



SLOVENSKI STANDARD
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Lesnoobdelovalni stroji - Varnost - 10. del: Žage, ki se uporabljajo na gradbišču (ISO/DIS 19085-10:2025)

Woodworking machines - Safety - Part 10: Building site saws (contractor saws) (ISO/DIS 19085-10:2025)

Holzbearbeitungsmaschinen - Sicherheit - Teil 10: Baustellenkreissägemaschinen (ISO/DIS 19085-10:2025)

Machines à bois - Sécurité - Partie 10: Scies de chantier (ISO/DIS 19085-10:2025)

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ISO/DIS 19085-10

Woodworking machines — Safety — Part 10: Building site saws (contractor saws)

Machines à bois — Sécurité —

Partie 10: Scies de chantier

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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*, 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.

This second edition replaces the first edition (ISO 19085-10:2018), which has been technically revised. The main changes are as follows:

- the way of reference to ISO 19085-1:2021 has been simplified: boilerplates and their explanations in Introduction have been deleted, since now redundant (deemed of use at 1st edition to explain the functioning of a multi-part standards to readers of the sector used to old standalone standards);
- the Scope now specifies that machines are intended for continuous production use;
- the list of significant hazards has been moved to a new [Annex A](#);
- [subclause 6.2](#) has been updated and a new full noise test code has been added in [Annex F](#);
- the verification sentences have been deleted since self-evident according to ISO Guide 78, 6.8.1.

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

<https://www.iso.org/committee/48390/x/catalogue/p/1/u/0/w/0/d/0> .

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 of its parts.

This document is a type-C standard as stated in ISO 12100:2010.

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 the 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 12100:2010), 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.

This document is intended to be used in conjunction with ISO 19085-1:2021, which gives requirements common to different woodworking machine types.

In this document, a subclause can refer to the same subclause of ISO 19085-1:2021 or give specific requirements or both. The specific text can be subdivided into further subclauses.

Woodworking machines — Safety —

Part 10: Building site saws (contractor saws)

1 Scope

This document gives the safety requirements and measures for building site saws, designed to cut wood and materials with similar physical characteristics to wood, capable of continuous production use, hereinafter referred to also as “machines”.

This document deals with all significant hazards, hazardous situations and events as 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.

The machine can also be fitted with a device for the saw blade to be manually raised and lowered through the table, whose hazards have been dealt with.

This document does not apply to the following:

- a) machines with a maximum saw blade diameter smaller than 350 mm or greater than 500 mm;
- b) hand-held motor-operated electric tools, including any adaptation permitting their use in a different mode, i.e. bench mounting;
- c) transportable motor-operated electric tools;
- d) machines with a device to tilt the saw blade for angle cutting, machines with more than one saw blade rotational speed and machines equipped with a sliding table.

NOTE 1 Hand-held motor-operated electric tools are covered by IEC 62841-1 together with IEC 62841-2-5.

NOTE 2 Transportable motor-operated electric tools are covered by IEC 62841-1 together with IEC 62841-3-1.

NOTE 3 Machines with the device to tilt the saw blade for angle cutting, machines with more than one saw blade rotational speed and machines equipped with a sliding table are considered as table saws, covered by ISO 19085-9.

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 13849-1:2023, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

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

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100:2010, ISO 13849-1:2023, ISO 19085-1:2021 and the following apply.

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

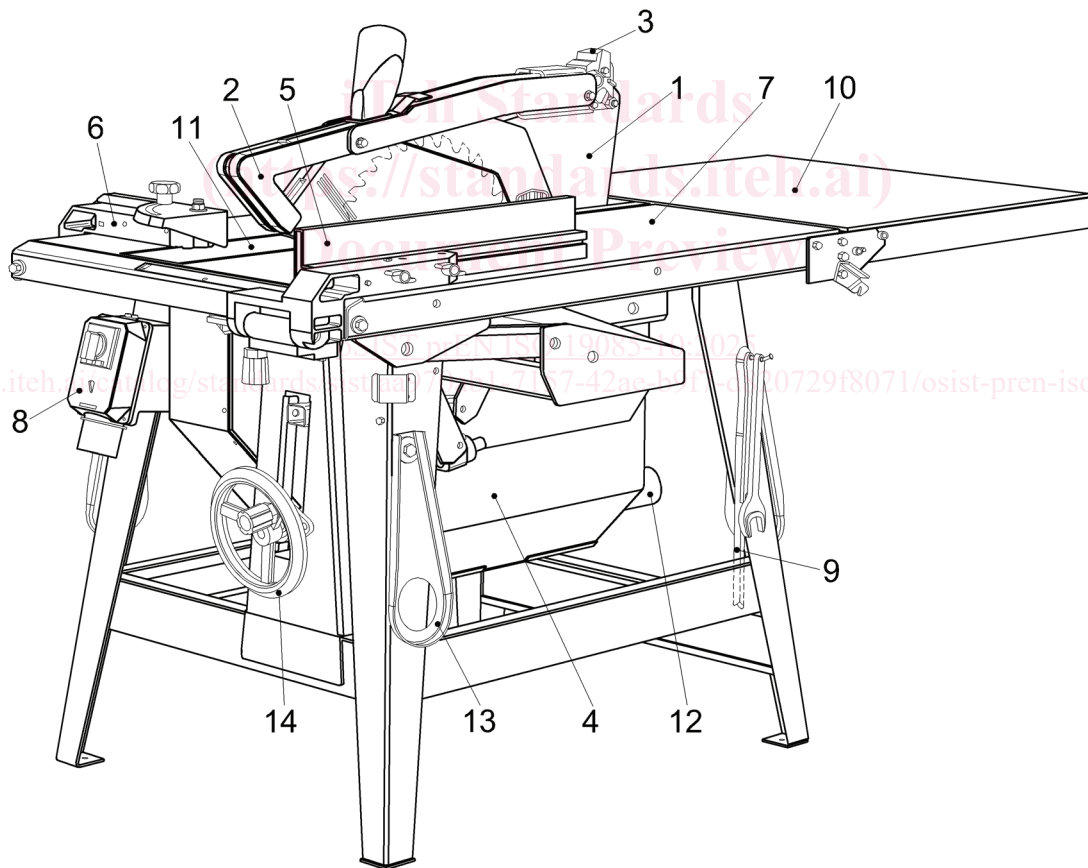
building site saw

contractor saw

hand-fed machine fitted with a saw blade mounted under the table designed for use on building sites outdoor and equipped with integral provisions for lifting, e.g. lifting eyes

Note 1 to entry: The saw blade is mounted on a horizontal spindle below the table. The machine can have the device for the saw blade to be raised and lowered through the table. An example is given in [Figure 1](#).

Note 2 to entry: The machine can have the possibility to be connected to a chip and dust extraction system.



Key

1	riving knife	8	controls on the front side
2	saw blade guard	9	push block/ push stick
3	saw blade guard support	10	extension table
4	fixed guard beneath table	11	table insert

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5	rip fence	12	chips and dust outlet (optional)
6	cross-cut fence	13	lifting eyes
7	machine table	14	cutting height adjustment (optional)

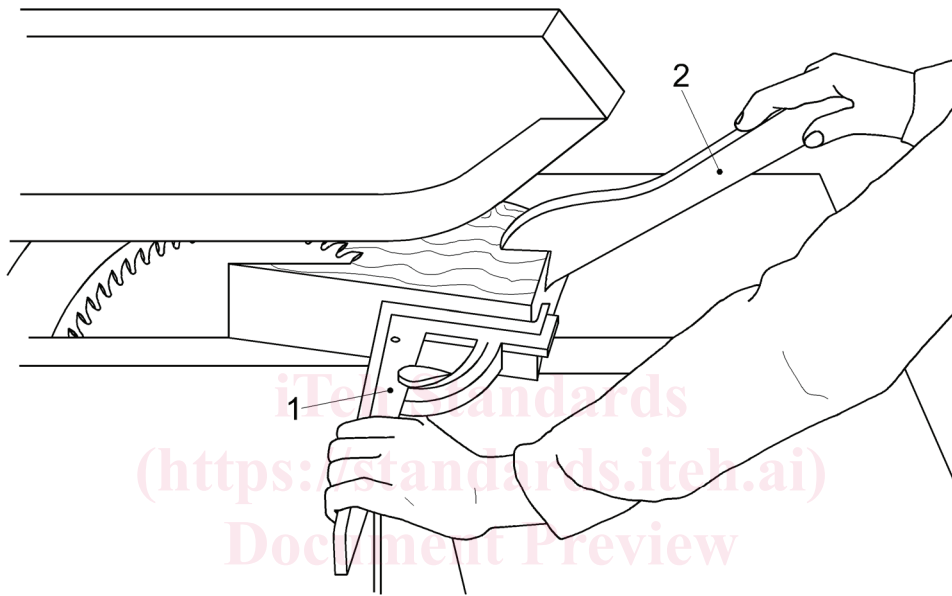
Figure 1 — Example of a building site saw

3.2

wedge cutting device

integral device to the machine to cut wedges with different angles

Note 1 to entry: An example of a wedge-cutting device is shown in [Figure 2](#).



Key

- 1 wedge cutting device
2 push stick

Figure 2 — Example of a wedge cutting device

4 Safety requirements and measures for controls

4.1 Safety and reliability of control systems

ISO 19085-1:2021, 4.1, shall apply.

[Annex B](#) provides an informative summary table of performance levels (PL) required in [Clauses 4](#) and [5](#) for each safety function.

4.2 Control devices

ISO 19085-1:2021, 4.2, shall apply.

The normal stop control device for the saw blade shall be positioned adjacent to the start control device. Both shall be positioned on the front side of the machine (see [Figure 1](#)).

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4.3 Start

4.3.1 Direct start

ISO 19085-1:2021, 4.3.1, shall apply, except the requirement on power feed, which is not mounted on building site saws.

4.3.2 Start via control power-on

Not required.

4.4 Safe stops

4.4.1 General

ISO 19085-1:2021, 4.4.1, shall apply.

4.4.2 Normal stop

ISO 19085-1:2021, 4.4.2, shall apply.

4.4.3 Operational stop

Not required.

4.4.4 Emergency stop

Not required.

4.5 Braking function of tools

ISO 19085-1:2021, 4.5, shall apply.

4.6 Mode selection

Not required.

4.7 Tool speed changing

4.7.1 Speed changing by shifting the belts on the pulleys

Not required.

4.7.2 Speed changing by incremental speed change motor

Not required.

4.7.3 Infinitely variable speed by frequency inverter

If frequency inverter is provided, a speed fixed value shall be pre-set by the machine manufacturer and the speed shall be monitored.

The control for speed monitoring shall ensure that, as soon as the speed exceeds the pre-set fixed value by more than 10 %, the drive is stopped automatically in stop category 0 according to IEC 60204- 1:2016, 9.2.2.

The SRP/CS for speed monitoring shall achieve $PL_r = c$.