

भारतीय मानक ब्यूरो

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भारतीय मानक मसौदा

धात्विक सामग्री - रॉकवेल कठोरता परीक्षण

भाग 3: संदर्भ खण्डों का अंशशोधन

IS 1586 (Part 3) का छठा पुनरीक्षण

Draft Indian Standard

Metallic Materials — Rockwell Hardness Test Part 3: Calibration of Reference Blocks

(Sixth Revision of IS 1586 (Part 3))

ICS 77.040.10

Mechanical Testing of Metals
Sectional Committee, MTD 03

Last date of comment:
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NATIONAL FOREWORD

This draft standard (Sixth Revision) is identical to ISO 6508-3 : 2023 'Metallic materials — Rockwell hardness test Part 3: Calibration of Reference Blocks' issued by the International Organization for Standardization (ISO), and subject to its finalization, is to be adopted by the Bureau of Indian Standards on the recommendation of the Mechanical Testing of Metals Sectional Committee and approval of the Metallurgical Engineering Division Council.

This standard was originally published in 1960 and subsequently revised in 1968, 1988, 2000, 2012 and 2018. The sixth revision of this standard has been undertaken to align with the latest version ISO 6508-2 : 2023 to harmonize it with the latest developments that have taken place at international level.

This Indian Standard is published in three parts. Other parts in this series are:

Part 1: Test method

Part 2: Verification and Calibration of Testing Machines and Indenters

The main changes compared to the previous edition are as follows:

- 1) removed all statements of requirements, permissions, and recommendations from the Scope of the document ([Clause 1](#));
- 2) addition of [Clause 3](#), Terms and definitions;
- 3) modification of the requirements for the calibration and verification of the machine and indenter ([Clause 5](#));
- 4) added a performance verification for the calibration machine and indenter ([Clause 5](#));
- 5) added a requirement to conduct a control verification prior to the calibration of reference blocks ([Clause 6](#));
- 6) added a normative [Annex D](#) for the control verification of the calibration machine ([Annex D](#)).

The text of ISO standard has been approved as suitable for publication as in Indian Standard without deviations. Certain terminologies and conventions are, however, not identical with those used in Indian Standard. Attention is especially drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, it should be read as 'Indian Standard'
- b) Comma (,) has been used as a decimal marker while in Indian Standards the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exists. The corresponding Indian Standards which are to be substituted in their place are listed below along with their degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 376 : 2011 Metallic materials — Calibration of force-proving instruments used for the verification of uniaxial testing machines	IS 4169 : 2014 / ISO 376 : 2011 Metallic materials - Calibration of force proving instruments used for the verification of uniaxial testing machines (<i>Second Revision</i>)	Identical
ISO 6508-1 : 2023 Metallic materials — Rockwell hardness test — Part 1 : Test method	IS 1586 (Part 1) : 2018 / ISO 6508-1 : 2015 Metallic materials - Rockwell hardness test Part 1 test method (<i>Fifth Revision</i>)	Identical
ISO 6508-2:2023 Metallic materials — Rockwell hardness test — Part 2: Verification and calibration of testing machines and indenters	IS 1586 (Part 2) : 2015 / ISO 6508-2 : 2018 Metallic materials - Rockwell hardness test: Part 2 verification and calibration of testing machines and indenters (<i>Fifth Revision</i>)	Identical

In reporting the result of a test or analysis made in accordance with this standard, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical-values (*second revision*)'.

The scope of the standard is as follows:

SCOPE

This document specifies a method for the calibration of reference blocks to be used for the indirect and daily verification of Rockwell hardness testing machines and indenters, as specified in ISO 6508-2. This document also specifies requirements for Rockwell machines and indenters used for calibrating reference blocks and specifies methods for their calibration and verification.

Attention is drawn to the fact that the use of hard metal for ball indenters is considered to be the standard type of Rockwell indenter ball.

The complete document/text of ISO 6508-3 : 2023 'Metallic materials — Rockwell hardness test Part 3: Calibration of Reference Blocks' may be made available, on request to:

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