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ARVJUHTIMISEGA PUURID JA PROFIILFREESID

Woodworking machines - Safety requirements - Part 3:
Numerically controlled (NC) boring and routing
machines (ISO 19085-3:2017)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 19085-3:2017 sisaldab Euroopa standardi EN ISO 19085-3:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 19085-3:2017 consists of the English text of the European standard EN ISO 19085-3:2017.
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English Version

**Woodworking machines - Safety requirements - Part 3:
Numerically controlled (NC) boring and routing machines
(ISO 19085-3:2017)**

Machines à bois - Sécurité - Partie 3: Perceuses et
défonçuses à commande numérique (CN) (ISO 19085-
3:2017)

Holzbearbeitungsmaschinen - Sicherheit - Teil 3: NC-
Bohr- und Fräsmaschinen (ISO 19085-3:2017)

This European Standard was approved by CEN on 9 October 2016.

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European foreword

This document (EN ISO 19085-3:2017) has been prepared by Technical Committee ISO/TC 39 “Machine tools” in collaboration with Technical Committee CEN/TC 142 “Woodworking machines - Safety” the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.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 848-3:2012.

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

Endorsement notice

The text of ISO 19085-3:2017 has been approved by CEN as EN ISO 19085-3:2017 without any modification.

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 Commission's standardisation request "M/396" to provide one voluntary means of conforming to *essential requirements of the new approach Machinery Directive 2006/42*.

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 (ERs) of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.1.2 Principles of safety integration		
a) fitted for its function	Clauses 5, 6, 7, 8	
b) eliminate or reduce the risks, give measures, inform	Clauses 5, 6, 7, 8	
c) intended use and reasonably foreseeable misuse	Clauses 5, 6, 7, 8	
d) constraints in use	7.5, 8.3	
e) equipment	6.1, 8.3	
1.1.3 Materials and products	6.2, 7.3	
1.1.4 Lighting	7.6, 8.3	
1.1.5 Design of machinery to facilitate its handling	7.5	
1.1.6 Ergonomics	7.5	
1.1.7 Operating position	5.2	
1.2.1 Safety and reliability of control systems	5.1, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 6.5, 6.6, 7.7, 7.8, 7.13	
1.2.2 Control devices	5.2, 5.3, 5.4, 5.6, 5.7, 5.13	
1.2.3 Starting	5.3, 5.13	
1.2.4 Stopping	5.4, 5.5, 5.8, 6.4	
1.2.4.1 Normal stop	5.4.2	
1.2.4.2 Operational stop	5.4.3	
1.2.4.3 Emergency stop	5.4.4	
1.2.5 Selection of control or operating mode	5.6	
1.2.6 Failure of the power supply	5.8, 7.7, 7.8	
1.3.1 Risk of loss of stability	6.1, 8.3	
1.3.2 Risk of break-up during operation	6.2, 8.3	
1.3.3 Risks due to falling or ejected objects	5.7.3, 6.2, 6.3, 6.5, 6.8, 6.9, 8.3	
1.3.4 Risk due to surfaces, edges or angles		Not significant, see EN ISO 12100:2010

1.3.6 Risks relating to variations in the operating conditions	5.7, 5.11	
1.3.7 Risks related to moving parts	6.5, 6.6, 6.7, 8.3	
1.3.8 Choice of protection against risks related to moving parts	6.6, 6.7, 6.8	
1.3.8.1 Moving transmission parts	6.6.3	
1.3.8.2 Moving parts involved in the process	6.6.1, 6.6.2, 6.6.4, 6.7	
1.3.9 Risk of uncontrolled movements	6.1.1	
1.4.1 General requirements	6.9	
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1.5.2 Static electricity	7.11	
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1.5.4 Errors of fitting	7.12	
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1.6.3 Isolation of energy sources	7.13, 8.3	
1.6.4 Operator intervention	7.14, 8.3	
1.6.5 Cleaning of internal parts	7.14, 8.3	
1.7.1 Information and warnings on the machinery	7.10, 8.1, 8.2	
1.7.2 Warning devices	8.1	
1.7.3 Marking of machinery	8.2	
1.7.4 Instructions	8.3	
2.3 Machinery for working wood and analogous materials		
a) guiding	6.10	
b) ejection	5.7.3, 6.2, 6.3, 6.5, 6.8, 6.9, 8.3	
c) brake	5.5, 6.4	

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).

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).

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.

The committee responsible for this document is ISO/TC 39, *Machine tools*, Subcommittee SC 4, *Woodworking machines*.

This document is intended to be used in conjunction with ISO 19085-1:2017, which gives requirements common to different machine types.

A list of all parts in the ISO 19085 series can be found on the ISO website.

Introduction

The ISO 19085 series of International Standards provides technical safety requirements for the design and construction of woodworking machinery. It concerns designers, manufacturers, suppliers and importers of the machines specified in the Scope. It also includes a list of informative items to be provided the user by the manufacturer.

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

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.

The full set of requirements for a particular type of woodworking machine are those given in the part of ISO 19085 applicable to that type, together with the relevant requirements from ISO 19085-1:2017, to the extent specified in the Scope of the applicable part of ISO 19085.

As far as possible, in parts of ISO 19085 other than ISO 19085-1:2017, safety requirements are referenced to the relevant sections of ISO 19085-1:2017 to avoid repetition and reduce their length. The other parts contain replacements and additions to the common requirements given in ISO 19085-1:2017.

This document is intended to be used in conjunction with ISO 19085-1:2017, which gives requirements common to the different machine types.

Thus, [Clauses 5, 6, 7](#) and [8](#), with their subclauses and the annexes of this document can either

- confirm as a whole,
- confirm with additions,
- exclude in total, or
- replace with specific text,

the corresponding subclauses or annexes of ISO 19085-1:2017.

This interrelation is indicated in the first paragraph of each clause, subclause or annex, right after the title, by one of the following statements:

- “This subclause of ISO 19085-1:2017 applies”;
- “This subclause of ISO 19085-1:2017 applies with the following additions”, or “This subclause of ISO 19085-1:2017 applies with the following additions, subdivided into further specific subclauses.”;
- “This subclause of ISO 19085-1:2017 does not apply.”;
- “This subclause of ISO 19085-1:2017 is replaced by the following text.”, or “This subclause of ISO 19085-1:2017 is replaced by the following text, subdivided into further specific subclauses.”.

Specific subclauses and annexes in this document without correspondent in ISO 19085-1:2017 are indicated by the introductory sentence: "This subclause (or annex) is specific to this document."

[Clauses 1, 2](#) and [4](#) replace the correspondent clauses of ISO 19085-1:2017, with no need for indication since they are specific to each part of the series.

NOTE Requirements for tools are given in EN 847-1:2013 and EN 847-2:2013.