



SLOVENSKI STANDARD

SIST EN ISO 7963:2023

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Nadomešča:
SIST EN ISO 7963:2011

Neporušitveno preskušanje - Ultrazvočno preskušanje - Specifikacije za umeritveni vzorec št. 2 (ISO 7963:2022)

Non-destructive testing - Ultrasonic testing - Specification for calibration block No. 2 (ISO 7963:2022)

Zerstörungsfreie Prüfung – Ultraschallprüfung – Beschreibung des Kalibrierkörpers Nr.2 (ISO 7963:2022)

Essais non destructifs - Contrôle par ultrasons - Spécifications relatives au bloc d'étalonnage n° 2 (ISO 7963:2022)

Ta slovenski standard je istoveten z: EN ISO 7963:2022

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19.100	Neporušitveno preskušanje	Non-destructive testing
25.160.40	Varjeni spoji in vari	Welded joints and welds

SIST EN ISO 7963:2023

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

November 2022

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Supersedes EN ISO 7963:2010

English Version

Non-destructive testing - Ultrasonic testing - Specification for calibration block No. 2 (ISO 7963:2022)

Essais non destructifs - Contrôle par ultrasons -
Spécifications relatives au bloc d'étalonnage n° 2 (ISO
7963:2022)

Zerstörungsfreie Prüfung - Ultraschallprüfung -
Beschreibung des Kalibrierkörpers Nr.2 (ISO
7963:2022)

This European Standard was approved by CEN on 31 August 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 7963:2022) has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" in collaboration with Technical Committee CEN/TC 138 "Non-destructive testing" 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of an identical text or by endorsement, at the latest by May 2023, and conflicting national standards shall be withdrawn at the latest by May 2023.

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.

This document supersedes EN ISO 7963:2010.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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Endorsement notice

SIST EN ISO 7963:2023

The text of ISO 7963:2022 has been approved by CEN as EN ISO 7963:2022 without any modification.

INTERNATIONAL
STANDARD

ISO
7963

Third edition
2022-10

**Non-destructive testing — Ultrasonic
testing — Specification for calibration
block No. 2**

*Essais non destructifs — Contrôle par ultrasons — Spécifications
relatives au bloc d'étalonnage n° 2*

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ISO 7963:2022(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 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 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.

This document was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 3, *Ultrasonic testing* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 138, *Non-destructive testing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 7963:2006), which has been technically revised.

The main changes are as follows:

- document structure aligned with ISO 2400;
- normative references updated;
- wording updated;
- Annex A deleted and the relevant information shifted to the main text;
- [Figures 1, 3](#) and [6](#) corrected;
- tempering aligned with ISO 2400.

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.

Introduction

Calibration block No. 2 is made of steel and may be used for all ultrasonic testing, as calibration block No. 1 described in ISO 2400.

Calibration block No. 2 differs in size and shape from calibration block No.1 but is made from the same material.

Calibration block No. 2 is much smaller and lighter, and its geometry is much simpler than block No 1.

Calibration block No. 2 does not offer as much scope as the larger block No.1; in particular it is not meant to check an ultrasonic instrument completely.

However, calibration block No. 2 makes it possible, during practical testing, to check simply, from time to time, the setting of the time base and the sensitivity of the ultrasonic instrument. Moreover, it is suited to check the beam angle and the probe index point of miniature angle-beam probes.

The International Institute of Welding (IIW) and its members developed the designs of steel calibration blocks in the 1950s and 1960s which were originally indicated as “IIW calibration block 1” and “IIW calibration block 2”. These designs have been adopted widely and they form the basis of many blocks currently available.

The smaller type block is sometimes indicated as “Rompas block” or “miniature angle-beam block (MAB)”, respectively named after the original Dutch designer or the intended use.

Some commercially available blocks look similar to calibration block No. 2, however such blocks are not necessarily according to this document and can have different features, dimensions or materials.

The details of calibration block No. 2, as specified in this document, have been adapted over time.

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