

Irish Standard I.S. EN 12750:2013

Safety of woodworking machines - Four sided moulding machines

© CEN 2013

No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/corrigenda/National Annexes issued since publication:		

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces: EN 12750:2001+A1:2009

 This document is based on:
 Published:

 EN 12750:2013
 5 March, 2013

 EN 12750:2001+A1:2009
 12 August, 2009

This document was published under the authority of the NSAI and comes into effect on:

5 March, 2013

ICS number:

79.120.10

NSAI T +353 1 807 3800 Sales:

 1 Swift Square,
 F +353 1 807 3838
 T +353 1 857 6730

 Northwood, Santry
 E standards@nsai.ie
 F +353 1 857 6729

 Dublin 9
 W standards.ie

W NSAl.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD NORME EUROPÉENNE

EN 12750

EUROPÄISCHE NORM

February 2013

ICS 79.120.10

Supersedes EN 12750:2001+A1:2009

English Version

Safety of woodworking machines - Four sided moulding machines

Sécurité des machines pour le travail du bois - Machines à moulurer sur quatre faces

Sicherheit von Holzbearbeitungsmaschinen -Fräsmaschinen für vierseitige Bearbeitung

This European Standard was approved by CEN on 15 December 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 12750:2013 (E)

Cont	Contents Page				
Forewo	ord	4			
	ction				
mtrodu					
1	Scope	7			
2	Normative references	7			
3	Terms and definitions				
4	List of significant hazards				
5	Safety requirements and/or measures				
5.1	General				
5.2	Controls				
5.2.1	Safety and reliability of control systems				
5.2.2	Position of controls				
5.2.3	Starting				
5.2.4	Normal stopping				
5.2.5	Emergency stop	22			
5.2.6	Mode selection	23			
5.2.7	Speed changing	24			
5.2.8	Direction of rotation	25			
5.2.9	Integrated feed	26			
5.2.10	Adjustment of spindles, spindle units, fences, table height, chip breakers and pressure shoes	27			
5.2.11	Control duplication				
	Failure of the power supply	28			
5.3	Protection against mechanical hazards				
5.3.1	Stability				
5.3.2	Risk of break-up during operation				
5.3.3	Tool holder and tool design				
5.3.4	Braking				
5.3.5	Devices to minimise the possibility or the effect of ejection				
5.3.6	Work-piece supports and guides				
5.3.7	Prevention of access to moving parts and ejection of parts of tools				
5.3.8	Required characteristics of tool guards				
5.3.9	Retaining devices				
5.4	Protection against non-mechanical hazards				
5.4.1	Fire				
5.4.2	Noise				
5.4.3	Emission of chips and dust				
5.4.4	Hot surfaces				
5.4.5	Electricity				
5.4.6	Ergonomics and handling				
5.4.7	Lighting				
5.4.8	Pneumatics				
5.4.9	Hydraulics				
	Electromagnetic immunity				
	Static electricity				
	Supply disconnection (isolation)				
	Errors of fitting	51			
5.4.14	Maintenance	51			
6	Information for use	52			

EN 12750:2013 (E)

6.1	Warning devices	52
6.2	Marking	
6.3	Instruction handbook	53
Annex	A (normative) Spindles dimensional tolerances	58
Annex	B (normative) Braking tests	59
B.1	Conditions for all tests	
B.2	Un-braked run-down time	59
B.3	Braked run-down time	59
B.4	Run-up time	60
Annex	C (normative) Table lip resistance test	61
C.1	General	
C.2	Test probe	61
C.3	Measurements	63
C.4	Tests	63
C.5	Result	64
C.6	Test report	64
Annex	CD (normative) Impact test method for guards	65
D.1	General	
D.2	Test method	65
D.2.1	Preliminary remarks	65
D.2.2	Testing equipment	
D.2.3	Projectile for guards	65
D.2.4	Sampling	66
D.2.5	Test procedure	66
D.3	Results	66
D.4	Assessment	
D.5	Test report	
D.6	Test equipment for impact test	
Annex	ZA (informative) Relationship between this European Standard and the Essential	
	Requirements of EU Directive 2006/42/EC	68
Biblio	graphy	69
;	J	

Foreword

This document (EN 12750:2013) has been prepared by Technical Committee CEN/TC 142 "Woodworking machines - Safety", the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12750:2001+A1:2009.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive 2006/42/EC, see informative Annex ZA, which is an integral part of this document.

