



SLOVENSKI STANDARD

SIST EN 16743:2016

01-junij-2016

Stroji za predelavo hrane - Avtomatski industrijski stroji za rezanje na rezine - Varnostne in higienske zahteve

Food processing machinery - Automatic industrial slicing machines - Safety and hygiene requirements

Nahrungsmittelmaschinen - Automatische Schneidemaschinen für den industriellen Einsatz - Sicherheits- und Hygieneanforderungen

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

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ICS:

67.260

Tovarne in oprema za
živilsko industrijo

Plants and equipment for the
food industry

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EUROPEAN STANDARD

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Food processing machinery - Automatic industrial slicing machines - Safety and hygiene requirements

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Nahrungsmittelmaschinen - Automatische Schneidemaschinen für den industriellen Einsatz - Sicherheits- und Hygieneanforderungen

This European Standard was approved by CEN on 1 November 2015.

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 16743:2016 (E)**European foreword**

This document (EN 16743:2016) 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of an identical text or by endorsement, at the latest by July 2016, and conflicting national standards shall be withdrawn at the latest by July 2016.

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 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.

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, 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.

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Introduction

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

The machinery concerned and the extent to which hazards, hazardous situations and 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.

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EN 16743:2016 (E)**1 Scope****1.1 General**

This European Standard specifies requirements relating to the design and construction of automatic industrial slicing machines and auxiliary components.

The automatic industrial slicing machines covered by this standard are used for the cutting of meat and sausage products, cheese or other sliceable food products that can be cut using one or more blades. Automatic industrial slicing machines are designed to cut slices.

A sickle blade or an eccentrically moving blade is used for cutting. As a rule, the product only moves along one axis during the cutting process.

The auxiliary components covered by this standard are used for conveying slices from the cutting zone, for weighing or for sorting.

This European Standard covers all the significant hazards, hazardous situations and hazardous events identified by means of risk assessment associated with automatic industrial slicing machines and auxiliary components if they are used in accordance with regulations and under the conditions of reasonably foreseeable misuse defined by the manufacturer (see Clause 4).

This standard covers hazards which can arise during the commissioning, operation, cleaning, servicing and decommissioning of the machine.

This standard only applies to automatic industrial slicing machines and auxiliary components that were manufactured after the date of publication of this standard.

This standard applies to automatic industrial slicing machines and auxiliary components designed for industrial use. These are machines which are usually used in food processing facilities. The machines are normally permanently installed in one place.

This standard does not apply to cutting machines with moving infeed slides, slicing machines that are used in for example shops, restaurants, supermarkets, canteens etc. and are already covered in EN 1974.

This standard does not apply to portion cutting machines which are manufactured and put on the market in accordance with the requirements specified in EN 13870.

1.2 Machine description

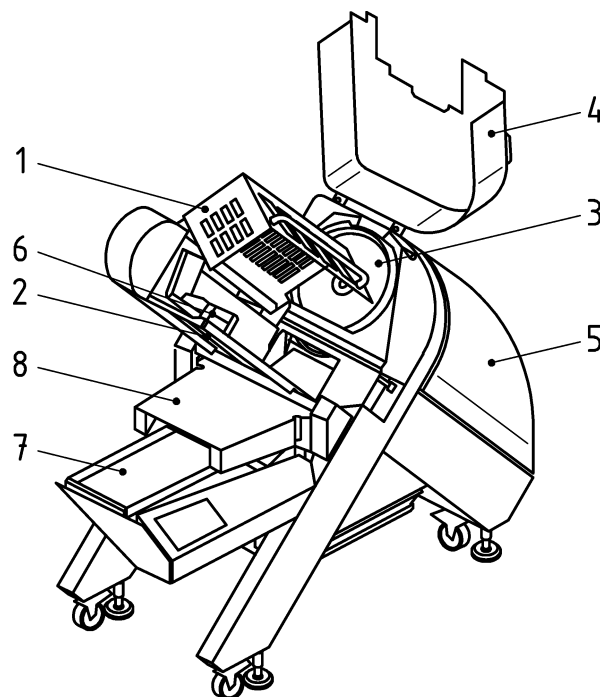
This standard covers the following designs (see Figure 1 to Figure 7):

Design variations in the feed area:

- automatic industrial slicing machine with manual feed;
- automatic industrial slicing machine with automatic feed;
- automatic industrial slicing machine with continuous feed.

Design variations in the outfeed area:

- automatic industrial slicing machine with outfeed conveyor, without depositing unit and without subsequent auxiliary components;
- automatic industrial slicing machine with depositing unit and if necessary with subsequent auxiliary components.

