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## ISO/DIS 19085-10

ISO/TC 39/SC 4

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## Woodworking machines — Safety —

### Part 10: Building site saws (contractor saws)

*Machines à bois — Sécurité —*

*Partie 10: Scies de chantier*

ICS:

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#### ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five month enquiry.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

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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](http://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](http://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 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/XXX.

This second/third/... edition cancels and replaces the first/second/... edition (), [clause(s) / subclause(s) / table(s) / figure(s) / annex(es)] of which [has / have] been technically revised.

ISO XXXX consists of the following parts. [Add information as necessary.]

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO 19085-10 was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 4, *Woodworking machines*.

ISO 19085 consists of the following parts, under the general title *Woodworking machines — Safety*:

Part 1: Common requirements

Part 2: Horizontal beam panel saws

Part 3: Numerically controlled (NC) boring and routing machines

Part 4: Vertical beam panel saws

Part 5: Dimension saws

Part 6: Single spindle vertical moulding machines

Part 7: Surface planning and thickness planing machines

Part 8: Wide belt calibrating and sanding machines

Part 9 Circular saw benches (with and without sliding table)

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Part 10: Building site saws (Contractor saws)

All these parts have been prepared simultaneously by Technical Committee ISO/TC 39, Machine tools, Subcommittee SC 4, Woodworking machines

Additional parts are to be developed in future to deal with specific requirements for other woodworking machines

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## Introduction

ISO 19085-10 was prepared by ISO/TC 39/SC4 under the Vienna Agreement in order to obtain EN ISO standards on technical safety requirements for the design and construction of woodworking machinery.

ISO 19085 as a whole concern designers, manufacturers, suppliers and importers of machines described in the Scope. It also includes a list of informative items to be provided by the manufacturer to the user.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document. In addition machines shall be designed according with the principals of ISO 12100:2010 for relevant but not significant hazards which are not dealt with covered by this International Standard.

This document together with ISO 19085-1 is a type C standard as defined in ISO 12100:2010.

When requirements of this type-C standard are different from those which are stated in type-A or -B standards, the requirements of this type-C standard take precedence over the requirements of the other International Standards for machines that have been designed and built according to the requirements of this type-C standard.

This part of ISO 19085 is intended to be used in conjunction with ISO 19085-1. As far as possible, the requirements of this part are treated by way of reference to clauses of ISO 19085-1, thus reducing considerably its length by avoiding many repetitions.

Thus, [clauses 5, 6, 7 and 8](#) with their subclauses and the annexes of this part can either

- confirm as a whole,
- confirm with additions,
- exclude in total, or
- replace with specific text.

This interrelation is indicated in the first paragraph of each subclause right after the title by one of the following possible statements:

- “This subclause of ISO 19085-1 applies.”;
- “This subclause of ISO 19085-1 applies with the following additions.” or
- “This subclause of ISO 19085-1 applies with the following additions, subdivided into further specific subclauses.”
- “Not applicable.”
- “This subclause of ISO 19085-1 is replaced by the following text.” or
- “This subclause of ISO 19085-1 is replaced by the following text, divided into further specific subclauses.”

Specific subclauses and annexes in this part without correspondent in ISO 19085-1 are indicated by “Subclause (or Annex) specific to this part.”

[Clauses 1, 2, 4](#) are always replaced with no need for indication, since they are machine specific.

Common requirements for tooling are given in EN 847-1:2013.

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# Woodworking machines — Safety —

## Part 10: Building site saws (contractor saws)

### 1 Scope

This international standard deals with all significant hazards, hazardous situations and events as listed in [Clause 4](#) which are relevant to displaceable building site saws, hereinafter referred to as “machines”, designed to cut solid wood and material with similar characteristics to wood (see ISO 19085-1:2016), when they are operated, adjusted and maintained as intended and under the conditions foreseen by the manufacturer including reasonably foreseeable misuse. Also transport, assembly, dismantling, disabling and scrapping phases are taken into account.

NOTE 1 For the definition of displaceable machine see 3.5 of ISO 19085-1.

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

This international standard does not apply to:

- a) machines with a maximum saw blade diameter smaller than 350 mm and greater than 500 mm;
- b) hand held woodworking machines including any adaptation permitting their use in a different mode, i.e. bench mounting

NOTE 2 Hand-held motor-operated electric tool and a saw bench to form an integrated whole are covered by IEC 62841-1:2014 together with IEC 62841-2-5:2014.

- c) Machines with a facility 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 3 Machines with the facility 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.

