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Rockwell hardness test — Test method

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Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Principle	2
5 Symbols, abbreviated terms and designations	2
5.1 Symbols and abbreviated terms	2
5.2 Designation of hardness	5
6 Testing machine	5
6.1 Testing machine	5
6.2 Spheroconical diamond indenter	5
6.3 Ball indenter	5
7 Test piece	6
7.1 Surface of test piece	6
7.2 Test piece finish	6
7.3 Minimum thickness of test piece or of layer under test	6
7.4 Test on convex cylindrical surfaces and spherical surfaces	6
8 Tests	6
8.1 Test temperature	6
8.2 Daily verification	7
8.3 Test after removal and replacement	7
8.4 Application and verification of diamond indenter and ball indenter	7
8.5 Support of test piece	7
8.6 Application of test force	7
8.7 Tests on convex cylindrical surface and spherical surface	8
8.8 Protection for apparatus from shock or vibration	8
8.9 Distance between the centres of two adjacent indentations	9
9 Uncertainty of the results	9
10 Test report	9
11 Conversions to other hardness scales or tensile strength values	9
Annex A (normative) HR30Tm and HR15Tm test for thin products	11
Annex B (normative) Minimum thickness of test piece in relation to Rockwell regular hardness and Rockwell superficial hardness	13

Annex C (normative)	Corrections to be added to Rockwell regular hardness value and Rockwell superficial hardness value obtained on convex cylindrical surfaces	17
Annex D (normative)	Corrections to be added to Rockwell hardness C scale values obtained on spherical test surfaces of various diameters	19
Annex E (normative)	Daily verification procedure of testing machine	20
Annex F (normative)	Inspection of diamond indenters	23
Annex G (informative)	Uncertainty of the measured hardness values	24
Annex H (informative)	CCM — Working group on hardness	31
Annex I (informative)	Rockwell hardness measurement traceability	32
Annex JA (informative)	Comparison table between JIS and corresponding International Standard	37

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by The Japan Iron and Steel Federation (JISF), an accredited standards development organization. This edition replaces the previous edition (**JIS Z 2245: 2016**), which has been technically revised.

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Rockwell hardness test — Test method

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 6508-1** : 2016, Edition 4, with some modifications of the technical contents.

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 specifies the method for Rockwell regular hardness and Rockwell superficial hardness tests for metallic materials, and is applicable to stationary and portable hardness testing machines. The scales and the scope of hardness are shown in Table 1 and Table 2.

For specific materials and products such as hardmetals, other standards shall 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 indenter balls) is considered to be the standard type of ball indenters for Rockwell regular hardness and Rockwell superficial hardness, and steel ball indenters are allowed to be used only in the test complying with Annex A. This Standard will adopt hardmetal indenter balls as the standard indenter at the time of next revision (see Table 1, Table 2, 5.2, 6.3 and Table E.1). Even in this case, steel balls are planned to be used as the standard indenter in the test complying with Annex A.

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

NOTE 3 (Editor's note : this NOTE 3 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 : 2016 *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.