



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 2343-6 : 2012

(ISO 3452-6 : 2008)

(JSNDI/JSA)

**Non-destructive testing — Penetrant
testing — Part 6: Penetrant testing
at temperatures lower than 10 °C**

ICS 19.100

Reference number : JIS Z 2343-6 : 2012 (E)

PROTECTED BY COPYRIGHT

AVA Documents
Document Sharing Hub
6 S

Date of Establishment: 2012-01-20

Date of Public Notice in Official Gazette: 2012-01-20

Investigated by: Japanese Industrial Standards Committee
Standards Board
Technical Committee on Iron and Steel

JIS Z 2343-6:2012, First English edition published in 2012-06

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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

© JSA 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Low temperature penetrant testing	2
3.1 General principles	2
3.2 Technical principles	2
3.3 Safety precautions	2
3.4 Reference blocks/test panels	2
3.5 Viscosity and penetrant testing	3
3.6 Personnel qualification	3
4 Low temperature penetrant testing process	3
4.1 General rules	3
4.2 Special requirements	3
5 Testing of low temperature penetrant testing materials	5
5.1 Preliminary notice	5
5.2 Test panels (reference test blocks)	5
5.3 Test temperature	5
5.4 Test process	5
6 Results	5

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.

This **JIS** document is protected by the Copyright Law.

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

JIS Z 2343 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 °C

Part 6: Penetrant testing at temperatures lower than 10 °C