

<b>STN</b>	<b>Kovové materiály</b> <b>Rockwellova skúška tvrdosti</b> <b>Časť 2: Overovanie a kalibrácia skúšobných</b> <b>strojov a vlačného telieska (ISO 6508-2: 2023)</b>	<b>STN</b> <b>EN ISO 6508-2</b>  42 0360
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Metallic materials - Rockwell hardness test - Part 2: Verification and calibration of testing machines and indenters (ISO 6508-2:2023)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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## Metallic materials - Rockwell hardness test - Part 2: Verification and calibration of testing machines and indenters (ISO 6508-2:2023)

Matériaux métalliques - Essai de dureté Rockwell -  
Partie 2: Vérification et étalonnage des machines  
d'essai et des pénétrateurs (ISO 6508-2:2023)

Metallische Werkstoffe - Härteprüfung nach Rockwell -  
Teil 2: Überprüfung und Kalibrierung der  
Prüfmaschinen und Eindringkörper (ISO 6508-2:2023)

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**EN ISO 6508-2:2023 (E)**

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## **European foreword**

This document (EN ISO 6508-2:2023) has been prepared by Technical Committee ISO/TC 164 "Mechanical testing of metals" in collaboration with Technical Committee CEN/TC 459/SC 1 "Test methods for steel (other than chemical analysis)" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## **Endorsement notice**

The text of ISO 6508-2:2023 has been approved by CEN as EN ISO 6508-2:2023 without any modification.

# INTERNATIONAL STANDARD

# ISO 6508-2

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## **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*



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ISO 6508-2:2023(E)

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## ISO 6508-2:2023(E)

### 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 document 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](http://www.iso.org/directives)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 3, *Hardness testing*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459, *ECISS - European Committee for Iron and Steel Standardization*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 6508-2:2015), which has been technically revised.

The main changes are as follows:

- removed all statements of requirements, permissions, and recommendations from the Scope of the document ([Clause 1](#));
- addition of [Clause 3](#), Terms and definitions;
- modification of the requirements for the calibration and verification of the force and depth measuring systems ([Clause 4](#));
- added a requirement for the hardness of the indenter ball holder ([Clause 6](#));
- changed the layout of [Table 8](#) ([Clause 6](#));
- modified the requirements for direct and indirect calibration and verification ([Clause 7](#));
- modified the information related to the determination of uncertainty of measurement ([Annex B](#)).

A list of all parts in the ISO 6508 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).



# Metallic materials — Rockwell hardness test —

## Part 2:

# Verification and calibration of testing machines and indenters

## 1 Scope

This document specifies two separate methods of verification of testing machines (direct and indirect) for determining Rockwell hardness in accordance with ISO 6508-1, together with a method for verifying Rockwell hardness indenters.

The direct verification method is used to determine whether the main parameters associated with the machine function, such as applied force, depth measurement, and testing cycle timing, fall within specified tolerances. The indirect verification method uses a number of calibrated reference hardness blocks to determine how well the machine can measure a material of known hardness.

This document is applicable to stationary and portable hardness testing machines.

Attention is drawn to the fact that the use of tungsten carbide composite for ball indenters is considered to be the standard type of Rockwell indenter ball.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 376, *Metallic materials — Calibration of force-proving instruments used for the verification of uniaxial testing machines*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method*

ISO 6508-3, *Metallic materials — Rockwell hardness test — Part 3: Calibration of reference blocks*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**