



# SLOVENSKI STANDARD SIST EN ISO 13857:2020

01-april-2020

Nadomešča:  
SIST EN ISO 13857:2008

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**Varnost strojev - Varnostne razdalje, ki preprečujejo doseg nevarnih območij z zgornjimi in spodnjimi udi (ISO 13857:2019)**

Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2019)

Sicherheit von Maschinen - Sicherheitsabstände gegen das Erreichen von Gefährdungsbereichen mit den oberen und unteren Gliedmaßen (ISO 13857:2019)

Sécurité des machines - Distances de sécurité empêchant les membres supérieurs et inférieurs d'atteindre les zones dangereuses (ISO 13857:2019)

**Ta slovenski standard je istoveten z: EN ISO 13857:2019**

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**ICS:**

13.110          Varnost strojev          Safety of machinery

**SIST EN ISO 13857:2020**          en,fr,de

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EUROPEAN STANDARD

EN ISO 13857

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2019

ICS 13.110

Supersedes EN ISO 13857:2008

English Version

## Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2019)

Sécurité des machines - Distances de sécurité empêchant les membres supérieurs et inférieurs d'atteindre les zones dangereuses (ISO 13857:2019)

Sicherheit von Maschinen - Sicherheitsabstände gegen das Erreichen von Gefährdungsbereichen mit den oberen und unteren Gliedmaßen (ISO 13857:2019)

This European Standard was approved by CEN on 6 October 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

**iTeh STANDARD PREVIEW**

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Turkey and United Kingdom.



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 13857:2019) has been prepared by Technical Committee ISO/TC 199 "Safety of machinery" in collaboration with Technical Committee CEN/TC 114 "Safety of machinery" 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 April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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 13857:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZA, which is an integral part of this document.

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, Turkey and the United Kingdom.

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## Endorsement notice

The text of ISO 13857:2019 has been approved by CEN as EN ISO 13857:2019 without any modification.

## Annex ZA (informative)

### Relationship between this European Standard and the essential requirements of EU Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/549 COMMISSION IMPLEMENTING DECISION C(2016) 5884 final of 21.9.2016 to provide one voluntary means of conforming to essential requirements of New Approach Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Directive 2006/42/EC**

Essential Requirements of Directive 2006/42/EC	Clause(s)/subclause(s) of this EN	Remarks/Notes
1.1.2. Principles of safety integration	Clause 1	Safety distance for reaching over/under and through
1.4.3. Special requirements for protective devices	4.2.2.1	Reaching over protective structures
1.4.3. Special requirements for protective devices	4.2.2.2	Values
1.4.3. Special requirements for protective devices	4.2.3	Reaching around
1.4.3. Special requirements for protective devices	4.2.4	Reaching through openings
1.4.3. Special requirements for protective devices	4.2.4.1	Reaching through regular openings — Persons of 14 years of age and above
1.4.3. Special requirements for protective devices	4.2.4.2	Reaching through regular openings — persons of 3 years of age and above
1.4.3. Special requirements for protective devices	4.2.4.3	Openings of irregular shape
1.4.3. Special requirements for protective devices	4.2.5	Effect of additional protective structures on safety distances
1.4.3. Special requirements for protective devices	4.3	Safety distances to prevent access by lower limbs
1.4.3. Special requirements for protective devices	4.4	Consideration of whole body access

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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# INTERNATIONAL STANDARD

**ISO**  
**13857**

Second edition  
2019-10

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## **Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs**

*Sécurité des machines — Distances de sécurité empêchant les  
membres supérieurs et inférieurs d'atteindre les zones dangereuses*

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## ISO 13857:2019(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](http://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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 199, *Safety of machinery*.

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).

This second edition cancels and replaces the first edition (ISO 13857:2008) which has been technically revised. The main change compared to the previous edition is that the document has been made more readable and more in line with ISO 12100:2010.