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Woodworking machines - Safety - Part 6: Single spindle vertical moulding machines (toupie) (ISO 19085-6:2024)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Woodworking machines - Safety - Part 6: Single spindle vertical moulding machines (toupie) (ISO 19085-6:2024)

Machines à bois - Sécurité - Partie 6: Toupies
monobroches à arbre vertical (ISO 19085-6:2024)

Holzbearbeitungsmaschinen - Sicherheit - Teil 6:
Einspindelige senkrechte Tischfräsmaschinen (ISO
19085-6:2024)

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This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 03 July 2024.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 19085-6:2024) 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of an identical text or by endorsement, at the latest by November 2024, and conflicting national standards shall be withdrawn at the latest by May 2026.

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 ISO 19085-6:2017.

This document is intended to be used in conjunction with Part 1 of the series.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

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Endorsement notice

The text of ISO 19085-6:2024 has been approved by CEN as EN ISO 19085-6:2024 without any modification.

EN ISO 19085-6:2024 (E)**Annex ZA**
(informative)**Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered**

This European Standard has been prepared under a Commission's standardization request "M/396 Mandate to CEN and CENELEC for Standardisation in the field of machinery" to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery and amending Directive 95/16/EC (recast).

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 Annex I of Directive 2006/42/EC

The relevant Essential Requirements of Directive 2006/42/EC	Clauses/sub-clauses of this EN	Remarks/Notes
1.1.2 Principles of safety integration		
a) fitted for its function	Clauses 4, 5, 6, 7	
c) intended use and reasonably foreseeable misuse	Clauses 4, 5, 6, 7	
d) constraints in use	Clauses 4, 5, 6, 7	
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WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.



International Standard

ISO 19085-6

Woodworking machines — Safety — Part 6: Single spindle vertical moulding machines (toupie)

Machines à bois — Sécurité —

Partie 6: Toupies monobroches à arbre vertical

**Second edition
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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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 document 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).

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This document was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 4 *Woodworking machines*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 142, *Woodworking machines*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 19085-6:2017), which has been technically revised. The main changes are as follows:

- the Scope now specifies that machines are intended for continuous production use;
- the list of significant hazards has been moved to [Annex A](#);
- the structure has been simplified and modified, in particular in [5.6](#);
- [Subclause 6.2](#) has been updated and a new full noise test code has been added in [Annex F](#).

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The ISO 19085 series of International Standards provides technical safety requirements for the design and construction of woodworking machinery, as well as for the content of the relevant instruction handbook. It concerns designers, manufacturers, suppliers and importers of the machines specified in the Scope.

This document is a type-C standard as defined 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 organisations, 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 in 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 (as defined in ISO 12100), 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 19085-1:2021, to the extent specified in the Scope of the applicable part of ISO 19085.

As far as possible, the safety requirements of parts of the ISO 19085 series refer to the relevant clauses of ISO 19085-1. Each part includes replacements and additions to the common requirements given in ISO 19085-1.

All parts of the ISO 19085 series have the same structure, so that reference to ISO 19085-1 is made always and only from and to the same subclause number, last indent.

[Clauses 1](#) to [3](#) are specific to each part and, therefore, are distinct from ISO 19085-1:2021, Clauses 1 to 3.

For [Clauses 4](#) to [7](#) and the annexes, each subclause in ISO 19085-1:2021, is cited as:

- confirmed as a whole;
- confirmed with additions;
- excluded in total; or
- replaced with specific text.

This is indicated by one of the following possible statements:

- “ISO 19085-1:2021, [subclause/Annex], applies.”;

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- “ISO 19085-1:2021, [subclause/Annex], applies with the following additions.” or “ISO 19085-1:2021, [subclause/Annex], applies with the following additions, subdivided into further specific subclauses.”;
- “ISO 19085-1:2021, [subclause/Annex], does not apply.”;
- “ISO 19085-1:2021, [subclause/Annex], is replaced by the following text.” or “ISO 19085-1:2021, [subclause/Annex], is replaced by the following text, subdivided into further specific subclauses.”.

Other subclauses and annexes specific to this document are indicated by the introductory sentence: “Subclause/Annex specific to this document.”.

Woodworking machines — Safety —

Part 6: Single spindle vertical moulding machines (toupie)

1 Scope

This document specifies the safety requirements and measures for single spindle vertical moulding machines (defined in [3.1](#)), capable of continuous production use and hereinafter referred to also as “machines”.

The machines are designed to cut solid wood and material with similar physical characteristics to wood.

This document deals with all significant hazards, hazardous situations and events as listed in [Annex A](#), relevant to the machines when they are operated, adjusted and maintained as intended and under the conditions foreseen by the manufacturer including reasonably foreseeable misuse. Transport, assembly, dismantling, disabling and scrapping phases have also been taken into account.

This document is also applicable to machines fitted with one or more of the following devices/additional working units, whose hazards have been dealt with:

- a) device to adjust the arbor vertically;
- b) device to tilt the arbor;
- c) device to fit a manually operated tenoning sliding table;
- d) glass bead saw unit;
- e) adjustable table insert;
- f) device for changing the direction of rotation of the spindle;
- g) device for fixing shank mounted tools on the arbor;
- h) interchangeable arbor;
- i) quick tool/arbor change system;
- j) demountable power feed unit;
- k) support for the demountable power feed unit with power-driven adjustments.

This document does not apply to

- machines equipped with outboard bearings,
- machines equipped with powered movements of a front extension table and/or a tenoning sliding table.

This document is not applicable to machines intended for use in potentially explosive atmospheres or to machines manufactured prior to the date of its publication.

ISO 19085-6:2024(en)**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13857:2019, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 19085-1:2021, *Woodworking machines — Safety — Part 1: Common requirements*

EN 847-1:2017, *Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades*

EN 847-2:2017, *Tools for woodworking — Safety requirements — Part 2: Requirements for shanks of shank mounted milling tools*

EN 847-3:2013, *Tools for woodworking — Safety requirements — Part 3: Clamping devices*

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