



NSAI
Standards

Irish Standard
I.S. EN ISO 16089:2015

Machine tools - Safety - Stationary grinding machines (ISO/DIS 16089:2014)

I.S. EN ISO 16089:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN ISO 16089:2015 is the adopted Irish version of the European Document EN ISO 16089:2015, Machine tools - Safety - Stationary grinding machines (ISO/DIS 16089:2014)

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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Correction Notice

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Please include the following minor editorial correction(s) in the document related to:

the following language version(s) :

- English
- French
- German

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- PQ/UQ
- Enquiry
- 2nd Enquiry
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- Formal Vote
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- 2nd Parallel Formal Vote
- UAP
- TC Approval
- 2nd TC Approval
- Publication
- Parallel Publication

It has been brought to our attention that this document, issued on 2015-12-16, requires modification.

Missing superseding note.

Please find enclosed the updated English and French version.

We apologise for any inconvenience this may cause.

EUROPEAN STANDARD

EN ISO 16089

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

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English Version

Machine tools - Safety - Stationary grinding machines (ISO 16089:2015)

Machines-outils - Sécurité - Machines à meuler fixes
(ISO 16089:2015)

Werkzeugmaschinen - Sicherheit - Ortsfeste
Schleifmaschinen (ISO 16089:2015)

This European Standard was approved by CEN on 3 October 2015.

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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European foreword

This document (EN ISO 16089:2015) 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 June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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 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.

For relationship with EU Directive, 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 16089:2015 has been approved by CEN as EN ISO 16089:2015 without any modification.

EN ISO 16089:2015 (E)

Annex ZA
(informative)
Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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**INTERNATIONAL
STANDARD**

**ISO
16089**

First edition
2015-11-15

**Machine tools — Safety — Stationary
grinding machines**

Machines-outils — Sécurité — Machines à meuler fixes



Reference number
ISO 16089:2015(E)

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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 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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 10, *Safety*.

This first edition of ISO 16089 is an adaptation of European Standard EN 13218:2002+A1/AC:2010-04. Significant differences between the European Standard and ISO 16089 are as follows.

- a) Introduction of a subdivision of grinding machines into three groups, based on the degree of automation. Specific safety measures for safe design for each group of grinding machines.
- b) Introduction of the Mode of safe operation 3 (*optional special mode for manual intervention under restricted operating conditions*) with a separate selection device and specific safety measures, and a new informative Annex providing examples.
- c) Instead of the categories of EN 954-1, the required performance level according to ISO 13849-1 is defined for relevant safety functions.
- d) The decrease in the impact resistance of unprotected polycarbonate depending on the duration of use is shown in the form of an aging curve in Annex A.
- e) Measures for the use of flammable metalworking fluids are given in the new Annex H.
- f) Examples for the integration of extraction and fire extinguishing systems when using flammable metalworking fluids are given in the new Annex I.
- g) Example for rotational speed limit monitoring of the wheel spindle given in the new Annex K.

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