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(JSNDI/JSA)

**Standard test blocks for ultrasonic  
testing—Part 4: Standard test  
blocks for angle beam ultrasonic  
testing**

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Consequently **JIS Z 2345**:2000 has been withdrawn and partially replaced with this Standard.

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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 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 4: Standard test blocks for angle beam ultrasonic testing

## Introduction

This Japanese Industrial Standard constitutes Part 4 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 angle 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 K 2238 *Machine oils*

JIS Z 2300 *Terms and definitions of nondestructive testing*

JIS Z 2345-3 *Standard test blocks for ultrasonic testing—Part 3: Standard test blocks for normal ultrasonic testing*

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**, and the following apply.

### 3.1

#### A2 series Standard Test Block

generic designation (hereafter abbreviated as A2 series STB) for standard test blocks STB-A2, STB-A21 and STB-A22 used for sensitivity setting and system performance measurement of ultrasonic flaw detectors (hereafter referred to as detectors)