STN

Zváranie Všeobecné tolerancie pre zvárané konštrukcie Rozmery pre dĺžky a uhly Tvar a poloha (ISO 13920: 2023)

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Welding - General tolerances for welded constructions - Dimensions for lengths and angles - Shape and position (ISO 13920:2023)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/23

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English Version

Welding - General tolerances for welded constructions - Dimensions for lengths and angles - Shape and position (ISO 13920:2023)

Soudage - Tolérances générales relatives aux constructions soudées - Dimensions des longueurs et angles, formes et positions (ISO 13920:2023)

Schweißen - Allgemeintoleranzen für Schweißkonstruktionen - Längen- und Winkelmaße -Form und Lage (ISO 13920:2023)

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EN ISO 13920:2023 (E)

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European foreword

This document (EN ISO 13920:2023) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by December 2023.

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The text of ISO 13920:2023 has been approved by CEN as EN ISO 13920:2023 without any modification.

INTERNATIONAL STANDARD

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Second edition 2023-06

Welding — General tolerances for welded constructions — Dimensions for lengths and angles, shape and position

Soudage — Tolérances générales relatives aux constructions soudées — Dimensions des longueurs et angles, formes et positions



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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).

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This document was prepared by Technical Committee ISO/TC 44, Welding and allied processes, Subcommittee SC 10, Quality management in the field of welding, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 121, Welding and allied processes, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 13920:1996), of which it constitutes a minor revision. The main changes are as follows:

- references have been updated;
- presentation has been updated to the latest ISO styles.

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. Official interpretations of ISO/TC 44 documents, where they exist, are available from this page: https://committee.iso.org/sites/tc44/home/interpretation.html.

Welding — General tolerances for welded constructions — Dimensions for lengths and angles, shape and position

1 Scope

This document specifies general tolerances for linear and angular dimensions and for shape and position of welded structures in four tolerance classes, based on customary workshop accuracy. The main criterion for selection of a particular tolerance class is based on the functional requirements which are to be met.

The applicable tolerances are always those which are stated in the drawing. Instead of specifying individual tolerances the tolerance classes according to this document can be used.

General tolerances for linear and angular dimensions and for shape and position as specified in this document apply for weldments, welding assemblies, welded structures, etc.

Special provisions can be necessary for complex structures.

The specifications given in this document are based on the independency principle of ISO 8015, according to which the dimensional and geometrical tolerances apply independently of each other.

Manufacturing documentation in which linear and angular dimensions or indications for shape and position are presented without individually indicated tolerances shall be deemed incomplete if there is no, or inadequate, reference to general tolerances. This does not apply to temporary dimensions.

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 463, Geometrical Product Specifications (GPS) — Dimensional measuring equipment — Design and metrological characteristics of mechanical dial gauges

ISO 1101, Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out

ISO 13385-1, Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 1: Design and metrological characteristics of callipers

ISO 13385-2, Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 2: Design and metrological characteristics of calliper depth gauges

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