INTERNATIONAL STANDARD

ISO 18217

First edition 2015-08-15

Safety of woodworking machines — Edge-banding machines fed by chain(s)

Sécurité des machines à bois — Machines à plaquer sur chant à alimentation par chaîne(s)





COPYRIGHT PROTECTED DOCUMENT

 $\, @ \,$ ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Contents					
Forew	ord			v	
Introd	duction			vi	
1					
_	_				
2	Normative references				
3	Terms and definitions				
4	List of	signific	ant hazards	7	
5	Safety requirements and/or protective measures				
	5.1	General			
	5.2		S		
		5.2.1	Safety and reliability of control systems		
		5.2.2 5.2.3	Position of controls Starting		
		5.2.3	Stop controls		
		5.2.5	Integrated feed		
		5.2.6	Mode selection		
		5.2.7	Overspeed control for milling tools		
		5.2.8	Failure of any power supply		
		5.2.9	Failure of the control circuits	15	
		5.2.10	Tele-service		
	5.3		ion against mechanical hazards		
		5.3.1	Stability		
		5.3.2	Risk of break-up during operation		
		5.3.3 5.3.4	Tool holder and tool design Braking		
		5.3.5	Devices to minimize the possibility or the effect of ejection or kick-back		
		5.3.6	Work-piece supports and guides		
		5.3.7	Prevention of access to moving parts		
	5.4		ion against non-mechanical hazards		
		5.4.1	Fire	28	
		5.4.2	Noise	29	
		5.4.3	Emission of chips and dust		
		5.4.4	Electricity	31	
		5.4.5	Ergonomics and handling		
		5.4.6	Lighting	32	
		5.4.7 5.4.8	Pneumatics and hydraulics Electromagnetic compatibility		
		5.4.9	Static electricity		
		5.4.10	Isolation		
		5.4.11	Maintenance		
		5.4.12	Errors of fitting		
		5.4.13	Heat		
		5.4.14	Substances	33	
		5.4.15	Artificial optical radiation	33	
6	Information for use				
	6.1				
	6.2 6.3	Marking			
		Instruct	tion handbook	35	
Annex	A (nor	mative)	Braking tests	39	
Annex	B (nor	mative)	Impact test method for guards	41	
Annex	c (nor	mative)	Stability test for displaceable machines	44	

ISO 18217:2015(E)

Annex D (informative) Performance level required	.45
Bibliography	47

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).

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).

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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: <u>Foreword - Supplementary information</u>.

The committee responsible for this document is ISO/TC 39, *Machine tools*, Subcommittee SC 4, *Woodworking machines*.

Introduction

This International Standard has been prepared to be a Harmonized Standard to provide one means of conforming to the Essential Safety Requirements of the Machinery Directive of the European Union and associated EFTA regulations.

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

The machinery concerned and the extent to which hazards, hazardous situations, and events are covered are indicated in the scope of this International Standard.

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 International Standards for machines that have been designed and built according to the requirements of this type-C standard.

The requirements of this International Standard concern designers, manufacturers, suppliers, and importers of machines described in the Scope.

This International Standard also includes a list of informative items to be provided by the manufacturer to the user.

Common requirements for tooling are given in EN 847-1:2013 and EN 847-2:2013.

Safety of woodworking machines — Edge-banding machines fed by chain(s)

1 Scope

This International Standard deals with all significant hazards, hazardous situations, and events as listed in <u>Clause 4</u>, which are relevant to edge banding machines fed by chains with manual loading and unloading and maximum work-piece height capacity of 100 mm, when they are used as intended and under the conditions foreseen by the manufacturer, including reasonably foreseeable misuse.

The work-piece is fed through the processing units by an integrated feed. Feeding chains also include "feeding belts".

For the purpose of this International Standard, an edge banding machine fed by chains is hereinafter referred to as "machine".

The machine is designed to process in one pass, one end (single end machine), or both ends (double end machine) panels of wood materials with similar physical characteristics as wood, as well as gypsum plaster boards.

Edges to be applied by the machine can be made of paper, melamine, plastic or composite materials, aluminium or light alloy, veneer or solid wood.

This International Standard also applies to machines fitted with the following:

- auxiliary devices essential for edge banding machines fed by chains (see 3.1);
- sanding belt units;
- fixed or movable workpiece support;
- automatic tool changing;
- automatic panel returner.

This International Standard also includes information to be provided by the manufacturer to the user.

This International Standard does not deal with any hazards relating to the following:

- a) systems for loading and unloading of the work-piece to a single machine other than automatic panel returner;
- b) single machine being used in combination with any other machine (as part of a line);
- c) wireless mobile control sets;
- d) additional equipment for grooving and for cutting by circular saw blade, installed out of the integral enclosure and/or whose tools protrude out of the integral enclosure;
- e) plasma unit, power laser unit, and hot-air-jet unit.

This International Standards applies to machines that are manufactured after the date of issue of this International Standard.