The following most significant changes have been made in comparison with EN 12750:2001+A1:2009:

- a) In Clause 1 Scope: The scope has been limited to machines having a maximum speed of the integrated work-piece feed of 200 m/min;
- b) In 5.2.1 Safety and reliability of control systems: Application of EN ISO 13849, i.e. by requiring PL for the machine's safety functions;
- c) In 5.2.7 Speed changing: concretion of requirements for different technologies;
- d) In 5.2.9 Integrated feed: Additional requirements related to the powered adjustment of spindle position, height adjustment of the feed mechanism, fences, table height, chip breakers and pressure shoes;
- e) In 5.3.4 Braking: concretion of requirements for different braking systems;
- f) In 5.3.5.2 Out-feed end of the machine: Additional requirements to prevent ejection from the machine;
- g) In 5.3.5.3 Use of glass bead cutting unit: Additional requirements for the glass bead cutting unit;
- h) In 5.3.7 Prevention of access to moving parts and ejection of parts of tools: concretion of requirements related to the safeguarding of the tools and ejection of parts of tools;
- i) In 5.4.2.1 Noise reduction at the design stage: Additional requirements related to integrated enclosures;
- j) In 5.4.2.2 Noise emission measurement: Additional noise emission test for machines having a maximum feed speed > 40 m/min;
- k) In 5.4.3 Emission of chips and dust: Additional requirements related to the emission of chips and dust;
- I) In 6.3 Instruction handbook: The sermon to be provided by the manufacturer has been extended to a large extent.

Organisations contributing to the preparation of this European Standard include the European Manufacturers Association "EUMABOIS".

EN 12750:2013 (E)

The European Standards produced by CEN/TC 142 are particular to woodworking machines and complement the relevant A and B Standards on the subject of general safety (see Introduction of EN ISO 12100:2010 for a description of A, B and C standards).

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 12750:2013 (E)

Introduction

This document has been prepared to be a harmonised standard to provide one means of conforming to the Essential Health and Safety Requirements of the Machinery Directive and associated EFTA Regulations. This document is a type C standard as defined in EN ISO 12100:2010.

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

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

The requirements of this document are directed to manufacturers and their authorised representatives of four sided moulding machines. This document is also useful for designers.

This document also includes provisions and examples of information to be provided by the manufacturer to the user.

Common requirements for tooling are given in EN 847-1:2005+A1:2007.

1 Scope

This European Standard deals with all significant hazards, hazardous situations and events as listed in Clause 4, which are relevant to stationary four sided moulding machines with a maximum working width of 350 mm and a maximum speed of the integrated work-piece feed of 200 m/min, with electrical and/or electronic control system, hereafter referred to as "machines" designed to cut solid wood, chipboard, fibreboard, plywood and also these materials where these are covered with plastic laminate or edgings when they are used as intended and under the conditions foreseen by the manufacturer, including reasonably foreseeable misuse of the machine (see 6.3 c)).

For the definition of a stationary machine, see 3.22.

This European Standard deals also with hazards relating to the following optional work units:

- universal spindle;
- glass bead cutting unit.

This European Standard is not applicable to machines designed for machining logs which have not previously been machined.

This European Standard does not deal with any hazards relating to:

- a) in-feed devices (magazines, hoppers, etc.);
 - NOTE For mechanical in-feed devices which also prevent access to the in-feed opening, see 5.3.7.2.
- b) the combination of single machines with any other machine as part of a line;
- c) out-feed devices (e.g. mechanical handling systems) except for hazards related to ejection from the machine due to climb cutting.

This European Standard is not applicable to four sided moulding machines which are manufactured before the date of its publication as EN.

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.

EN 614-1:2006+A1:2009, Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles

EN 847-1:2005+A1:2007, Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades

EN 894-1:1997+A1:2008, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 1: General principles for human interactions with displays and control actuators

EN 894-2:1997+A1:2008, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays

EN 894-3:2000+A1:2008, Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators



This is a free preview	 Purchase the entire 	e publication at the link below:
------------------------	---	----------------------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation