heat treatment)*

JIS G 0202 *Glossary of terms used in iron and steel (testing)*

JIS G 0404 *Steel and steel products—General technical delivery requirements*