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**Method for ultrasonic testing for
welds of ferritic steel**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japanese Society for Non-destructive Inspection (JSNDI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS Z 3060**:2002 is replaced with this Standard.

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Method for ultrasonic testing for welds of ferritic steel

1 Scope

This Japanese Industrial Standard specifies the method for detecting discontinuities and for measuring their locations and dimensions on full penetration welds of ferritic steel with thickness of 6 mm or more by manual ultrasonic examination (hereafter referred to as “examination”) by means of an ultrasonic test instrument using ultrasonic pulse (hereafter referred to as “test instrument”) with a scope display. This Standard is not applicable to the examination of joint welds of steel pipes under production process.

2 Normative references

The following standards contain provisions which, 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 Z 2300 *Terms and definitions of nondestructive testing*

JIS Z 2305 *Non-destructive testing—Qualification and certification of NDT personnel*

JIS Z 2345 *Standard test blocks for ultrasonic testing*

JIS Z 2350 *Method for measurement of performance characteristics of ultrasonic probes*

JIS Z 2351 *Method for evaluating electronic characteristics of ultrasonic test instruments*

JIS Z 2352 *Method for evaluating performance characteristics of ultrasonic pulse-echo testing systems*

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS Z 2300**, and the following apply.

3.1 glycerol paste

a couplant made by adding a small amount of surfactant and thickener to glycerol

3.2 L direction

the principal rolling direction of rolled steel materials

3.3 C direction

the direction perpendicular to the principal rolling direction

3.4 Q direction

the direction at an angle of 45° to the principal rolling direction