- d) machines intended for use in potentially explosive atmosphere;
- e) machines manufactured before the date of its publication as an international standard.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7960:1995, *Airborne noise emitted by machine tools — Operating conditions for woodworking machines*

ISO 9614-1:1993, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points*

ISO 11202:2010, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections*

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ISO 11204:2010, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections*

ISO 11688-1:2006, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning*

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

ISO 13849-1:2016, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

ISO 13849-2:2003, *Safety of machinery — Safety-related parts of control systems — Part 2: Validation*

ISO 13850:2006, *Safety of machinery — Emergency stop — Principles for design*

ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 14118:2000, *Safety of machinery — Prevention of unexpected start-up*

ISO 14119:2013, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

ISO 19085-1, *Woodworking machines – Safety – ISO 19085-1: common requirements*

EN 349:1993+A1: 2009, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 847-1:2013, *Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades*

EN 50370-1:2005, *Electromagnetic compatibility (EMC) — Product family standard for machine-tools — Part 1: Emission*

EN 50370-2:2003, *Electromagnetic compatibility (EMC) — Product family standard for machine-tools — Part 2: Immunity*

IEC 60204-1:2005, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100:2010, ISO 13849-1:2016, ISO 19085-1 and the following apply.

#### 3.1 building site saw contractor saw

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

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

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

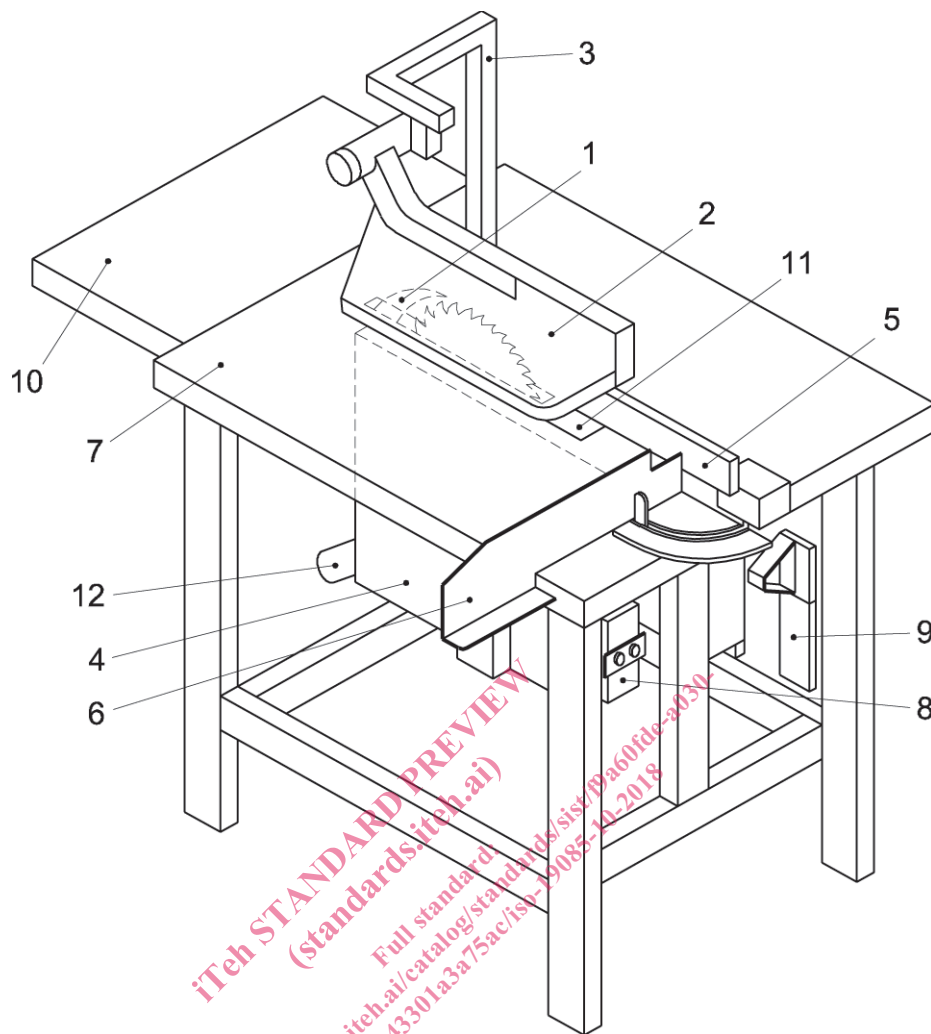


Figure 1 a)

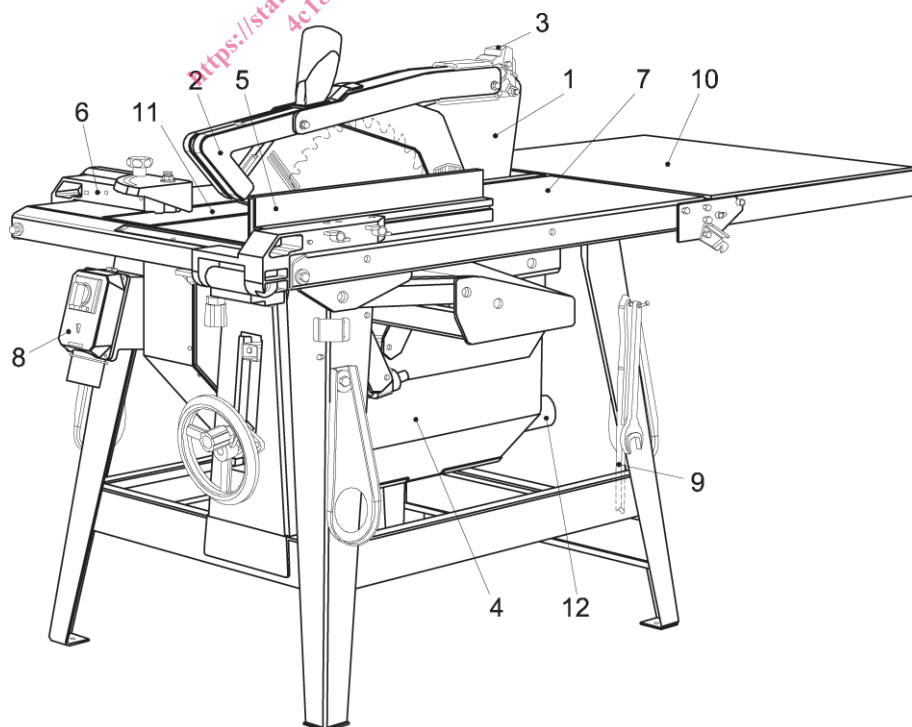


Figure 1 b)

Key

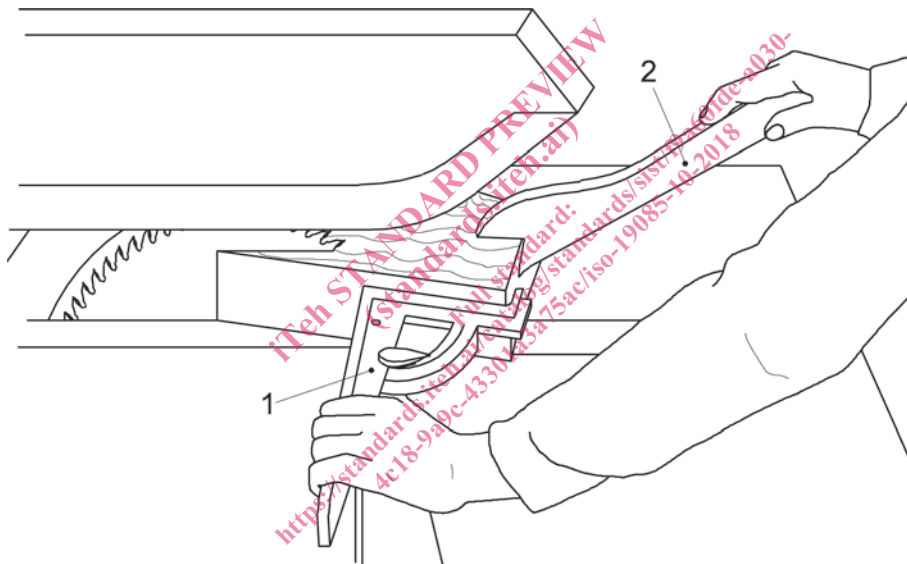
- |   |                           |    |   |
|---|---------------------------|----|---|
| 1 | ripping knife             | 7  | machine table                                       |
| 2 | saw blade guard           | 8  | controls on the front side                          |
| 3 | saw blade guard support   | 9  | push block/ push stick                              |
| 4 | fixed guard beneath table | 10 | extension table                                     |
| 5 | rip fence                 | 11 | table insert  |
| 6 | cross-cut fence           | 12 | possible place for connection for an exhaust outlet |

Figure 1 — Examples 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: 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 wedge cutting device

4 List of significant hazards

This clause contains all significant hazards, hazardous situations and events (see ISO 12100:2010), identified by risk assessment as significant for the machines as defined in the scope and which require action to eliminate or reduce the risk. This document deals with these significant hazards by defining safety requirements and/or measures or by reference to relevant standards.

These hazards are listed in Table 1: