INTERNATIONAL STANDARD

ISO 6508-2

Third edition 2015-03-01

Metallic materials — Rockwell hardness test —

Part 2:

Verification and calibration of testing machines and indenters

Matériaux métalliques — Essai de dureté Rockwell —

Partie 2: Vérification et étalonnage des machines d'essai et des pénétrateurs



ISO 6508-2:2015(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

	ontents	Page
Fore	reword	iv
1	Scope	
2	Normative references	1
3	General conditions	1
4	Direct verification of the testing machine 4.1 General 4.2 Calibration and verification of the test force 4.3 Calibration and verification of the depth-measuring system 4.4 Calibration and verification of the testing cycle	
	4.5 Calibration and verification of the machine hysteresis	
5	Indirect verification of the testing machine 5.1 General 5.2 Procedure 5.3 Repeatability 5.4 Bias 5.5 Uncertainty of measurement	
6	Calibration and verification of Rockwell hardness indenters 6.1 General 6.2 Diamond indenter 6.2.1 General 6.2.2 Direct calibration and verification of the diamond indenter 6.2.3 Indirect verification of diamond indenters 6.3 Ball indenter 6.3.1 Direct calibration and verification of the ball indenter	
	6.3.2 Indirect verification of the ball holder assembly	
7	Intervals between direct and indirect calibrations and verifications	
8	Verification report	
_	nex A (normative) Repeatability of testing machines	
	nex B (informative) Uncertainty of measurement of the calibration results of the hardness testing machine	1e
Rihl	liography	24

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 3, *Hardness testing*.

This third edition cancels and replaces the first edition (ISO 6508-2:2005), which has been technically revised.

ISO 6508 consists of the following parts, under the general title *Metallic materials* — *Rockwell hardness test*:

- Part 1: Test method
- Part 2: Verification and calibration of testing machines and Indenters
- Part 3: Calibration of reference blocks