JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 2245 : 2016

(JISF)

Rockwell hardness test—Test method

ICS 77.040.10

Reference number : JIS Z 2245 : 2016 (E)

Date of Establishment: 1952-11-25
Date of Revision: 2016-02-22
Date of Public Notice in Official Gazette: 2016-02-22
Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area
Technical Committee on Metal and Inorganic Materials

JIS Z 2245:2016, First English edition published in 2016-09

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

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

Printed in Japan

KK/AT

Contents

Page

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 Japan Iron and Steel Federation (JISF) 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 2245**:2011 is replaced with this Standard.

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.

Rockwell hardness test—Test method

Introduction

This Japanese Industrial Standard has been prepared based on the third edition of **ISO 6508-1** published in 2015 with some modifications of the technical contents.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the method for Rockwell regular and Rockwell superficial hardness tests for metallic materials and is applicable to stationary and portable hardness testing machines. The scales and applicable range of application are shown in Tables 1 and 2.

For specific materials and/or products like hardmetals, other specific standards apply (for instance, **ISO 3738-1** and **ISO 4498**).

NOTE 1 Attention is drawn to the fact that, in **ISO 6508-1**, the use of tungsten carbide composite for ball indenters (hereafter referred to as "hardmetal ball") is considered to be the standard type of Rockwell and Rockwell superficial indenter balls. Steel indenter balls are allowed to continue to be used only when complying with Annex A. This Standard will adopt hardmetal balls as the standard indenter at the time of next revision.

NOTE 2 Attention is drawn to the fact that the result obtained with hardmetal balls may be significantly different from the result obtained with a steel balls.

NOTE 3 (Editor's note: this note is unrelated to English translation therefore omitted.)

NOTE 4 The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 6508-1:2015 *Metallic materials—Rockwell hardness test—Part 1: Test method* (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**.

WARNING Persons carrying out tests based on this Standard should be familiar with normal laboratory practice. This Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices.