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OHUTUS- JA HÜGIEENINÕUDED

Food processing machinery - Slicing machines - Safety  
and hygiene requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 1974:2020 sisaldab Euroopa standardi EN 1974:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 1974:2020 consists of the English text of the European standard EN 1974:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

## Food processing machinery - Slicing machines - Safety and hygiene requirements

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

Nahrungsmittelmaschinen-  
Aufschnittschneidemaschinen - Sicherheits- und  
Hygieneanforderungen

This European Standard was approved by CEN on 18 October 2020.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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## European foreword

This document (EN 1974:2020) 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.

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of an identical text or by endorsement, at the latest by May 2021, and conflicting national standards shall be withdrawn at the latest by May 2021.

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

This document supersedes EN 1974:1998+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 2006/42/EC.

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

In comparison with the previous edition, the following major technical modifications have been made:

- the Scope and Terms and definitions have been updated;
- general redraft of the list of significant hazards;
- safety and/or protective measure cross reference added;
- improvement on blade protection requirements (blade guard, gauge plate, integrated blade sharpener, product support, stacker unit and control system);
- improvement on the hygiene section;
- general redraft on the verification of safety requirements and/or measures;
- updating on the instruction handbook section, new requirements added.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

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

This document is of relevance in particular for the following stakeholder groups, representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

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

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

## 1 Scope

This document specifies the safety and hygiene requirements for the design and manufacture, installation, training, use, cleaning and maintenance of slicing machines which are fitted with a motor-driven blade of more than 150 mm in diameter, provided with a product support. These types of slicing machines are intended to be used in shops, restaurants, supermarkets, canteens, etc. to slice foodstuffs.

This document deals with all significant hazards, hazardous situations and events relevant to slicing machines, when they are used as intended by the manufacturer (see Clause 4).

This document applies to the hazards arising during all the phases of the life of the machine as described in EN ISO 12100:2010, 5.4.

Automatic industrial slicing machines covered by EN 16743:2016 are excluded from the scope of this document.

This document covers the following types of slicing machines:

- horizontal feed slicing machine (see Figure 1);
- gravity feed slicing machine (see Figure 2).

Both types can have an either hand-operated or power-operated carriage to move the product towards the blade. They both can be fitted with manual or automatic devices to receive and convey the slices away from the machine. All these types can also be provided with a scale.

This document applies to machines which are manufactured after the date of issue of this document.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 614-1:2006+A1:2009, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*

EN 1672-2:2005+A1:2009, *Food processing machinery - Basic concepts - Part 2: Hygiene requirements*

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

EN 60529:1991<sup>2</sup>, *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN ISO 4287:1998<sup>3</sup>, *Geometrical product specifications (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287:1997)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

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<sup>1</sup> As impacted by EN 60204-1:2006/A1:2009 and EN 60204-1:2006/corrigendum Feb. 2010.

<sup>2</sup> As impacted by EN 60529:1991/corrigendum May 1993, EN 60529:1991/A1:2000, EN 60529:1991/A2:2013, EN 60529:1991/AC:2016-12 and EN 60529:1991/A2:2013/AC:2019-02.

<sup>3</sup> As impacted by EN ISO 4287:1998/AC:2008 and EN ISO 4287:1998/A1:2009.



EN ISO 13849-1:2015, *Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2015)*

EN ISO 14119:2013, *Safety of machinery - Interlocking devices associated with guards - Principles for design and selection (ISO 14119:2013)*

EN ISO 21469:2006, *Safety of machinery - Lubricants with incidental product contact - Hygiene requirements (ISO 21469:2006)*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100:2010 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **slicing machine**

machine with a blade used to cut food products into slices of varying thickness

Note 1 to entry: A slicing machine consists of a base, a blade, a blade cover, a blade guard, a blade sharpener, a gauge plate, a product support, a carriage, a product pusher and electrical components.

#### 3.2

##### **blade**

circular rotating disk provided with a sharp cutting edge