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Safety of woodworking machines - Tenoning machines -Part 3: Hand fed tenoning machines with sliding table for JN. Coling Colon C cutting structural timbers CONSOLIDATED TEXT



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1218-3:2001+A1:2009 sisaldab Euroopa standardi EN 1218-3:2001+A1:2009 ingliskeelset teksti.

This Estonian standard EVS-EN 1218-3:2001+A1:2009 consists of the English text of the European standard EN 1218-3:2001+A1:2009.

Standard on kinnitatud Eesti Standardikeskuse 30.09.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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

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ICS 79.120.10

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EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1218-3:2001+A1

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ICS 79.120.10

Supersedes EN 1218-3:2001

English Version

Safety of woodworking machines - Tenoning machines - Part 3: Hand fed tenoning machines with sliding table for cutting structural timbers

Sécurité des machines à bois - Tenonneuses - Partie 3: Machines à avance manuelle et à table roulante pour la coupe des éléments de charpente de toit en bois Sicherheit von Holzbearbeitungsmaschinen -Zapfenschneid- und Schlitzmaschinen - Teil 3: Abbundmaschinen mit von Hand bewegtem Schiebetisch

This European Standard was approved by CEN on 30 September 2001 and includes Amendment 1 approved by CEN on 21 May 2009.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 1218-3:2001+A1:2009) 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 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.

This document supersedes EN 1218-3:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

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(s), see informative Annexes ZA and ZB, which are integral parts of this document. (A)

(A) 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 🔄

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

[A] The Annexes A, B, C and D are normative and Annexes ZA and ZB are informative. (A)

This standard includes a Bibliography.

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 PA) EN ISO 12100-1:2003 [A] 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.

0 Introduction

This European Standard 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 European Standard is a type "C" standard as defined in A) EN ISO 12100-1:2003 (A).

The extent to which hazards are covered is indicated in the scope of this European Standard.

The requirements of this European Standard concern designers, manufacturers, suppliers and importers of hand fed tenoning machines with sliding table for cutting structural timbers.

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

Common requirements for tooling are given in [A] EN 847-1:2005 (A).

1 Scope

This document deals with all the significant hazards, hazardous situations and events as listed in Clause 4 which are relevant to hand fed tenoning machines with sliding table for cutting structural timbers, hereinafter referred to as "machines". [At]

This European Standard does not apply to:

- machines where the tenon is produced by means of milling tools;
- machines designed for a tool spindle speed exceeding 6000 min⁻¹;
- machines where the cuts are made on both ends of the workpiece during one cycle;
- combined machines used for tenoning (see A) EN 940:2008 (4);
- the tenoning attachment on a vertical spindle moulding machine (see A) EN 848-1:2007 (41).

A₁) deleted text (A₁

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

This European Standard is primarily directed to machines which are manufactured after the date of issue of this European Standard.

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. [41]

A₁ deleted text (A₁

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

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

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 — [An]

A₁ deleted text (A₁

EN 982:1996, Safety requirements for fluid power systems and components – Hydraulics

EN 983:1996, Safety requirements for fluid power systems and components – Pneumatics

(A) 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

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

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

(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 (A)

| EN 60204-1:2006 (A), Safety of machinery — Electrical equipment of machines — Part 1: General requirements | A) (IEC 60204-1:2005, modified) (A)

(A) EN 60439-1:1999, Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies (IEC 60439-1:1999)

EN 60529:1991, Degree of protection provided by enclosures (IP code) (IEC 60529:1989)

EN 60825-1:2007, Safety of laser products —Part 1: Equipment classification and requirements (IEC 60825-1:2007) (A)

A) EN 60947-4-1:2001 (♠1), Low voltage switchgear and control gear — Part 4: Contactors and motor starters - Section 1: Electromechanical contactors and motor starters (♣1) (IEC 60947-4-1:2000) (♠1)

(A) EN 60947-5-1:2004 (A), Low voltage switchgear and control gear — Part 5: Control circuit devices and switching elements — Section 1: Electromechanical control circuit devices (A) (IEC 60947-5-1:2003) (A)

- EN 61310-1:2008, Safety of machinery Indication, marking and actuation Part 1: Requirements for visual, acoustic and tactile signals (IEC 61310-1:2007) [A]
- 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 wall test rooms (ISO 3743-1:1994)
- EN ISO 3743-2:1996, Acoustics Determination of sound power levels of noise sources Engineering methods for small, moveable sources in reverberant fields Part 2: Method 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 methods 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) (4)
- EN ISO 3746:1995, Acoustics Determination of sound power levels of noise sources using sound pressure Survey method employing an enveloping measurement surface over a reflecting plane (ISO 3746: 1995)
- EN ISO 4871:1996, Acoustics Determination 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 method of emission sound pressure levels at the workstation 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) ♠
- A) EN ISO 13850:2008, Safety of machinery Emergency stop Principles for design (ISO 13850:2006) (A)
- ISO 286-2:1988, ISO system of limits and fits Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts
- HD 21.1 S4:2002, Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation Part 1: General requirements [A]
- [A] 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 [A]