**Key**

- 1 feed guard
- 2 product support
- 3 blade
- 4 blade guard
- 5 machine housing
- 6 gripper
- 7 outfeed conveyor
- 8 protective outfeed guard

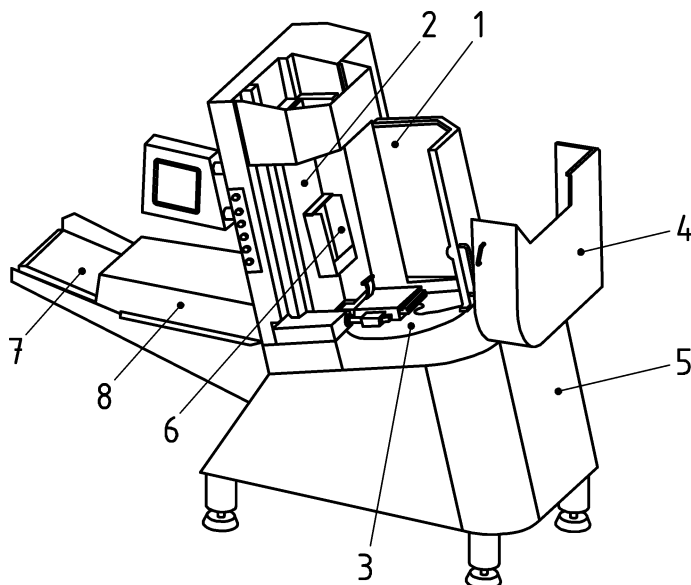
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Figure 1 — Machine with manual feed and outfeed conveyor and without depositing unit

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**Key**

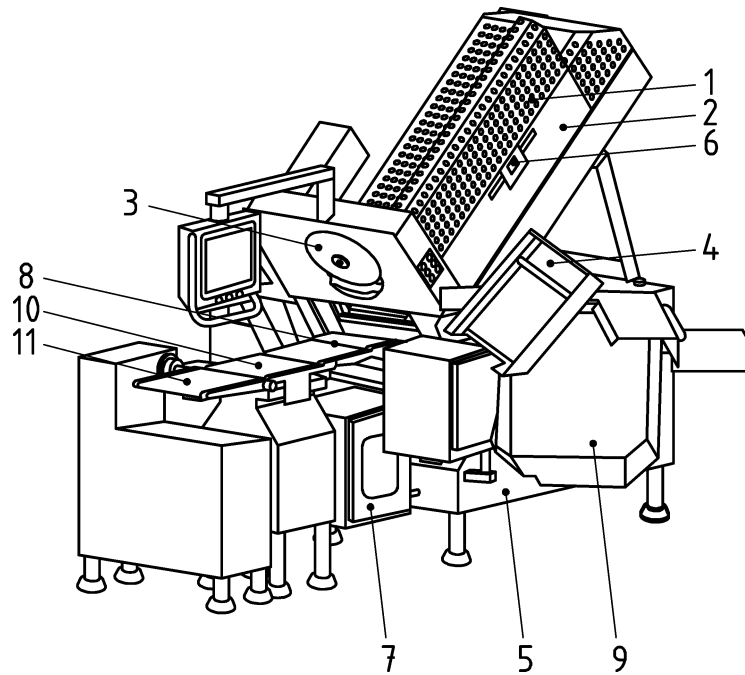
- 1 feed guard
- 2 product support
- 3 blade
- 4 blade guard
- 5 machine housing
- 6 gripper
- 7 outfeed conveyor
- 8 protective outfeed guard

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Figure 2 — Machine with manual feed and outfeed conveyor and without depositing unit



Key

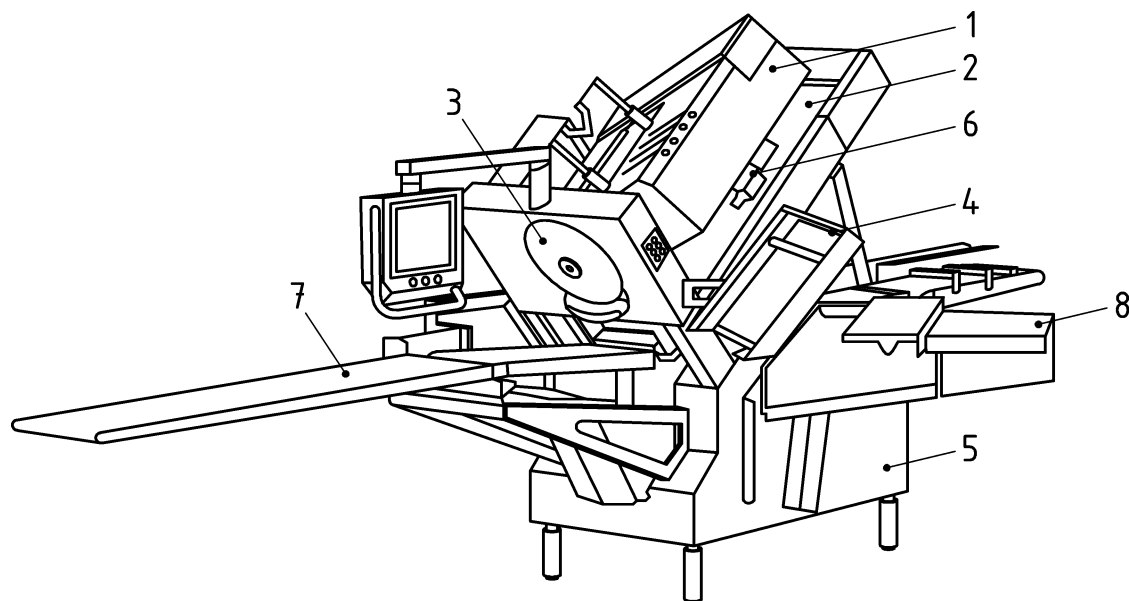
- 1 feed guard
- 2 product support
- 3 blade
- 4 blade guard
- 5 machine housing
- 6 gripper
- 7 interleaver
- 8 depositing unit
- 9 outfeed guard
- 10 weigher
- 11 rocker

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Figure 3 — Machine with manual feed, depositing unit and auxiliary components

**Key**

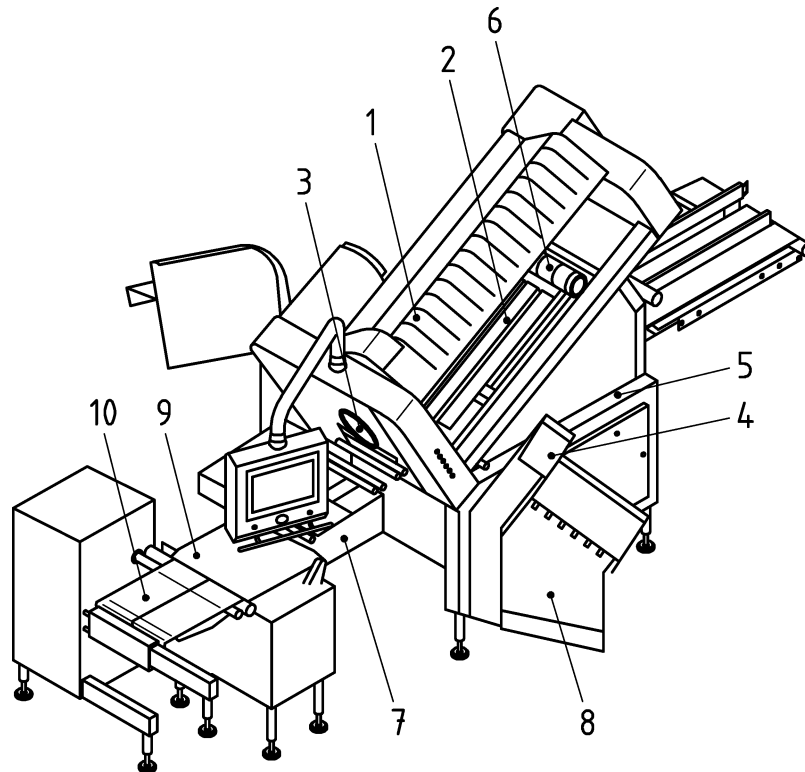
- 1 feed guard
- 2 product support
- 3 blade
- 4 blade guard
- 5 machine housing
- 6 gripper
- 7 outfeed conveyor
- 8 protective outfeed guard

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Figure 4 — Machine with automatic feed and outfeed conveyor and without depositing unit

**Key**

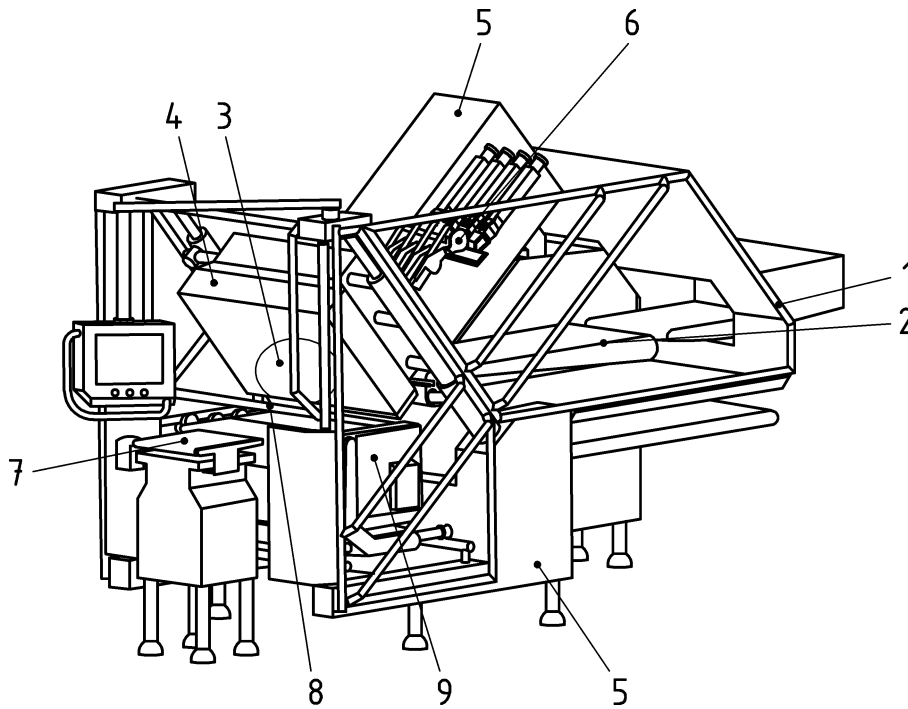
- 1 feed guard
- 2 product support
- 3 blade
- 4 blade guard
- 5 machine housing
- 6 gripper
- 7 depositing unit
- 8 protective outfeed guard
- 9 check weigher
- 10 rocker

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Figure 5 — Machine with automatic feed and depositing unit and auxiliary components

**Key**

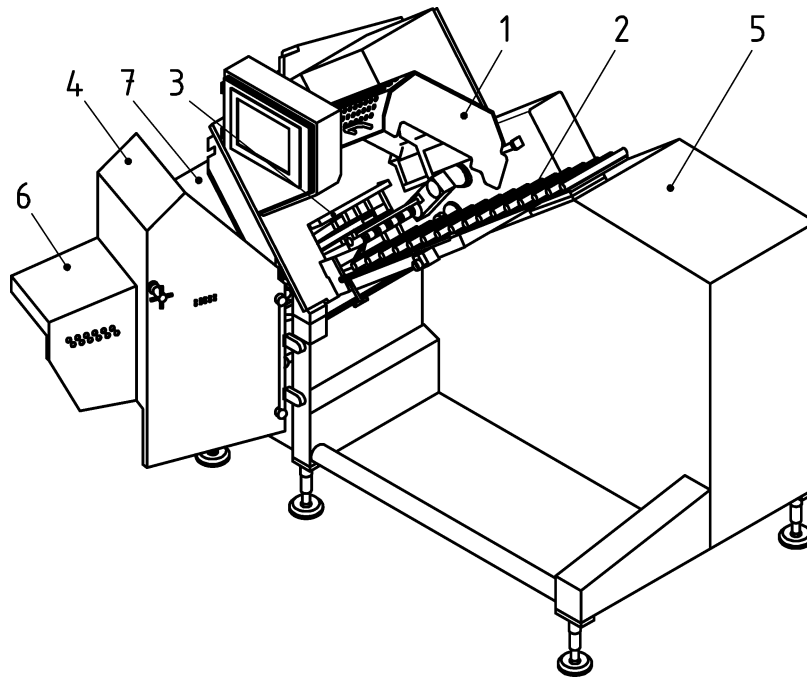
- 1 feed guard
- 2 product support
- 3 blade
- 4 blade guard
- 5 machine housing
- 6 gripper
- 7 check weigher
- 8 protective outfeed guard
- 9 depositing unit

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Figure 6 — Machine with automatic feed with depositing unit and auxiliary components



Key

- 1 feed guard
- 2 product support
- 3 blade (covered)
- 4 blade guard
- 5 machine housing
- 6 protective outfeed guard
- 7 depositing unit / outfeed conveyor

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Figure 7 — Machine with continuous feed

1.3 Machine design

Automatic industrial slicing machines mainly consist of machine housing, product support with automatic or manually operated grippers, downholder, blade housing, blade, outfeed device, associated drives and electrical, hydraulic or pneumatic components. Furthermore optional features can be added.

Automatic industrial slicing machines in the scope of this standard may be equipped with the following auxiliary components:

- feeder;
- interleaver;
- outfeed conveyor;
- depositing unit;
- check weigher;
- sorting components (e.g. rocker);
- positioning devices (e.g. wheels).