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Food processing machinery - Circular saw machines - Safety and hygiene requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12267:2003+A1:2010 sisaldab Euroopa standardi EN 12267:2003+A1:2010 ingliskeelset teksti.

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English Version

**Food processing machinery - Circular saw machines - Safety
and hygiene requirements**

Machines pour les produits alimentaires - Scies circulaires -
Prescriptions relatives à la sécurité et à l'hygiène

Nahrungsmittelmaschinen - Kreissägemaschinen -
Sicherheits- und Hygienebestimmungen

This European Standard was approved by CEN on 9 January 2003 and includes Amendment 1 approved by CEN on 9 April 2010.

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Foreword

This document (EN 12267:2003+A1:2010) has been prepared by Technical Committee CEN/TC 153 "Machinery intended for use with foodstuffs and feed", the secretariat of which is held by DIN.

It has been prepared by Working Group 2 "Meat Processing Machinery" of CEN/TC 153.

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of an identical text or by endorsement, at the latest by November 2010, and conflicting national standards shall be withdrawn at the latest by November 2010.

This document includes Amendment 1, approved by CEN on 2010-04-09.

This document supersedes EN 12267:2003.

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

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A1 For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document. **A1**

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Introduction

A1 This document is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are 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 type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard. **A1**

1 Scope

This European Standard specifies requirements for the design and manufacturing of circular saw machines (see Figures 1 and 2).

The machines covered by this European Standard are used to cut bone and meat.

The circular saw machines covered by this European Standard do not include circular saw machines for processing of wood and similar materials and the requirements of EN 1870-1 do not apply.

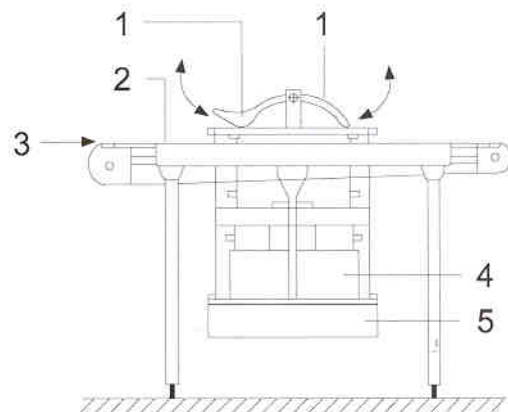
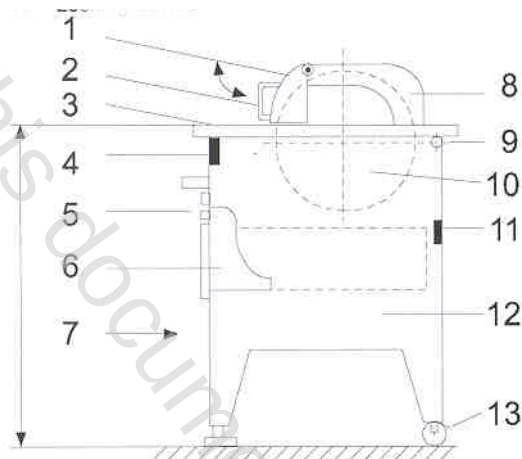
Circular saw machines for domestic use are not included in this European Standard.

This European Standard applies only to machines which are manufactured after the date of issue of this European Standard.

This European Standard covers the following types of machines:

Circular saw machines with a feed table and a fixed product pusher

- The distance "A" from the floor to the top surface of the feed table is from 800 mm to 1050 mm. The saw blade diameter is between 350 mm and 400 mm (see Figure 1).
- Circular saw machines installed in a cutting line (e.g. conveyor belt or roller conveyor), e.g. with a protective component which can be lifted on the feed and discharge side. The saw blade diameter is between 350 mm and 400 mm (see Figure 2).



Key

- 1 Product pusher
- 2 Handle
- 3 Feed table
- 4 Interlocking switch for feed table
- 5 ON / OFF switch
- 6 Chip pan
- 7 Operator side
- 8 Protective hood
- 9 Hinge
- 10 Saw blade 350 mm - 400 mm diameter
- 11 Interlocking switch for chip pan
- 12 Machine rack
- 13 Locking device

- 1 Protective hood
- 2 Roller conveyor or belt conveyor
- 3 Feed side
- 4 Casing
- 5 Chip pan

Figure 1 — Circular saw machine with machine base

Figure 2 — Circular saw machine in cutting line

Circular saw machines comprise a machine base, a fixed, foldable feed table, a product pusher, a protective hood which can be lifted, a saw blade, a drive and electrical components, depending on machine type.

Circular saw machines with a machine base can be wheel-mounted (see Figure 1).

A1 *deleted text* **A1**

A1 This European Standard deals with all significant hazards, hazardous situations and events relevant to circular saw machines, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

This European Standard deals with the hazards which can arise during commissioning, operation, cleaning, use, maintenance and decommissioning of the machine. **A1**

On floor-type circular saw machines (see Figure 3) the product to be cut is placed by hand onto the feed table and pushed against the cutting zone of the saw blade by means of the product pusher and sawed.

On circular saw machines which are installed in a cutting line (see Figure 4) the product to be cut is pushed by hand via the conveyor belt or roller conveyor against the cutting zone of the saw blade and sawed.

2 Normative references

[A1] 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.

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

EN 953:1997, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 1005-1, *Safety of machinery — Human physical performance — Part 1: Terms and definitions*

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

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

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

EN 1672-2:2005, *Food processing machinery — Basic concepts — Part 2: Hygiene requirements*

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

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

EN ISO 3744, *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 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment — (ISO 4871:1996)*

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

EN ISO 11688-1, *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 and specifications (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 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by the upper and lower limbs (ISO 13857:2008)*