



SLOVENSKI STANDARD
oSIST prEN ISO 19085-5:2021
01-september-2021

Lesnoobdelovalni stroji - Varnost - 5. del: Formatne žage (ISO/DIS 19085-5:2021)

Woodworking machines - Safety - Part 5: Dimension saws (ISO/DIS 19085-5:2021)

Holzbearbeitungsmaschinen - Sicherheit - Teil 5: Formatkreissägemaschinen (ISO/DIS 19085-5:2021)

Machines à bois - Sécurité - Partie 5: Scies au format (ISO/DIS 19085-5:2021)

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Part 5: Dimension saws

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Contents

Introduction.....	8
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	2
4 Safety requirements and measures for controls.....	5
4.1 Safety and reliability of control systems.....	5
4.2 Control devices	5
4.3 Start	6
4.3.1 Direct start	6
4.3.2 Start via control power-on	6
4.4 Safe stops	7
4.4.1 General	7
4.4.2 Normal stop	7
4.4.3 Operational stop	7
4.4.4 Emergency stop	7
4.5 Braking function of tools.....	7
4.6 Mode selection.....	7
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	8
4.9 Manual reset control	8
4.10 Standstill detection and monitoring.....	8
4.11 Machine moving part speed monitoring.....	8
4.12 Time delay	8
4.13 Teleservice	8
4.14 Power-operated adjustment of the saw blades and fences	8
4.14.1 Risk of contact between the saw blades and fences.....	8
4.14.2 Crushing hazard for the body.....	9
4.14.3 Crushing and shearing hazard for the arm, hand or finger.....	9
5 Safety requirements and measures for protection against mechanical hazards.....	10
5.1 Stability	10
5.2 Risk of break-up during operation.....	10
5.3 Tool and tool fixing design	10
5.3.1 General	10
5.3.2 Spindle locking	10
5.3.3 Circular saw blade fixing device.....	10
5.3.4 Flange dimension for circular saw blades	10
5.3.5 Fixing device for milling tools.....	10
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

ISO/DIS 19085-5:2021(E)

5.5.1	Fixed guards.....	11
5.5.2	Interlocking movable guards.....	12
5.5.3	Hold-to-run control	12
5.5.4	Two-hand control.....	12
5.5.5	Electro-sensitive protective equipment (ESPE).....	12
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	Access to the saw blade above the machine table	12
5.6.2	Access to the saw blade below the machine table	18
5.6.3	Guarding of drives	19
5.7	Impact hazard.....	19
5.8	Clamping devices.....	19
5.9	Measures against ejection.....	19
5.9.1	General.....	19
5.9.2	Guards materials and characteristics.....	19
5.9.3	Anti-kickback devices.....	20
5.10	Workpiece supports and guides	23
5.10.1	Rip fence	23
5.10.2	Cross-cut fence	26
5.10.3	Workpiece clamping shoe.....	26
5.10.4	Machine table	26
5.10.5	Extension table.....	27
5.10.6	Sliding table.....	27
5.11	Safety appliances.....	27
6	Safety requirements and measures for protection against other hazards	30
6.1	Fire	30
6.2	Noise	30
6.2.1	Noise reduction at the design stage.....	30
6.2.2	Noise emission measurement and declaration.....	30
6.3	Emission of chips and dust	30
6.4	Electricity	31
6.5	Ergonomics and handling.....	31
6.6	Lighting.....	31
6.7	Pneumatics	31
6.8	Hydraulics.....	31
6.9	Electromagnetic compatibility.....	31
6.10	Laser	31
6.11	Static electricity	32
6.12	Errors of fitting	32
6.13	Isolation.....	32
6.14	Maintenance.....	32
6.15	Relevant but not significant hazards	32
7	Information for use	32
7.1	Warning devices	32
7.2	Marking.....	32
7.2.1	General.....	32
7.2.2	Additional markings	32
7.3	Instruction handbook.....	33
7.3.1	General.....	33
7.3.2	Additional information	33

