



BSI Standards Publication

## Machine tools safety - Presses

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Part 1: General safety requirements

This is a preview of "BS EN ISO 16092-1:20...". [Click here to purchase the full version from the ANSI store.](#)

## National foreword

This British Standard is the UK implementation of EN ISO 16092-1:2018. It is identical to ISO 16092-1:2017.

The UK participation in its preparation was entrusted to Technical Committee MTE/1/1, Machine tools - Safety.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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

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**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2018.

### Amendments/corrigenda issued since publication

Date	Text affected
31 May 2018	Implementation of CEN correction notice 28 February 2018: supersession information on the title page and in the European foreword added
30 November 2020	Removal of supersession information in the national foreword

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EUROPÄISCHE NORM

February 2018

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Supersedes EN 13736:2003+A1:2009, EN  
692:2005+A1:2009, EN 693:2001+A2:2011

English Version

## Machine tools safety - Presses - Part 1: General safety requirements (ISO 16092-1:2017)

Sécurité des machines-outils - Presses - Partie 1:  
Exigences générales de sécurité (ISO 16092-1:2017)

Werkzeugmaschinen-Sicherheit - Pressen - Teil 1:  
Allgemeine Sicherheitsanforderungen (ISO 16092-  
1:2017)

This European Standard was approved by CEN on 24 November 2017.

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.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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## European foreword

This document (EN ISO 16092-1:2018) 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 August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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 13736:2003+A1:2009, EN 692:2005+A1:2009, EN 693:2001+A2:2011.

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 organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 16092-1:2017 has been approved by CEN as EN ISO 16092-1:2018 without any modification.

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## 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/396/C(2007) to provide one voluntary means of conforming to essential requirements of EU Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery.

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)/sub-clause(s) of this EN	Remarks/Notes
Within the limits of the scope all relevant essential requirements are covered.	All normative clauses	To confer a presumption of conformity with the relevant essential requirements of Directive 2006/42/EC, this standard (providing general/common requirements for a whole machine family) has to be applied together with one of those standards as specified in the scope (providing specific requirements for a particular category of machinery within this family), once this standard is cited in the Official Journal of the European Communities under Directive 2006/42/EC.

**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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## 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 on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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

A list of all parts in the ISO 16092 series can be found on the ISO website.

## Introduction

This document is a type C standard as stated in ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard."

This document is intended to be applied with at least one of the other relevant parts (ISO 16092-2 for mechanical presses, ISO 16092-3 for hydraulic presses and, ISO 16092-4 for pneumatic presses).

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# Machine tools safety — Presses —

## Part 1: General safety requirements

### 1 Scope

This document specifies technical safety requirements and measures to be adopted by persons undertaking the design, manufacture and supply of presses which are intended to work cold metal or material partly of cold metal, but which can be used in the same way to work other sheet materials (e.g. cardboard, plastic, rubber, leather, etc.).

**NOTE 1** The design of a machine includes the study of the machine itself, taking into account all phases of the "life" of the machine mentioned in ISO 12100:2010, 5.4, and the drafting of the instructions related to all the above phases.

The requirements in this document take account of intended use, as defined in ISO 12100:2010, 3.23, as well as reasonably foreseeable misuse, as defined in ISO 12100:2010, 3.24. This document presumes access to the press from all directions, deals with all significant hazards during the various phases of the life of the machine described in [Clause 4](#), and specifies the safety measures for both the operator and other exposed persons.

**NOTE 2** All significant hazards means those identified or associated with presses at the time of the publication of this document.

This document applies to presses which can function independently and can also be used as a guide for the design of presses which are intended to be integrated in a manufacturing system.

The covered presses transmit force mechanically to cut, form, or work cold metal or other sheet materials by means of tools or dies attached to or operated by slides/ram in range in size from small high speed machines with a single operator producing small workpieces to large relatively slow speed machines with several operators and large workpieces.

This document does not cover machines whose principal designed purpose is:

- a) metal cutting by guillotine;
- b) attaching a fastener, e.g. riveting, stapling or stitching;
- c) bending or folding by press brakes or folding machines;
- d) straightening;
- e) turret punch pressing;
- f) extruding;
- g) drop forging or drop stamping;
- h) compaction of metal powder;
- i) single purpose punching machines designed exclusively for profiles, e.g. used in the construction industry;
- j) spot welding;
- k) tube bending;