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Machine tools – Safety – Turning machines (ISO 23125:2015)

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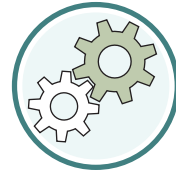
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Denna standard ersätter SS-EN ISO 23125:2010, utgåva 1 och SS-EN ISO 23125:2010/A1:2012, utgåva 1.

The European Standard EN ISO 23125:2015 has the status of a Swedish Standard. This document contains the official version of EN ISO 23125:2015.

This standard supersedes the Swedish Standard SS-EN ISO 23125:2010, edition 1 and SS-EN ISO 23125:2010/A1:2012, edition 1.

I denna rättade version har följande ändringar gjorts/ In this corrected version the following has been changed

Enligt/According to: CEN Correction Notice 2015-03-18

Rättning av referensen till EU Directive i innehållsförteckningen och i Annex ZA.
Correction of the reference to the EU Directive in the Table of contents and in the Annex ZA.

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EUROPEAN STANDARD

EN ISO 23125

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2015

ICS 25.080.01

Supersedes EN ISO 23125:2010

English Version

Machine tools - Safety - Turning machines (ISO 23125:2015)

Machines-outils - Sécurité - Machines de tournage (ISO
23125:2015)

Werkzeugmaschinen - Sicherheit - Drehmaschinen (ISO
23125:2015)

This European Standard was approved by CEN on 25 September 2014.

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.

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.

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN ISO 23125:2015) has been prepared by Technical Committee ISO/TC 39 “Machine tools” in collaboration with Technical Committee CEN/TC 143 “Machine tools - Safety” the secretariat of which is held by SNV.

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 July 2015, and conflicting national standards shall be withdrawn at the latest by July 2015.

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

This document supersedes EN ISO 23125:2010.

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 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 23125:2015 has been approved by CEN as EN ISO 23125:2015 without any modification.

Introduction

This International Standard has been prepared to be a Harmonized Standard to provide one means of conforming to the Essential Safety Requirements of the Machinery Directive of the European Union and associated EFTA regulations.

This International Standard is a type-C standard as defined in ISO 12100:2010.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered is indicated in the Scope of this International Standard. In addition, turning machines shall comply as appropriate with ISO 12100:2010 for hazards which are not covered by this International Standard.

When provisions of this type-C standard are different from those which are stated in type-A or -B standards, the provisions of this type-C standard take precedence over the provisions of the other International Standards for machines that have been designed and built in accordance with the provisions of this type-C standard.

This International Standard makes reference to the “safety categories” in EN 954-1:1996 as resistance to faults and their subsequent behaviour in the fault condition together with the “performance level” defined in ISO 13849-1:2006 in terms of probability of dangerous failure per hour. It is the decision of the user of this International Standard to apply “safety categories” or “performance levels”.

The requirements of this International Standard concern designers, manufacturers, suppliers and importers of machines described in the Scope.

This International Standard also includes a list of informative items to be provided by the manufacturer to the user.

The requirements for a new mode of operation, Mode 3 “manual intervention machining mode” will be discussed in the future.

Machine tools — Safety — Turning machines

1 Scope

This International Standard specifies the requirements and/or measures to eliminate the hazards or reduce the risks in the following groups of turning machines and turning centres, which are designed primarily to shape metal by cutting.

- **Group 1:** Manually controlled turning machines without numerical control.
- **Group 2:** Manually controlled turning machines with limited numerically controlled capability.
- **Group 3:** Numerically controlled turning machines and turning centres.
- **Group 4:** Single- or multi-spindle automatic turning machines.

NOTE 1 For detailed information on the machine groups, see the definitions in [3.4](#) and mandatory and optional modes of operation in [3.3](#).

NOTE 2 Requirements in this International Standard are, in general, applicable to all groups of turning machines. If requirements are applicable to some special group(s) of turning machines only, then the special group(s) of turning machine(s) is/are specified.

NOTE 3 Hazards arising from other metalworking processes (e.g. grinding and laser processing) are covered by other International Standards (see Bibliography).

This International Standard covers the significant hazards listed in [Clause 4](#) and applies to ancillary devices (e.g. for workpieces, tools and work clamping devices, handling devices and chip handling equipment), which are integral to the machine.

This International Standard also applies to machines which are integrated into an automatic production line or turning cell inasmuch as the hazards and risks arising are comparable to those of machines working separately.

This International Standard also includes a minimum list of safety-relevant information which the manufacturer has to provide to the user. See also ISO 12100:2010, Figure 2, which illustrates the interaction of manufacturer's and user's responsibility for the operational safety.

The user's responsibility to identify specific hazards (e.g. fire and explosion) and reduce the associated risks can be critical (e.g. whether the central extraction system is working correctly).

Where additional processes (milling, grinding, etc.) are involved, this International Standard can be taken as a basis for safety requirements; for specific information see the Bibliography.

This International Standard applies to machines that are manufactured after the date of issue of this International Standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable to its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 230-5:2000, *Test code for machine tools — Part 5: Determination of the noise emission*

ISO 447:1984, *Machine tools — Direction of operation of controls*

ISO 702 (all parts), *Machine tools — Connecting dimensions of spindle noses and work holding chucks*