
**Varnost strojev – Varnostne razdalje, ki preprečujejo doseg nevarnih območij
z zgornjimi in spodnjimi udi (ISO/DIS 13857:2006)**

Safety of machinery - Safety distances to prevent danger zones being reached by
upper and lower limbs (ISO/DIS 13857:2006)

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English Version

Safety of machinery - Safety distances to prevent danger zones being reached by upper and lower limbs (ISO/DIS 13857:2006)

Sécurité des machines - Distances de sécurité empêchant les membres supérieurs et inférieurs d'atteindre les zones dangereuses (ISO/DIS 13857:2006)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 114.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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Foreword

This document (prEN ISO 13857:2006) 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 document is currently submitted to the parallel Enquiry.

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).

Endorsement notice

The text of ISO 13857:2006 has been approved by CEN as prEN ISO 13857:2006 without any modifications.

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DRAFT INTERNATIONAL STANDARD ISO/DIS 13857

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Safety of machinery — Safety distances to prevent danger 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

(Revision of ISO 13852:1996 and ISO 13853:1998)

ICS 13.110

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ISO/CEN PARALLEL ENQUIRY

The CEN Secretary-General has advised the ISO Secretary-General that this ISO/DIS covers a subject of interest to European standardization. **In accordance with the ISO-lead mode of collaboration as defined in the Vienna Agreement, consultation on this ISO/DIS has the same effect for CEN members as would a CEN enquiry on a draft European Standard.** Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month FDIS vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 13857 was prepared by Technical Committee ISO/TC 199, *Safety of machinery*.

The first edition of ISO 13857 cancels and replaces ISO 13852:1996 and ISO 13853:1998.

With regard to ISO 13852:1996 and ISO 13853:1998, the following changes have been made:

- a) Merge of ISO 13852 and ISO 13853;
- b) Addition of Annex A giving guidance on how to use Tables 1 and 2 with intermediate values;
- c) Change of Annex A of ISO 13853 to Annex B of this standard.

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Introduction

This document is a type B standard as stated in ISO 12100-1.

The provisions of this document can be supplemented or modified by a type C standard.

NOTE For machines which are covered by the scope of a type C standard and which have been designed and built according to the provisions of that standard, the provisions of that type C standard take precedence over the provisions of this type B standard.

One method of eliminating or reducing risks caused by machinery is to make use of safety distances preventing hazard zones from being reached by the upper and lower limbs.

In specifying safety distances a number of aspects have to be taken into consideration, such as:

- reach situations occurring when machinery is being used;
- reliable surveys of anthropometric data, taking into account ethnic groups likely to be found in the countries concerned;
- biomechanical factors, such as compression and stretching of parts of the body and limits of joint rotation;
- technical and practical aspects;
- additional measures for particular groups of persons (e.g. persons with limited abilities) may be required due to a deviation from the specified body dimensions.

For the application of this document a transition period of three years is given.

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