

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 2345-3 : 2018

(JSNDI/JSA)

**Standard test blocks for ultrasonic
testing—Part 3: Standard test
blocks for normal ultrasonic testing**

ICS 19.100;25.160.40

Reference number : **JIS Z 2345-3 : 2018 (E)**

Z 2345-3 : 2018

Date of Establishment: 2018-12-20

Date of Public Notice in Official Gazette: 2018-12-20

Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area

JIS Z 2345-3:2018, First English edition published in 2019-04

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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Printed in Japan

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Foreword

This Japanese Industrial Standard has been 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Consequently **JIS Z 2345**:2000 has been withdrawn and partially replaced with this Standard.

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JIS Z 2345 series consists of the following 4 parts under the general title “*Standard test blocks for ultrasonic testing*”:

Part 1: A1 Standard Test Block

Part 2: A7963 Standard Test Block

Part 3: Standard test blocks for normal ultrasonic testing

Part 4: Standard test blocks for angle beam ultrasonic testing

Standard test blocks for ultrasonic testing—Part 3: Standard test blocks for normal ultrasonic testing

Introduction

This Japanese Industrial Standard constitutes Part 3 of the four-part standard series of **JIS Z 2345**, which was initially established as a single standard in 1973 to provide comprehensive standard test block requirements, revised in 2000, and has been newly established at this time as four separate standards with the aim of ensuring conformity to **ISO 2400:2012** and **ISO 7963:2006**. The **JIS Z 2345** standard series consists of the following parts: Part 1: A1 Standard Test Block, Part 2: A7963 Standard Test Block, Part 3: Standard test blocks for normal ultrasonic testing, and Part 4: Standard test blocks for angle beam ultrasonic testing.

No corresponding International Standard has been established at this point.

1 Scope

This Standard specifies requirements for standard test blocks for calibrating ultrasonic test equipment used in manual straight beam testing.

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 G 3106 *Rolled steels for welded structure*

JIS G 4051 *Carbon steels for machine structural use*

JIS G 4053 *Low-alloyed steels for machine structural use*

JIS G 4805 *High carbon chromium bearing steels*

JIS K 2238 *Machine oils*

JIS Z 2300 *Terms and definitions of nondestructive testing*

JIS Z 2354 *Method for measurement of ultrasonic attenuation coefficient of solids*

ASTM A105 *Standard Specification for Carbon Steel Forgings for Piping Applications*

3 Terms and definitions

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

3.1

G Standard Test Block

standard test block (hereafter referred to as STB-G) used in straight beam testing for sensitivity setting of ultrasonic test equipment and performance testing of straight-beam probe