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**Automated eddy current examination
of steel pipes and tubes**

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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 0583**: 2012), which has been technically revised.

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Automated eddy current examination of steel pipes and tubes

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 10893-1** : 2011, Edition 1, **ISO 10893-2** : 2011, Edition 1 and respective Amendment 1 : 2020 with some modifications of the technical contents. The amendments to the said International Standards have been incorporated into this Standard.

The vertical lines on both sides and dotted underlines indicate change from the corresponding International Standards. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the requirements for automated eddy current examination of flaws on seamless and welded steel pipes and tubes, with the exception of submerged arc-welded steel tubes (hereafter referred to as tubes). The test employs the concentric coil technique or the probe coil technique. The concentric coil technique is generally applicable to the tubes with an outside diameter of 250 mm or under.

NOTE 1 In addition to the above techniques, **ISO 10893-1** and **ISO 10893-2** also specify the segment coil technique. This Standard, however, does not include the said technique since it has hardly been applied in Japan.

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

ISO 10893-1 : 2011 *Non-destructive testing of steel tubes — Part 1 : Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leak-tightness* + Amendment 1 : 2020

ISO 10893-2 : 2011 *Non-destructive testing of steel tubes — Part 2 : Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections* + Amendment 1 : 2020 (overall evaluation : MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards 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.