

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

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JIS Z 2324-2 : 2020

**Non-destructive testing — Automatic  
inspection system for inner diameter  
surface of machining holes — Part 2:  
Method of testing for performance  
characteristics of laser inspection  
system**

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ICS 19.100

Reference number : JIS Z 2324-2 : 2020 (E)

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Z 2324-2 : 2020

Date of Establishment: 2020-11-20

Date of Public Notice in Official Gazette: 2020-11-20

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Safety

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JIS Z 2324-2 : 2020, First English edition published in 2022-04

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 in accordance with the Industrial Standardization Act.

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**JIS Z 2324** series consists of the following 4 parts under the general title *Non-destructive testing — Automatic inspection system for inner diameter surface of machining holes —*:

*Part 1: Standard test blocks*

*Part 2: Method of testing for performance characteristics of laser inspection system*

*Part 3: Method of testing for performance characteristics of camera inspection system*

*Part 4: Method of testing for performance characteristics of eddy current inspection system*

# Non-destructive testing — Automatic inspection system for inner diameter surface of machining holes — Part 2 : Method of testing for performance characteristics of laser inspection system

## 1 Scope

This Japanese Industrial Standard specifies the method for verifying the performance of an inspection system that is designed to perform automatic flaw inspection of the inner diameter surface (hereafter referred to as the inspection surface) of machining holes used mainly in automobile and industrial machine components (hereafter referred to as the inspection system) by means of laser beam with the use of standard test blocks specified in **JIS Z 2324-1**.

The principle of flaw detection carried out by the inspection system is detailed in Annex A.

## 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 C 1609-1 *Illuminance meters Part 1 : General measuring instruments*

JIS Z 2300 *Terms and definitions of nondestructive testing*

JIS Z 2324-1 *Non-destructive testing — Automatic inspection system for inner diameter surface of machining holes — Part 1 : Standard test blocks*

JIS Z 8120 *Glossary of optical terms*

JIS Z 8401 *Rounding of numbers*

JIS Z 9110 *General rules of recommended lighting levels*

## 3 Terms and definitions

For the purpose of this Standard, the following terms and definitions, and those given in **JIS Z 2300**, **JIS Z 2324-1** and **JIS Z 8120** apply.

### 3.1

#### probe

part of an inspection system which irradiates the inspection surface with laser light and receives the reflected light

### 3.2

#### misalignment