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(JSNDI/JSA)

**Non-destructive testing—Penetrant  
testing—Part 3: Reference test  
blocks**

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In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

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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 2343-3:2001** is replaced with this Standard.

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**JIS Z 2343** series consists of the following 6 parts under the general title “*Non-destructive testing—Penetrant testing*”:

*Part 1: General principles—Method for liquid penetrant testing and classification of the penetrant indication*

*Part 2: Testing of penetrant materials*

*Part 3: Reference test blocks*

*Part 4: Equipment*

*Part 5: Penetrant testing at temperatures higher than 50 degree C*

*Part 6: Penetrant testing at temperatures lower than 10 degree C*

# Non-destructive testing—Penetrant testing—Part 3: Reference test blocks

## Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 3452-3** published in 2013 by incorporating the part corresponding to this Standard without any modifications of the technical contents, but also adding some specification contents (Type 1 and Type 3 reference test blocks) that are not given in the corresponding International Standard.

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

## 1 Scope

This Standard describes three types of reference blocks to be used for **JIS Z 2343-1** and **JIS Z 2343-2**: Type 1 reference blocks are used to determine the sensitivity levels of both fluorescent and colour contrast penetrant product families; Type 2 and Type 3 reference blocks are used for routine assessment of the performance of both fluorescent and colour contrast penetrant facilities, and in-use penetrant. The reference blocks are used in the same conditions as those of test panels according to **JIS Z 2343-1** and **JIS Z 2343-2**.

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

ISO 3452-3:2013 *Non-destructive testing—Penetrant testing—Part 3: Reference test blocks* (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) indicated below shall be applied.

JIS S 0415 *Steel and steel products—Inspection documents*

NOTE: Corresponding International Standard: ISO 10474 *Steel and steel products—Inspection documents* (MOD)

JIS G 4305 *Cold-rolled stainless steel plate, sheet and strip*

JIS H 4000 *Aluminium and aluminium alloy sheets, strips and plates*

JIS Z 2244 *Vickers hardness test—Test method*

JIS Z 2300 *Terms and definitions of nondestructive testing*