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(JSNDI/JSA)

**Non-destructive testing—Ultrasonic  
thickness measurement—Part 1:  
Measurement method**

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In the event of any doubts arising as to the contents,  
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## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment 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.

Consequently **JIS Z 2355**:2005 has been withdrawn and partially replaced with this Standard.

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Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

**JIS Z 2355** series consists of the following 2 parts under the general title “*Non-destructive testing—Ultrasonic thickness measurement*”:

*Part 1: Measurement method*

*Part 2: Method for evaluating performance characteristics of ultrasonic thickness measuring equipment*

# Non-destructive testing— Ultrasonic thickness measurement— Part 1: Measurement method

## Introduction

This Japanese Industrial Standard has been prepared based on the first edition of **ISO 16809** published in 2012 with some modifications of the technical contents to facilitate smooth management of ultrasonic thickness meters based on the actual management in Japan.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JE.

## 1 Scope

This Standard specifies the thickness measurement method of metallic and non-metallic materials on the occasion of maintenance inspection or product inspection by the ultrasonic thickness measurement apparatus (hereafter referred to as measurement apparatus) utilizing the ultrasonic pulse.

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

ISO 16809:2012 *Non-destructive testing—Ultrasonic thickness measurement* (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

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) listed below shall be applied.

JIS B 0601 *Geometrical Product Specifications (GPS)—Surface texture: Profile method—Terms, definitions and surface texture parameters*

JIS G 0431 *Steel products—Employer's qualification system for non-destructive testing (NDT) personnel*

JIS Z 2300 *Terms and definitions of nondestructive testing*

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

JIS Z 2353 *Method for measurement on ultrasonic velocity of solid by pulse technique using reference test piece*