
Lesnoobdelovalni stroji - Varnost - 8. del: Stroji za širokotračno brušenje in stroji za brušenje ravnih obdelovancev (ISO/DIS 19085-8:2026)

Woodworking machines - Safety - Part 8: Wide belt sanding machines and surface treating machines (ISO/DIS 19085-8:2026)

Holzbearbeitungsmaschinen - Sicherheit - Teil 8: Breitbandschleifmaschinen zum Kalibrieren und Maschinen zur Oberflächenbearbeitung (ISO/DIS 19085-8:2026)

Machines à bois - Sécurité - Partie 8: Machines de ponçage à large bande et machines de traitement de surface (ISO/DIS 19085-8:2026)

Ta slovenski standard je istoveten z: **prEN ISO 19085-8**

ICS:

13.110	Varnost strojev	Safety of machinery
25.080.50	Brusilni in polirni stroji	Grinding and polishing machines
79.120.10	Lesnoobdelovalni stroji	Woodworking machines

oSIST prEN ISO 19085-8:2026 **en**

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DRAFT International Standard

ISO/DIS 19085-8

Woodworking machines — Safety —

Part 8: Wide belt sanding machines and surface treating machines

Machines à bois — Sécurité —

*Partie 8: Machines de ponçage à large bande et machines de
traitement de surface*

ICS: 13.110; 79.120.10

ISO/TC 39/SC 4

Secretariat: **UNI**

Voting begins on:
2026-06-01

Voting terminates on:
2026-08-24

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO/DIS 19085-8:2026(en)

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Published in Switzerland

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ISO/DIS 19085-8:2026(en)

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Safety requirements and measures for controls	9
4.1 Safety and reliability of control systems.....	9
4.2 Control devices.....	9
4.2.1 General.....	9
4.2.2 Hand-held control set.....	9
4.2.3 Reset device.....	9
4.3 Start.....	9
4.3.1 Direct start.....	9
4.3.2 Start via control power-on.....	9
4.3.3 Laser surface treating unit.....	10
4.4 Safe stops.....	10
4.4.1 Stop function.....	10
4.4.2 Normal stop.....	10
4.4.3 Operational stop.....	10
4.4.4 Emergency stop.....	10
4.5 Braking function of tools.....	10
4.6 Operating modes.....	10
4.6.1 General.....	10
4.6.2 Mode selection.....	10
4.6.3 Setting mode (MODE 2).....	11
4.7 Tool speed.....	11
4.7.1 Speed changing by shifting the belts on the pulleys.....	11
4.7.2 Speed changing by incremental speed change motor.....	11
4.7.3 Speed control by frequency inverter.....	11
4.8 Failure of any energy supply.....	11
4.9 Manual reset control.....	11
4.10 Standstill detection.....	11
4.11 Machine moving parts speed monitoring.....	11
4.12 Time delay.....	12
4.13 Teleservice.....	12
4.14 Protection against corruption.....	12
5 Safety requirements and protective measures against mechanical hazards	12
5.1 Stability.....	12
5.2 Risk of break-up during operation.....	12
5.3 Tool and tool fixing design.....	12
5.4 Tool brake.....	12
5.5 Safeguards.....	12
5.5.1 Fixed guards.....	12
5.5.2 Interlocking moveable guards.....	12
5.5.3 Hold-to-run control.....	13
5.5.4 Two-hand control.....	13
5.5.5 Electro-sensitive protective equipment (ESPE).....	13
5.5.6 Pressure sensitive protecting device (PSPE).....	13
5.5.7 Enabling control.....	13
5.6 Prevention of access to hazardous moving parts.....	13
5.6.1 Guarding of tools.....	13
5.6.2 Safeguarding of shearing zones, crushing zones and drawing-in points.....	14
5.6.3 Guarding of drives.....	15

ISO/DIS 19085-8:2026(en)

5.7	Impact hazard	15
5.8	Clamping devices	15
5.9	Measures against ejection	15
5.9.1	Devices against ejection and choice of class of guards	15
5.9.2	Guards of class A, materials and thickness	16
5.9.3	Guards of class B, materials and thickness	16
5.9.4	Anti-kickback devices	16
5.9.5	Adjustment of machine work height	17
5.10	Workpiece support and guides	17
5.10.1	General	17
5.10.2	Roller tables	18
5.10.3	Roller rails	18
6	Safety requirements and protective measures against other hazards	18
6.1	Fire	18
6.2	Noise	18
6.2.1	Noise reduction at the design stage	18
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	Risks due to surfaces, edges or angles	19
6.16	Relevant but not significant hazards	19
6.17	Substances	20
7	Information for use	20
7.1	Warning devices	20
7.2	Marking	20
7.2.1	Marking principles and methods	20
7.2.2	Marking contents	20
7.3	Instructions	20
7.3.1	Instructions principles and drafting	20
7.3.2	Instructions handbook contents	20
	Annex A (informative) List of significant hazards	22
	Annex B (informative) Performance level required	24
	Annex C (normative) Brake test	26
	Annex D (normative) Impact test for guards	27
	Annex E (normative) Noise test code	28
	Annex F (normative) Anti-kickback test	31
	Annex G (normative) Test for anti-kickback devices of finger type	32
	Annex ZA (informative) ZA - Relationship between this European Standard and the essential requirements of Regulation (EU) 2023/1230 aimed to be covered	33

ISO/DIS 19085-8:2026(en)

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 — 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 19085-1:2026.

This third edition cancels and replaces the second edition (ISO 19085-8:2024), which has been technically revised. The main changes are as follows:

- the way of reference from this document to ISO 19085-1:2026 has been simplified, as well as its explanation in Introduction, and aligned to ISO drafting rules;
- the verification methods at the end of each subclause have been deleted, since self-evident;
- [4.2](#), [4.6](#), [7.2](#), [7.3](#) have been rearranged, to follow the new subdivision in ISO 19085-1:2026;
- [4.7.3](#), [5.10](#) have been subdivided, to follow the new subdivision in ISO 19085-1:2026;
- [5.4](#), [5.9](#) have been simplified in structure, for easier reading;
- laser surface treating unit has been added in [1](#), [3.14](#), [4.3.3](#), [4.4.1](#), [6.10](#) and [7.3.2](#).

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/DIS 19085-8:2026(en)

Introduction

The ISO 19085 series 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 (e.g. regulators, accident prevention organisations, market surveillance).

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.

In this document, a subclause can refer to the same subclause of ISO 19085-1:2026 or give specific requirements or both.

Woodworking machines — Safety —

Part 8:

Wide belt sanding machines and surface treating machines

1 Scope

This document specifies the safety requirements and measures for wide belt sanding machines (defined in [3.1](#)) and for surface treating machines (defined in [3.2](#)) capable of continuous production use, altogether referred to as “machines”.

This document deals with all significant hazards, hazardous situations or hazardous events, listed in [Annex A](#), relevant to the machines when used as intended and under conditions of misuse which are reasonably foreseeable, as well as when transported, assembled, adjusted, maintained, dismantling, disabled and scrapped.

The machines are designed to process workpieces with flat surface and even thickness, in shape of panels or beams or frames, consisting of:

- solid wood;
- material with similar physical characteristics to wood (see ISO 19085-1:2021, 3.2);
- gypsum boards, gypsum bounded fibreboards;
- composite materials with core consisting of, e.g. polyurethane or mineral material;
- rock wool and glass wool;
- polymer-matrix composite materials and reinforced thermoplastic, thermoset and elastomeric materials;
- expanded polystyrene (EPS) or extruded polystyrene (XPS);
- graphite;
- carbon fiber;
- matrix engineered mineral boards, silicate boards;
- composite boards made from the materials listed above;
- all materials listed above, already lacquered.

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

- transversal sanding unit;
- cleaning brushing unit;
- satining roller unit;
- disk brushing unit;
- texturing brushing roller unit;
- texturing brushing belt unit;

ISO/DIS 19085-8:2026(en)

- cutterblock unit;
- texturing band saw unit;
- spiked roller unit;
- multi blade unit;
- conveyor directly controlled by the machine;
- additional workpiece vacuum clamping device
- laser surface treating unit;
- antistatic bar unit.

NOTE 1 An antistatic bar is a device that eliminates electrostatic charges on the workpiece to ease its subsequent cleaning from dust by airflow.

This document does not deal with hazards related to:

- specific devices other than those listed above;
- access through in-feed and out-feed openings of machines with a work piece height capacity greater than 700 mm;
- systems for powered loading or unloading, or both, of the workpiece to or from a single machine;

NOTE 2 Loading the machine manually includes manually placing the workpiece onto a conveyor directly controlled by the machine. Unloading the machine manually includes manually removing the workpiece from a conveyor directly controlled by the machine.

- out-feed workpieces on machines with feed speed higher than 60 m/min;
- interfacing of the machine with any other machine.

This document is not applicable to machines intended for use in a potentially explosive atmosphere and 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 13849-1:2023, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

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

IEC 60825-1:2014, *Safety of laser products - Part 1: Equipment classification and requirements*

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

EN ISO 11553-1:2020, *Safety of machinery - Laser processing machines - Part 1: Laser safety requirements (ISO 11553-1:2020)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100:2010, ISO 13849-1:2023, ISO 13849-1:2023, ISO/DIS 19085-1 :2026 and the following apply.

ISO/DIS 19085-8:2026(en)

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

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

3.1

wide belt sanding machine

machine used to either calibrate or sand, or both, workpieces with flat surface and even thickness, fitted with integrated feed and sanding belts positioned either above or below the workpiece level, or both

Note 1 to entry: [Figure 1](#) and [Figure 2](#) show examples of different sanding unit positions (safeguarding devices are not illustrated). Sanding belts can rotate in both directions, against the feed or in “climb cutting”, as defined in ISO DIS 19085-1:2026, 3.14 and 3.15.

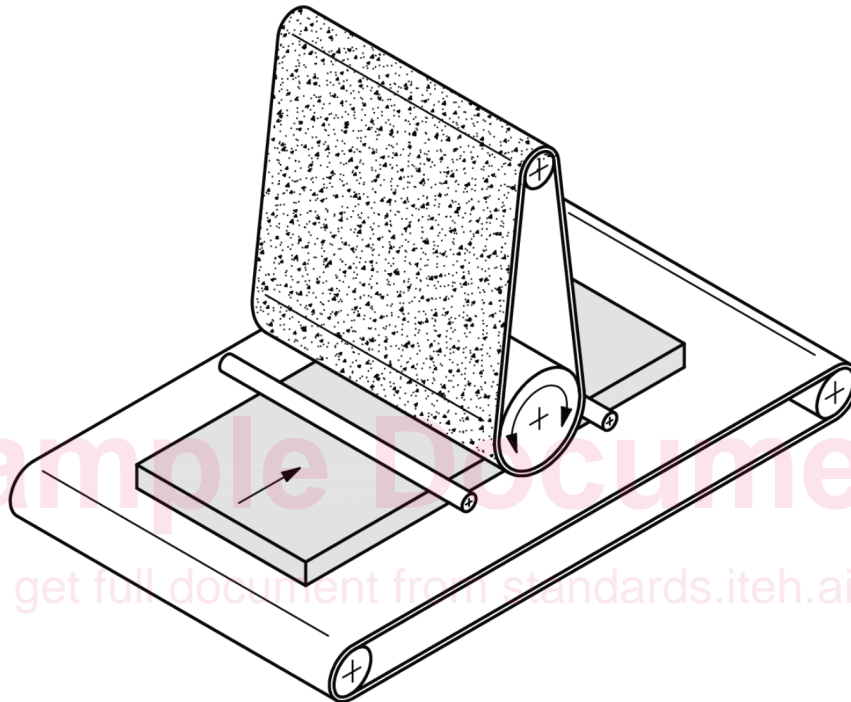


Figure 1 — Example of a sanding unit positioned above the workpiece level

ISO/DIS 19085-8:2026(en)

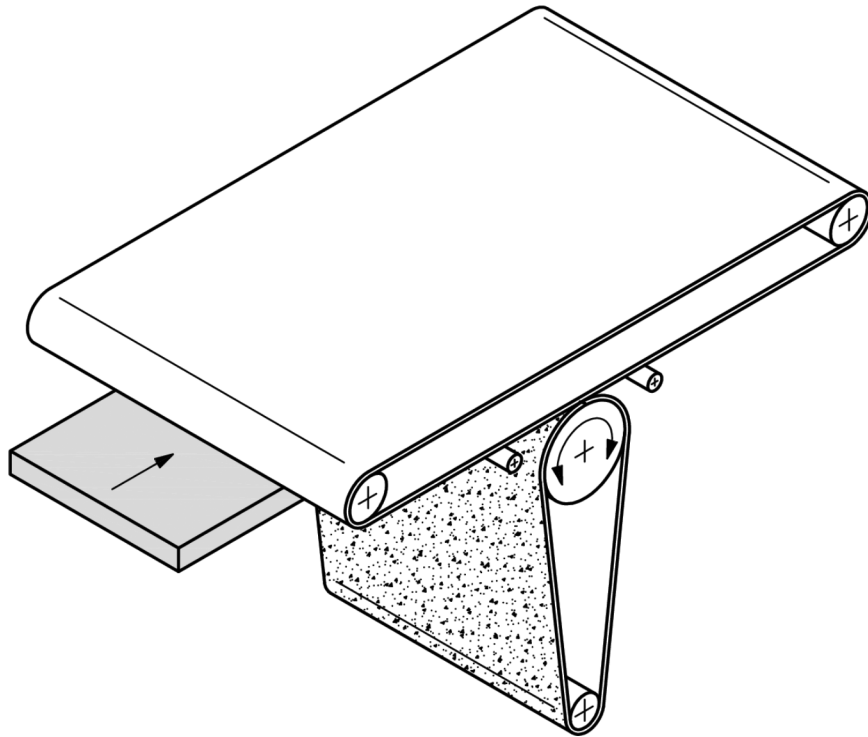


Figure 2 — Example of a sanding unit positioned below the workpiece level

3.2 surface treating machine

machine used to treat the surface of workpieces with flat surface and even thickness, fitted with

- an integrated feed, and
- any of the following working units,
 - *cleaning brushing unit* (3.4),
 - *satining roller unit* (3.5),
 - *disk brushing unit* (3.6),
 - *texturing brushing roller unit* (3.7),
 - *texturing brushing belt unit* (3.8)

positioned either above or below the work piece level, or both, with no sanding belt unit

Note 1 to entry: Typical surface treatments are texturing and brushing.

3.3 transversal sanding unit

unit with sanding belt working perpendicularly to the panel feed direction positioned above or below the workpiece level

Note 1 to entry: See [Figure 3](#) for an example of a transversal sanding unit (safeguarding devices are not illustrated).