Annex A (informative) List of significant hazards	36
Annex B (informative) Performance level required	39
Annex C (normative) Stability test.....	41
C.1 C.1 Test of stability during machining	41
Annex D (normative) Test for braking function	43
Annex E (normative) Impact test for guards.....	44
Annex F (normative) Noise test code.....	45
F.1 General	45
F.2 Determination of the A-weighted emission sound pressure level at workstations	45
F.2.1 Basic standards and measurement procedure	45
F.2.2 Measurement time interval	45
F.2.3 Position of microphones at workstations.....	45
F.2.4 Measurement uncertainty	45
F.3 Determination of the A-weighted sound power level.....	45
F.3.1 Basic standards and measurement procedure	45
F.3.2 Sound power level determination on very large machines.....	45
F.3.3 Measurement time interval	45
F.3.4 Measurement uncertainty.....	46
F.4 Mounting conditions.....	46
F.5 Operating conditions.....	46
F.5.1 Operation during measurements	46
F.5.2 Test material	47
F.5.2.1 Particle Board	47
F.5.2.2 Coated particle Board	47
F.5.2.3 Softwood	47
F.5.2.4 Hardwood.....	47
F.5.3 Standardized tools	47
F.6 Information to be recorded	47
F.7 Information to be reported.....	47
F.8 Declaration and verification of noise emission values	47
F.8.1 General and content.....	47
F.8.2 Example of noise emission declaration	47
Annex G (normative) Riving knife longitudinal and lateral rigidity tests.....	48
G.1 Riving knife longitudinal rigidity test	48
G.2 Riving knife lateral rigidity test	49
Annex H (normative) Minimum dimensions of machine table and extension table	50

ISO/DIS 19085-5:2021(E)

Annex I (normative) Saw blade guard rigidity test.....	51
I.1 General.....	51
I.2 Saw blade guards mounted separately from riving knife	51
I.1.1 I.2.1 Saw blade guards with lead-in.....	51
I.1.2 I.2.2 Saw blade guards with in-feed rollers	52
I.3 Riving knife mounted saw blade guards.....	53
Bibliography.....	57

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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 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*.

This second edition cancels and replaces the first edition (ISO 19085-5:2017), which has been technically revised. The main changes compared to the previous edition are as follows:

- the Scope now specifies that machines are intended for continuous production use;
- the list of significant hazards has been moved to new 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.

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.

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.

ISO/DIS 19085-5:2021(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.”.

NOTE Requirements for tools are given in EN 847-1:2017.

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Woodworking machines — Safety — Part 5: Dimension saws

1 Scope

This document gives the safety requirements and measures for dimension saws as defined in 3.1, capable of continuous production use and 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 for the main saw blade and scoring saw blade to be raised and lowered;
- b) device to tilt the main saw blade and scoring saw blade for angled cutting;
- c) device for scoring;
- d) device for grooving with milling tool with a width not exceeding 20 mm;
- e) demountable power feed unit;
- f) post-formed edge pre-cutting unit;
- g) power-operated sliding table;
- h) workpiece clamping.

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

ISO/DIS 19085-5:2021(E)

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100:2010, ISO 13849-1:2015, ISO 19085-1:2021, and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

dimension saw

hand-fed machine fitted with a single main circular saw blade, which is fixed in position during the cutting operation, and a sliding table adjacent to the saw blade

Note 1 to entry: The main parts of the machine and their terminology are shown in Figure 1.

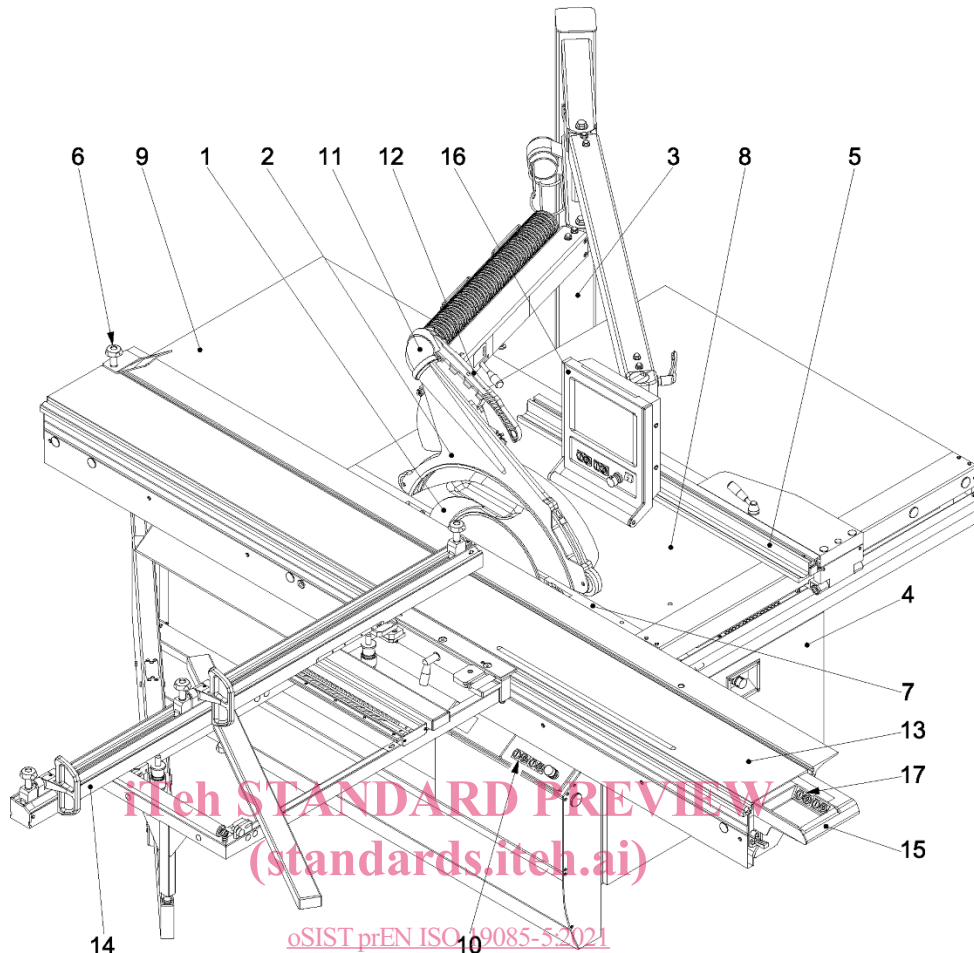
Note 2 to entry: The main saw blade is mounted on a spindle below the table.

Note 3 to entry: It is possible to operate the machine from two possible workplaces (see Figure 3).

Note 4 to entry: The machine may have any of the devices/additional working units listed in the scope.

Note 5 to entry: Dimension saws are used for ripping, cross cutting, dimensioning and grooving.

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Key

- | | | | |
|---|---------------------------|----|--|
| 1 | riving knife | 10 | controls |
| 2 | saw blade(s) guard | 11 | saw blade guard support (may include pipe for chips and dust extraction) |
| 3 | saw blade guard support | 12 | push stick |
| 4 | fixed guard beneath table | 13 | sliding table |
| 5 | rip fence | 14 | cross-cut fence mounted to the cross-cut sliding table |
| 6 | clamping shoe | 15 | sliding table handle |
| 7 | table insert | 16 | moveable control panel |
| 8 | machine table | 17 | additional controls at the rear side of the sliding table |
| 9 | extension table | | |

Figure 1 — Example of a dimension saw

3.2

grooving

making of a cut in the surface of the workpiece not deep enough to pass through using the saw blade or a milling tool

3.3