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Woodworking machines - Safety - Part 16: Table band saws and band re-saws (ISO 19085-16:2021)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/22

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English Version

**Woodworking machines - Safety - Part 16: Table band
saws and band re-saws (ISO 19085-16:2021)**Machines à bois - Sécurité - Partie 16: Scies à ruban à
table et scies à ruban à refendre (ISO 19085-16:2021)Holzbearbeitungsmaschinen - Sicherheit - Teil 16:
Tischbandsägemaschinen und
Trennbandsägemaschinen (ISO 19085-16:2021)

This European Standard was approved by CEN on 20 August 2021.

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EN ISO 19085-16:2021 (E)

Contents	Page
European foreword.....	3
Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered	4

European foreword

This document (EN ISO 19085-16:2021) 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of an identical text or by endorsement, at the latest by May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

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 1807-1:2013.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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

Endorsement notice

The text of ISO 19085-16:2021 has been approved by CEN as EN ISO 19085-16:2021 without any modification.

EN ISO 19085-16:2021 (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	
b) eliminate or reduce the risks, give measures, inform	Clauses 4, 5, 6, 7	
c) intended use and reasonably foreseeable misuse	Clauses 4, 5, 6, 7	
d) constraints in use	6.5, 7.3	
e) equipment	5.1, 7.3	
1.1.3 Materials and products	5.2, 6.3, 6.8	
1.1.4 Lighting	6.6, 7.3	
1.1.5 Design of machinery to facilitate its handling	6.5	
1.1.6 Ergonomics	6.5	
1.2.1 Safety and reliability of control systems	4.1	
1.2.2 Control devices	4.2, 4.3, 4.4, 4.6, 4.7	
1.2.3 Starting	4.3	
1.2.4.1 Normal stop	4.4.2	
1.2.4.3 Emergency stop	4.4.4	
1.2.5 Selection of control or operating mode	4.6	
1.2.6 Failure of the power supply	4.8	
1.3.1 Risk of loss of stability	5.1, 7.3	

1.3.2 Risk of break-up during operation	5.2, 7.3	
1.3.3 Risks due to falling or ejected objects	5.2, 5.3, 5.5, 5.9, 7.3	
1.3.6 Risks relating to variations in the operating conditions	4.7	
1.3.7 Risks related to moving parts	5.6, 5.7, 7.3	
1.3.8 Choice of protection against risks related to moving parts	5.5, 5.6, 5.7, 7.3	
1.3.8.1 Moving transmission parts	5.6, 5.7	
1.3.8.2 Moving parts involved in the process	5.6	
1.3.9 Risk of uncontrolled movements	4.1	
1.4.1 General requirements	5.2, 5.5, 5.6, 5.9, 6.3	
1.4.2.1 Fixed guards	5.5.1	
1.4.2.2 Interlocking movable guards	5.5.2	
1.4.2.3 Adjustable guards restricting access	5.6.2	
1.4.3 Special requirements for protective devices	5.5.6	
1.5.1 Electricity supply	6.4, 6.13	
1.5.2 Static electricity	6.11	
1.5.3 Energy supply other than electricity	6.7, 6.8	
1.5.6 Fire	6.1, 6.11	
1.5.8 Noise	6.2	
1.5.11 External radiation	6.9	
1.5.12 Laser equipment	6.10	
1.5.13 Emission of hazardous materials and substances	6.3	
1.6.1 Machinery maintenance	6.14, 7.3	
1.6.2 Access to operating position and servicing points	4.2, 6.14, 7.3	
1.6.3 Isolation of energy sources	6.13, 7.3	
1.6.4 Operator intervention	5.5, 5.6, 7.3	
1.7.1 Information and warnings on the machinery	6.10, 7.1, 7.2	
1.7.2 Warning devices	6.10, 7.1	
1.7.3 Marking of machinery	7.2	
1.7.4 Instructions	6.10, 7.3, Annex F	
2.3 Machinery for working wood and analogous materials		

EN ISO 19085-16:2021 (E)

a) guiding	5.10	
b) ejection		Not applicable for this type of machinery in the scope
c) brake	4.5, 5.4	
d) accidental tool contact	5.5, 5.6, 7.3	

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.

INTERNATIONAL STANDARD

ISO 19085-16

First edition
2021-10

Woodworking machines — Safety — Part 16: Table band saws and band re-saws

Machines à bois — Sécurité —

Partie 16: Scies à ruban à table et scies à ruban à refendre



Reference number
ISO 19085-16:2021(E)

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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Safety requirements and measures for controls	6
4.1 Safety and reliability of control systems.....	6
4.2 Control devices.....	6
4.3 Start.....	6
4.3.1 Direct start.....	6
4.3.2 Start via control power-on.....	6
4.4 Safe stops.....	6
4.4.1 General.....	6
4.4.2 Normal stop.....	6
4.4.3 Operational stop.....	6
4.4.4 Emergency stop.....	6
4.5 Braking function of tools.....	6
4.6 Mode selection.....	6
4.7 Tool speed changing.....	7
4.7.1 Speed changing by shifting the belts on the pulleys.....	7
4.7.2 Speed changing by incremental speed change motor.....	7
4.7.3 Infinitely variable speed by frequency inverter.....	7
4.8 Failure of any power supply.....	7
4.9 Manual reset control.....	7
4.10 Standstill detection and monitoring.....	7
4.11 Machine moving parts speed monitoring.....	7
4.12 Time delay.....	7
4.13 Teleservice.....	7
5 Safety requirements and measures for protection against mechanical hazards	8
5.1 Stability.....	8
5.2 Risk of break-up during operation.....	8
5.3 Tool and tool fixing design.....	8
5.3.1 General.....	8
5.3.2 Spindle locking.....	8
5.3.3 Circular saw blade fixing device.....	8
5.3.4 Flange dimensions for circular saw blades.....	8
5.3.5 Band saw blade straining and tracking.....	8
5.3.6 Band saw blade guides.....	9
5.4 Braking.....	11
5.4.1 Braking of tools.....	11
5.4.2 Maximum run-down time.....	11
5.4.3 Brake release.....	11
5.5 Safeguards.....	11
5.5.1 Fixed guards.....	11
5.5.2 Interlocking movable guards.....	11
5.5.3 Hold-to-run control.....	11
5.5.4 Two-hand control.....	11
5.5.5 Electro-sensitive protective equipment (ESPE).....	11
5.5.6 Pressure-sensitive protective equipment (PSPE).....	12
5.5.7 Enabling control.....	12
5.6 Prevention of access to hazardous moving parts.....	12
5.6.1 Guarding of the non-cutting area of the band saw blade.....	12

ISO 19085-16:2021(E)

5.6.2	Guarding of the cutting area of the band saw blade.....	12
5.6.3	Guarding of drives.....	13
5.7	Impact hazard.....	13
5.8	Clamping devices.....	13
5.9	Measures against ejection.....	13
5.9.1	General.....	13
5.9.2	Guards material and characteristics.....	14
5.10	Workpiece supports and guides.....	14
5.10.1	Requirements for table band saws.....	14
5.10.2	Requirements for band resaws.....	16
5.11	Safety appliances.....	17
6	Safety requirements and measures for protection against other hazards.....	17
6.1	Fire.....	17
6.2	Noise.....	17
6.2.1	Noise reduction at the design stage.....	17
6.2.2	Noise emission measurement and declaration.....	18
6.3	Emission of chips and dust.....	18
6.4	Electricity.....	18
6.5	Ergonomics and handling.....	18
6.6	Lighting.....	19
6.7	Pneumatics.....	19
6.8	Hydraulics.....	19
6.9	Electromagnetic compatibility.....	19
6.10	Laser.....	19
6.11	Static electricity.....	19
6.12	Errors of fitting.....	19
6.13	Isolation.....	19
6.14	Maintenance.....	19
6.15	Relevant but not significant hazards.....	19
7	Information for use.....	19
7.1	Warning devices.....	19
7.2	Marking.....	19
7.2.1	General.....	19
7.2.2	Additional markings.....	20
7.3	Instruction handbook.....	20
7.3.1	General.....	20
7.3.2	Additional information.....	20
	Annex A (informative) List of significant hazards.....	22
	Annex B (informative) Performance level required.....	24
	Annex C (normative) Stability test.....	25
	Annex D (normative) Test for braking function.....	26
	Annex E (normative) Impact test for guards.....	27
	Annex F (normative) Noise test code.....	28
	Annex G (normative) Rigidity test of the adjustable guard above the cutting area of the band saw blade.....	32

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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

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 – Safety*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This document is intended to be used in conjunction with ISO 19085-1:2021, 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.

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.

ISO 19085-16:2021(E)

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 that the manufacturer will need to give to the user.

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 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, 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 contains replacements and additions to the common requirements given in ISO 19085-1.

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

For [Clauses 4 to 7](#) and the annexes, ISO 19085-1:2021, Clauses 4 to 7 and Annexes, can be:

- 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.”;

- “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 16: Table band saws and band re-saws

1 Scope

This document gives the safety requirements and measures for table band saws and band resaws, with manual loading and/or unloading and suitable for continuous production use, hereinafter referred to as “machines”.

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

It deals with all significant hazards, hazardous situations and events, listed in [Annex A](#), relevant to the machines, when operated, adjusted and maintained as intended and under the conditions foreseen by the manufacturer; reasonably foreseeable misuse has been considered too. Also, transport, assembly, dismantling, disabling and scrapping phases have been taken into account.

It 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 tilt the table;
- b) device to tilt the saw unit.

This document does not apply to:

- 1) machines driven by combustion engines or power take offs (PTO);
- 2) log band sawing machines;

NOTE Log band sawing machines are covered by EN 1807-2:2013.

- 3) horizontal band saws and band resaws;
- 4) machines designed for cross-cutting of firewood.

This document does not deal with hazards related to the combination of a single machine being used with any other machine (as part of a line).

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.

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 4871:1996, *Acoustics — Declaration and verification of noise emission values of machinery and equipment*

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

ISO 13849-1:2015, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

ISO 19085-16:2021(E)

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN