



CSA/ANSI C22.2 No. 19085-11:23
(ISO 19085-11:2020, MOD)
National Standard of Canada
American National Standard



CSA/ANSI C22.2 No. 19085-11:23
Woodworking machines — Safety — Part 11: Combined machines
(ISO 19085-11:2020, MOD)



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CSA/ANSI C22.2 No. 19085-11:23 January 2023

Title: *Woodworking machines — Safety — Part 11: Combined machines*

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**CSA/ANSI C22.2 No. 19085-11:23
Woodworking machines — Safety —
Part 11: Combined machines
(ISO 19085-11:2020, MOD)**

Prepared by
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Approved on October 28, 2022 by ANSI
Published in January 2023 by CSA Group
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ICS 13.110; 79.120.10
ISBN 978-1-4883-4501-2

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CSA/ANSI C22.2 No. 19085-11:23

Woodworking machines — Safety — Part 11: Combined machines (ISO 19085-11:2020, MOD)

CSA Preface

This is the first edition of CSA/ANSI C22.2 No. 19085-11, *Woodworking machines — Safety — Part 11: Combined machines*, which is an adoption, with North American deviations, of the identically titled ISO (International Organization for Standardization) Standard 19085-11 (first edition, 2020-03). It is one in a series of Standards issued by CSA Group under Part II of the *Canadian Electrical Code*.

For brevity, this Standard will be referred to as “CSA/ANSI C22.2 No. 19085-11” throughout.

This Standard covers the safety requirements and measures for combined machines.

The North American deviations are intended to meet product requirements and to align with the *Canadian Electrical Code, Part I* (Canada) and the *National Electrical Code* (United States).

This Standard is intended to be used in conjunction with CSA/ANSI C22.2 No. 19085-1:19, *Woodworking machines — Safety — Part 1: Common requirements* (adopted ISO 19085-1:2017, with North American deviations).

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was reviewed for North American adoption by the CSA Subcommittee on Electrical Equipment for Woodworking Machinery, under the jurisdiction of the CSA Technical Committee on Industrial Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

This Standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

Interpretations: The Strategic Steering Committee on Requirements for Electrical Safety has provided the following direction for the interpretation of Standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant CSA committee interpretation has not already been published, CSA Group’s procedures for interpretation shall be followed to determine the intended safety principle.”

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INTERNATIONAL
STANDARD

ISO
19085-11

First edition
2020-03

Woodworking machines — Safety —
Part 11:
Combined machines

Machines à bois — Sécurité —

Partie 11: Machines combinées



Reference number
ISO 19085-11:2020(E)

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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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This document was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 4, *Woodworking machines*.

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 19085-1:2017, which gives requirements common to different machine types and with ISO 19085-5:2017, ISO 19085-6:2017, ISO 19085-7:2019 and ISO 19085-9:2019, which give requirements specific for the integrated working units.

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

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.

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 19085-1:2017, to the extent specified in the Scope of the applicable part of ISO 19085.

As far as possible, in this document, safety requirements are referenced to the relevant sections of ISO 19085-1:2017, ISO 19085-5:2017, ISO 19085-6:2017, ISO 19085-7:2019 and ISO 19085-9:2019 to avoid repetition and reduce their length.

Specific subclauses and annexes in this document without correspondent in ISO 19085-1, ISO 19085-5, ISO 19085-6, ISO 19085-7 or ISO 19085-9 are indicated by the introductory sentence: "Subclause (or annex) specific to this document."

Clauses 1, 2, 4 replace the correspondent clauses of ISO 19085-1:2017, with no need for indication since they are specific to each part of the series.

NOTE Requirements for tools are given in EN 847-1:2017 and EN 847-2:2017.

DV.1 Replace all references to "ISO 12100" and "ISO 12100:2010" with "ANSI/ISO 12100" throughout this Standard.

DV.2 Replace all references to "ISO 19085-1" and "ISO 19085-1:2017" with "CSA/ANSI C22.2 No. 19085-1" throughout this Standard.

DV.3 Replace all references to "ISO 19085-6" and "ISO 19085-6: 2017" with "CSA/ANSI C22.2 No. 19085-6" throughout this Standard.

Woodworking machines — Safety — Part 11: Combined machines

1 Scope

This document gives the safety requirements and measures for stationary and displaceable combined woodworking machines, having at least two separately usable working units and with manual loading and unloading of the workpiece, hereinafter referred to as “machines”. The integrated working units can be of these types only:

- a sawing unit;
- a moulding unit;
- a planing unit.

The machines are designed to cut solid wood and material with similar physical characteristics to wood.

NOTE 1 For the definitions of stationary and displaceable machines, see ISO 19085-1:2017, 3.4 and 3.5.

This document deals with all significant hazards, hazardous situations and events as listed in Clause 4, relevant to the machines, when 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 have been taken into account.

NOTE 2 For relevant but not significant hazards, e.g. sharp edges of the machine frame, see ISO 12100:2010.

This document does apply to machines also equipped with the devices/additional working units listed in the Scopes of ISO 19085-5:2017, ISO 19085-6:2017, ISO 19085-7:2019 and ISO 19085-9:2019.

This document does not apply to:

- a) machines incorporating only a planing unit and a mortising device;

NOTE 3 Such machines are dealt with in ISO 19085-7:2019.

- b) combined machines incorporating a band saw unit;
- c) machines with a mortising unit with a separate drive other than the planing unit drive;
- d) machines intended for use in potentially explosive atmosphere;
- e) machines manufactured before the date of its publication as an International Standard.

1DV Modify Clause 1 by adding the following to the first paragraph:

This Standard applies to combined woodworking machines that are intended to be installed and used in accordance with the National Electrical Code (NFPA 70) in the United States and the Canadian Electrical Code, Part I (CSA C22.1) in Canada.