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Stainless steel tubes for boiler and heat exchanger

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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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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by The Japan Iron and Steel Federation (JISF), an accredited standards development organization. This edition replaces the previous edition (**JIS G 3463** : 2019), which has been technically revised.

However, **JIS G 3463** : 2019 may be applied in the **JIS** mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 19 December 2024.

It should be noted that being in conformance with this Standard may come under the use of the patent rights and other rights held by the following :

— Name : NIPPON STEEL Stainless Steel Corporation

— Address : 8-2 Marunouchi 1-chome, Chiyoda-ku, Tokyo

Symbol of grade	Title of invention	Patent number	Registration date of establishment of patent right
SUS821L1TB	Low-alloy duplex stainless steel wherein weld heat-affected zones have good corrosion resistance and toughness	No. 5345070	23 August 2013

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Stainless steel tubes for boiler and heat exchanger

Introduction

This Japanese Industrial Standard has been prepared based on ISO 9329-4 : 1997, Edition 1, and ISO 9330-6 : 1997, Edition 1, with some modifications of the technical contents.

Annex JA and Annex JB are unique to JIS and not given in the corresponding International Standards. The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standards. A list of modifications with the explanations is given in Annex JC.

1 Scope

This Standard specifies requirements for the stainless steel tubes used for exchanging heat between the inside and outside of the tube (hereafter referred to as tubes), such as superheater tubes of boilers, and heat exchanger tubes, condenser tubes and catalyser tubes, etc. used in chemical and petroleum industries. It is not applicable to the steel tubes for fired heater.

NOTE 1 This Standard is generally applicable to tubes of outside diameters 15.9 mm to 139.8 mm.

NOTE 2 The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 9329-4 : 1997 *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 4 : Austenitic stainless steels*

ISO 9330-6 : 1997 *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 6 : Longitudinally welded austenitic stainless steel tubes* (overall evaluation : MOD)

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 21-1.

2 Normative references

Part or all of the provisions of the following standards, through reference in this text, constitute provisions of this Standard. 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 0203 *Glossary of terms used in iron and steel (Products and quality)*

JIS G 0320 *Standard test method for heat analysis of steel products*