

**Puidutöötlemismasinate ohutus. Tappimismasinad.  
Osa 2: Topelt tappimise/profileerimismasina keti või  
kettidega fiider KONSOLIDEERITUD TEKST**

Safety of woodworking machines - Tenoning machines -  
Part 2: Double end tenoning and/or profiling machines fed by  
chain or chains CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1218-2:2004+A1:2009 sisaldab Euroopa standardi EN 1218-2:2004+A1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.07.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.06.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1218-2:2004+A1:2009 consists of the English text of the European standard EN 1218-2:2004+A1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.07.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 17.06.2009.

The standard is available from Estonian standardisation organisation.

ICS 79.120.10

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English Version

**Safety of woodworking machines - Tenoning machines - Part 2:  
Double end tenoning and/or profiling machines fed by chain or  
chains**

Sécurité des machines pour le travail du bois -  
Tenonneuses - Partie 2: Machines à tenonner et/ou à  
profiler à chaîne ou chaînes

Sicherheit von Holzbearbeitungsmaschinen -  
Zapfenschneid- und Schlitzmaschinen - Teil 2:  
Doppelseitige Zapfenschneid- und Schlitzmaschinen  
und/oder Doppelendprofiler mit Kettenbandvorschub

This European Standard was approved by CEN on 24 March 2004 and includes Corrigendum 1 issued by CEN on 20 December 2006 and Amendment 1 approved by CEN on 21 May 2009.

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## Foreword

This document (EN 1218-2:2004+A1:2009) has been prepared by the 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of an identical text or by endorsement, at the latest by December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-05-21 and Corrigendum 1 issued by CEN on 20 December 2006.

This document supersedes EN 1218-2:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags **AC** **AC**.

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).

**A1** For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

**A1** EN 1218, *Safety of woodworking machines — Tenoning machines* consists of the following parts:

*Part 1: Single end tenoning machines with sliding table*

*Part 2: Double end tenoning and/or profiling machines fed by chain or chains*

*Part 3: Hand fed tenoning machines with sliding table for cutting structural timbers*

*Part 4: Edge banding machines fed by chain(s)*

*Part 5: One side profiling machines with fixed table and feed rollers or fed by chain **A1***



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

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 12100-1:2003 for a description of A, B and C standards).

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

## Introduction

This document has been prepared to be a harmonised standard to provide one means of conforming to the essential safety requirements of the Machinery Directive, and associated EFTA regulations.



This document is a type C standard as stated in  EN ISO 12100-1:2003 .

The machinery concerned and the extent to which hazards, hazardous situations and events covered are 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 C type standard take precedence over the provisions of other standards, for machines that have been designed and built in accordance with the provisions of this type C standard.

The requirements of this document are directed to manufacturers and their authorised representatives of double end tenoning and/or profiling machines fed by chain or chains. It is also useful for designers.

This document also includes information which can be provided by the manufacturer to the user.

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

## 1 Scope

**A1** This document deals with all the significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to double end tenoning and/or profiling machines fed by chain or chains, hereinafter referred to as the machine, designed to cut solid wood, chipboard, fibreboard or plywood and also these materials where they are covered with plastic laminate or edgings. The workpiece is fed passed the tools by an integrated feed. **A1**

**A1** *deleted text* **A1**

This document does not apply to:

- a) double end tenoning and/or profiling machines fed by chain or chains with a complete enclosure as defined in 3.3.11;
- b) transportable machines.

This document does not deal with any hazards relating to:

- c) mechanical loading of the workpiece to a single machine; or
- d) single machine being used in combination with any other machine (as part of a line); or
- e) use of tools working between the machine halves (see 3.1); or
- f) use of laser.

For Computer Numerically Controlled (CNC) machines this document does not cover hazards related to Electro-Magnetic Compatibility (EMC).

NOTE 1 The requirements of this document apply to all machines whatever their method of control e.g. electromechanical and/or electronic.

This document is primarily directed to machines which are manufactured after the date of publication by CEN.

NOTE 2 Single end tenoning machines with sliding table are dealt with in EN 1218-1:1999. Single end tenoning machines where the tenon is produced only by means of saw blades are dealt with in EN 1218-3. Single end profiling machines fed by chain or chains are dealt with in EN 1218-5.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

**A1** *deleted text* **A1**

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

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

**A1** EN 894-1:1997, *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, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays*

EN 894-3:2000, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators* <sup>A1</sup>

<sup>A1</sup> deleted text <sup>A1</sup>

EN 982:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 983:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics*

<sup>A1</sup> EN 1005-1:2001, *Safety of machinery — Human physical performance — Part 1: Terms and definitions*

EN 1005-2:2003, *Safety of machinery — Human physical performance — Part 2: Manual handling of machinery and component parts of machinery*

EN 1005-3:2002, *Safety of machinery — Human physical performance — Part 3: Recommended force limits for machinery operation*

EN 1005-4:2005, *Safety of machinery — Human physical performance — Part 4: Evaluation of working postures and movements in relation to machinery* <sup>A1</sup>

EN 1037:1995, *Safety of machinery — Prevention of unexpected start-up*

<sup>A1</sup> deleted text <sup>A1</sup>

EN 1088:1995, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

EN 1760-2:2001, *Safety of machinery — Pressure sensitive protection devices — Part 2: General principles for the design and testing of pressure sensitive edges and pressure sensitive bars*

EN 1837:1999, *Safety of machinery — Integral lighting of machines*

<sup>A1</sup> 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* <sup>A1</sup>

<sup>A1</sup> EN 60204-1:2006 <sup>A1</sup>, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements* <sup>A1</sup> (IEC 60204-1:2005, modified) <sup>A1</sup>

<sup>A1</sup> EN 60439-1:1999, *Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies* (IEC 60439-1:1999) <sup>A1</sup>

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code)* (IEC 60529:1989)

<sup>A1</sup> EN 60947-4-1:2001 <sup>A1</sup>, *Low voltage switchgear and controlgear — Part 4-1: Contactors and motor starters - Electromechanical contactors and motor starters* <sup>A1</sup> (IEC 60947-4-1:2000) <sup>A1</sup>

<sup>A1</sup> EN 60947-5-1:2004 <sup>A1</sup>, *Low-voltage switchgear and controlgear — Part 5-1: Control circuit devices and switching elements — Electromechanical control circuit devices* <sup>A1</sup> (IEC 60947-5-1:2003) <sup>A1</sup>

<sup>A1</sup> EN 61310-1:2008, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, acoustic and tactile signals* (IEC 61310-1:2007) <sup>A1</sup>

Ⓐ CLC/TS 61496-2:2006 Ⓐ, *Safety of machinery — Electro-sensitive protective equipment — Ⓐ Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:2006) Ⓐ*

Ⓐ EN ISO 354:2003 Ⓐ, *Acoustics — Measurement of sound absorption in a reverberation room (ISO 354:2003)*

EN ISO 3743-1:1995, *Acoustics — Determination of sound power levels of noise sources — Engineering methods for small, moveable sources in reverberant fields — Part 1: Comparison method for hard walled test rooms (ISO 3743-1:1994)*

EN ISO 3743-2:1996, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering methods for small, moveable sources in reverberant fields — Part 2: Methods for special reverberation test rooms (ISO 3743-2:1994)*

EN ISO 3744:1995, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994)*

Ⓐ EN ISO 3745:2003 Ⓐ, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Precision methods for anechoic and semi-anechoic rooms (ISO 3745:2003)*

EN ISO 3746:1995, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995)*

EN ISO 4871:1996, *Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

EN ISO 9614-1:1995, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points (ISO 9614-1:1993)*

EN ISO 11202:1995, Ⓐ *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Survey method in situ (ISO 11202:1995) Ⓐ*

EN ISO 11204:1995, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at the workstation and at other specified positions — Method requiring environmental corrections (ISO 11204:1995)*

EN ISO 11688-1:1998, *Acoustics — Recommended practice for the design of low noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*

Ⓐ EN ISO 13849-1:2008 *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006) Ⓐ*

Ⓐ EN ISO 13850:2008, *Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006) Ⓐ*

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts*

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

Ⓐ HD 21.1 S4:2002, *Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation — Part 1: General requirements Ⓐ*

HD 22.1 S4:2002, *Cables of rated voltages up to and including 450/750 V and having cross-linked insulation — Part 1: General requirements*

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