
Lesnoobdelovalni stroji - Varnostne zahteve - 17. del: Stroji za lepljenje robnih trakov z verižnim dodajanjem (ISO/DIS 19085-17:2026)

Woodworking machines - Safety - Part 17: Edge banding machines fed by chains (ISO/DIS 19085-17:2026)

Holzbearbeitungsmaschinen - Sicherheit - Teil 17: Kantenanleimmaschinen mit Kettenbandvorschub (ISO/DIS 19085-17:2026)

Machines à bois - Sécurité - Partie 17: Machines à plaquer sur chant à alimentation par chaînes (ISO/DIS 19085-17:2026)

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79.120.10	Lesnoobdelovalni stroji	Woodworking machines

oSIST prEN ISO 19085-17:2026 **en,fr,de**

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DRAFT International Standard

ISO/DIS 19085-17

Woodworking machines — Safety —

Part 17: Edge banding machines fed by chains

Machines à bois — Sécurité —

Partie 17: Machines à plaquer sur chant à alimentation par chaînes

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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 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).

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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 19085-1:2026.

This second edition cancels and replaces the first edition (ISO 19085-17:2021), 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.

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 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 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 at 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.

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

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Woodworking machines — Safety —

Part 17: Edge banding machines fed by chains

1 Scope

This document specifies the safety requirements and measures for edge banding machines fed by chains or belts, with manual loading and unloading and maximum workpiece height capacity of 100 mm, capable of continuous production use, hereinafter referred to also 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 in one pass one end (single-end machine) or both ends (double-end machine) of panels of:

- materials with similar physical characteristics to wood (see ISO 19085-1:2021, 3.2), even with a core sheet of aluminium light alloy;
- gypsum plaster boards.

Edges to be applied by the machine can be made of:

- paper;
- melamine;
- plastic;
- composite materials;
- aluminium;
- light alloy;
- veneer;
- solid wood.

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:

- hot air banding unit;
- laser banding unit;
- infrared banding unit;
- dynamic processing units;
- sanding belt units;
- milling unit installed out of the integral enclosure at the panel side on single-end machines;

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- milling unit installed out of the integral enclosure between machines halves of double-end machines;
- additional fixed or movable workpiece support along the feed;
- additional infeed workpiece support;
- additional outfeed workpiece support;
- in-feed device for transversal loading of panels in single-end machines;
- intermediate workpiece support in double-end machines;
- automatic panel returner in single-end machines;
- automatic tool changing;
- quick tool changing system;
- automatic multiple edges infeed device;
- workpiece heaters.

This document does not deal with any hazard related to:

- a) systems for loading and unloading of the workpiece to a single machine other than automatic panel returner and infeed and outfeed workpiece supports (e.g. robots);
- b) the combination of a single machine being used with other machines (as part of a line);
- c) workpiece dividing unit installed out of the integral enclosure or whose tools protrude out of the integral enclosure;
- d) plasma banding unit.

This document is not applicable to machines intended for use in potentially explosive atmosphere nor manufactured before 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 286-2:2010, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 2: Tables of standard tolerance classes and limit deviations for holes and shafts*

ISO 7010:2019, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

ISO 11553-1:2005, *Safety of machinery — Laser processing machines — Part 1: General safety requirements*

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

ISO 13732-1:2006, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces*

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*

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3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100:2010, ISO 13849-1:2023, ISO/DIS 19085-1:2026 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 <https://www.electropedia.org/>

3.1

edge banding machine

machine designed for banding in one pass the edge on one side of the workpiece (single-end edge banding machine) or on both sides of the workpiece (double-end edge banding machine), consisting of an edge banding zone with various units (e.g. for heating, banding, pressing of the edge, etc.), of a zone for additional operations (e.g. for snipping, trimming, milling, sanding, polishing, chamfering, etc.) and in addition a sizing/profiling zone that can precede the edge banding zone.

Note 1 to entry: The main parts of a single-end machine and a double-end machine and their terminology are illustrated in [Figure 1](#) and [Figure 2](#) respectively.

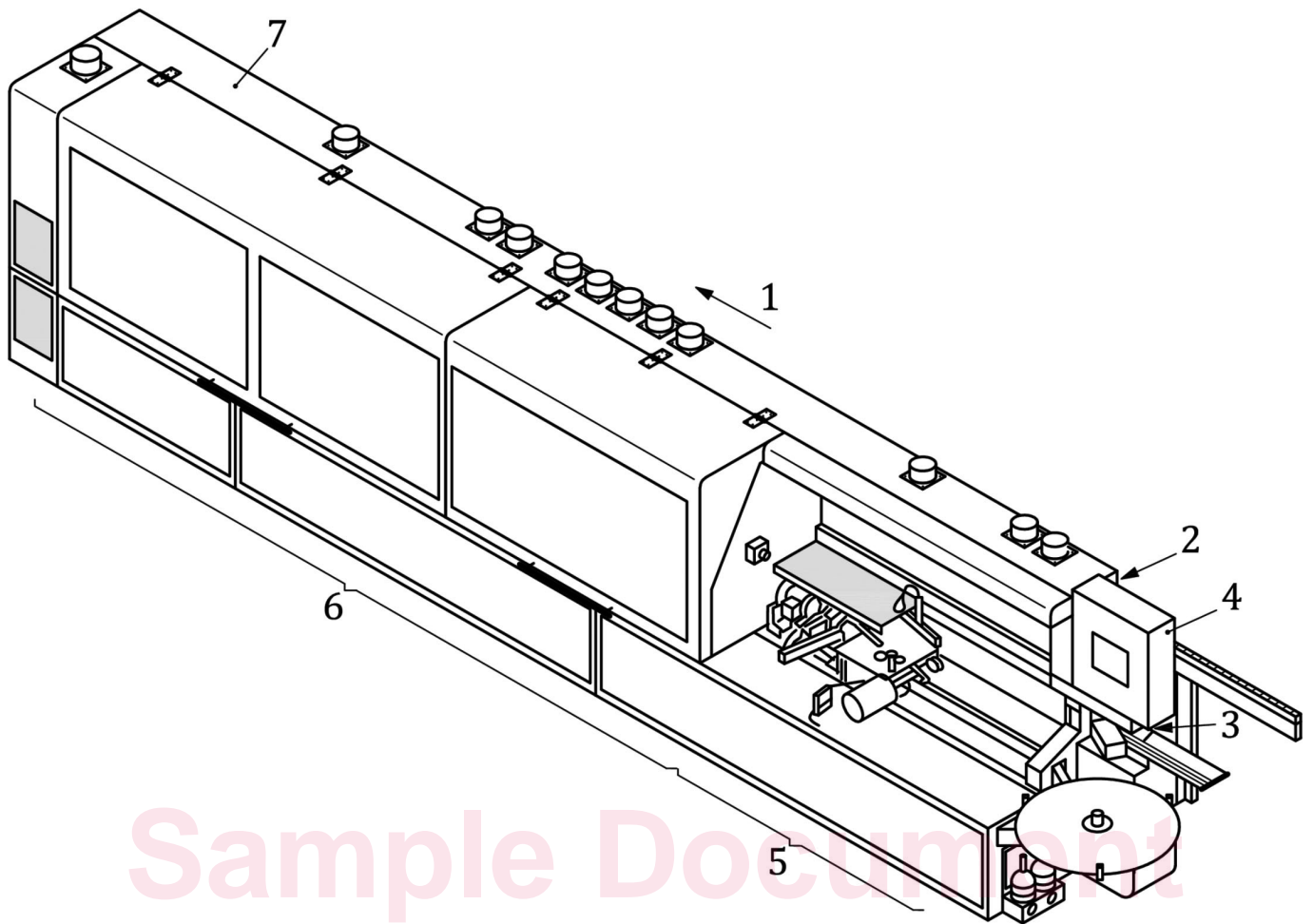
Note 2 to entry: The glue can be applied to the edge or to the workpiece side.

Note 3 to entry: Workpiece feeding can be by chains or by feeding belts.

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**Key**

- | | |
|---|---------------------------|
| 1 | feed direction |
| 2 | top pressure beam |
| 3 | chain/belt beam |
| 4 | controls |
| 5 | edge banding zone |
| 6 | additional operation zone |
| 7 | integral enclosure |

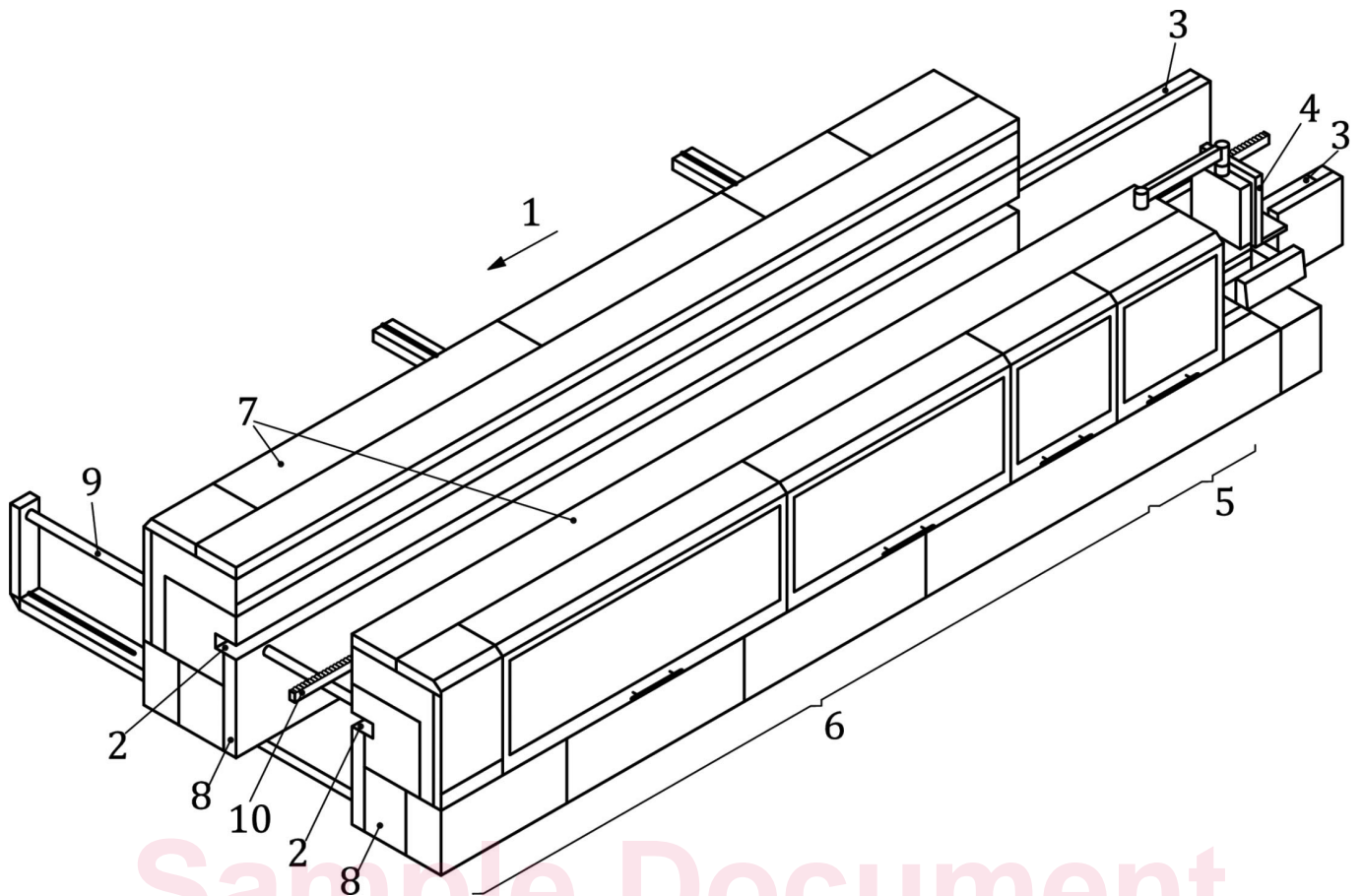
Figure 1 — Example of a single-end machine

3.2**machine half**

<double-end machines> part of a machine consisting of a frame, chain/belt beam, top pressure beam and working units

Note 1 to entry: the two machine halves process the two opposite sides of the workpiece in the same pass. One or both machine halves are capable of opening (distancing) and closing (approaching) to accept workpieces of different dimensions.

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Key

- | | |
|----|--------------------------------|
| 1 | feed direction |
| 2 | top pressure beam |
| 3 | chain beam |
| 4 | controls |
| 5 | edge banding zone |
| 6 | additional operation zone |
| 7 | integral enclosure |
| 8 | machine halves |
| 9 | feed cross drive shaft |
| 10 | intermediate workpiece support |

Figure 2 — Example of a double-end machine

3.3

integral enclosure

guarding designed to fit close to the single-end machine or to each *machine half* (3.2) of double-end machines, where certain setting adjustments can be available outside the enclosure

Note 1 to entry: the integral enclosure can also attenuate noise

3.4

gluing unit

unit for the adhesion of the edge to the panel by any technology

Note 1 to entry: *Hot melt banding unit* (3.5), *hot air banding unit* (3.6), *laser banding unit* (3.7), *infrared banding unit* (3.8) are kinds of gluing unit, and can be alternative or additional to each other in a machine.