SLOVENSKI STANDARD
oSIST prEN 15467:2013

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Stroji za predelavo hrane - Stroji za odstranjevanje glav in filetiranje rib - Varnostne in higienske zahteve

Food processing machinery - Fish heading and filleting machines - Safety and hygiene requirements

Nahrungsmittelmaschinen - Fischköpf- und -filetiermaschinen - Sicherheits- und Hygieneanforderungen

Machines pour les produits alimentaires - Machines à étêter et à fileter le poisson - Prescriptions relatives à la sécurité et à l'hygiène

Ta slovenski standard je istoveten z: **prEN 15467**

ICS:

67.260	Tovarne in oprema za živilsko industrijo	Plants and equipment for the food industry

oSIST prEN 15467:2013 **en,fr,de**

EUROPEAN STANDARD

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ICS 67.260

English Version

Food processing machinery - Fish heading and filleting machines - Safety and hygiene requirements

Machines pour les produits alimentaires - Machines à étêter et à fileter le poisson - Prescriptions relatives à la sécurité et à l'hygiène

Nahrungsmittelmaschinen - Fischköpf- und -filetiermaschinen - Sicherheits- und Hygieneanforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 153.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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Foreword

This document (prEN 15467:2012) 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 document is currently submitted to the CEN Enquiry.

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 2006/42/EC, see informative Annex ZA which is an integral part of this document.

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 hazardous events are covered are indicated in the scope of this European Standard.

When provisions of this type-C-standard are different from those which are stated in type-A- and -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.

1 Scope

This European Standard specifies the safety and hygiene requirements for the design and construction of automatic fish heading and fish filleting machines, and using knives.

This European Standard applies to machinery and equipment for the heading and filleting of fish in the fish processing industry. This document deals with all significant hazards, hazardous situations, and events relevant to fish heading and filleting machines when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4). It deals with the hazards during the following phases of the intended use: assembly and installation, commissioning, setting and adjusting, operation, cleaning, fault finding, and maintenance.

When drawing up this European Standard, the following assumptions were made:

— only trained adult persons operate the machines;

— the machines are used in workplaces with an illumination level that can be reasonably expected in such places.

This European Standard is not applicable to fish heading and filleting machines that are manufactured before the date of its publication as EN.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 349:1993+A1:2008, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 614-1:2006+A1:2009, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

EN 953:1997+A1:2009, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 1037:1995+A1:2008, *Safety of machinery — Prevention of unexpected start-up*

EN 1088:1995+A2:2008, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

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

EN 1760-2:2001+A1:2009, *Safety of machinery — Pressure-sensitive protective devices — Part 2: General principles for the design and testing of pressure-sensitive edges and pressure-sensitive bars*

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

EN 60529:1991 + A1:2000, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989 + A1:1999)*

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

EN 61496-1:2004 + A1:2008, *Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:2004, mod. + A1:2007 + Corr. July 2008)*

EN ISO 4413:2010, *Hydraulic fluid power — General rules and safety requirements for systems and their components (ISO 4413:2010)*

EN ISO 4414:2010, *Pneumatic fluid power — General rules and safety requirements for systems and their components (ISO 4414:2010)*

EN ISO 4871:2009, *Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

EN ISO 11204:2010, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections (ISO 11204:2010)*

EN ISO 11688-1:2009, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*

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

EN ISO 13732-3:2008, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 3: Cold surfaces (ISO 13732-3:2005)*

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)*

EN ISO 13855:2010, *Safety of machinery — Positioning of safeguards with respect to the approach speeds of parts of the human body (ISO 13855:2010)*

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

EN ISO 14122-1:2001 + A1:2010, *Safety of machinery — Permanent means of access to machinery — Part 1: Choice of fixed means of access between two levels (ISO 14122-1:2001 + Amd 1:2010)*

EN ISO 14122-2:2001 + A1:2010, *Safety of machinery — Permanent means of access to machinery — Part 2: Working platforms and walkways (ISO 14122-2:2001 + Amd 1:2010)*

EN ISO 14122-3:2001 + A1:2010, *Safety of machinery — Permanent means of access to machinery — Part 3: Stairs, stepladders and guard-rails (ISO 14122-3:2001 + Amd 1:2010)*

EN ISO 14122-4:2004 + A1:2010, *Safety of machinery — Permanent means of access to machinery — Part 4: Fixed ladders (ISO 14122-4:2004 + Amd 1:2010)*

3 Terms and definitions

3.1 General

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

3.1.1
filleting
process consisting of the removal of spine/spinal cord and/or collarbones from fish

3.1.2
splitting
cutting of fish into fillets with the spine on one of the filets, or the spine divided on both fillets

3.1.3
heading
deheading process includes V-cutting, flat-cutting, round-cutting, and guillotine-cutting

3.1.4
nobbing
cutting off the head and pulling out the intestines

3.1.5
gutting
removal of the intestines from fish

3.1.6
cutting tool
see 3.1.8, knife

3.1.7
in-feed
part of the machine where the product is placed and subsequently fed to the machine

3.1.8
knife
cutting tool with a sharp firm or corrugated cutting edge, intended for cutting of meat, bone and similar parts of a fish

Note 1 to entry: The knife may be

- stationary,
- reciprocating,
- rotating circular,
- or an endless blade

3.1.9
knife-holder (blade removing device)
device to make the knife safe to grasp during mounting and dismounting

Note 1 to entry: The knife-holder may be an integrated part of the knife or detachable

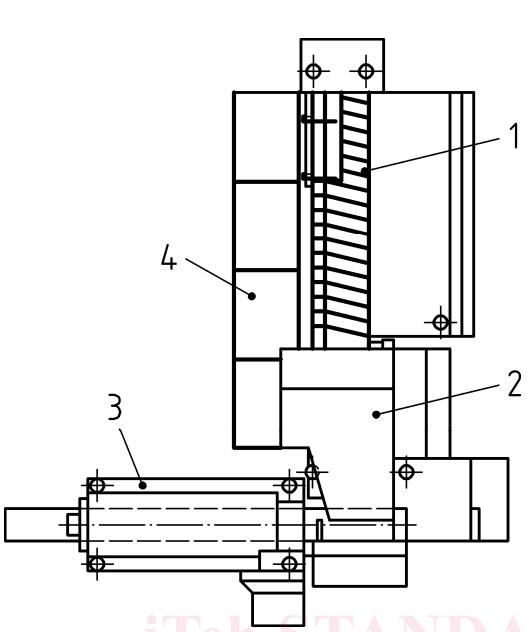
3.1.10
knife-edge guard
device guarding the knife-edge during the mounting and dismounting of the knife. A knife-edge guard may be a detachable or an integral part of the machine

3.1.11
knife-carrier
device that protects the operator and guards the knife during transport and storage

3.1.12
processing
processing covers one or more of the terms: Filleting, splitting, heading, nobbing, gutting and similar handling

3.2 Tray in-feed machine

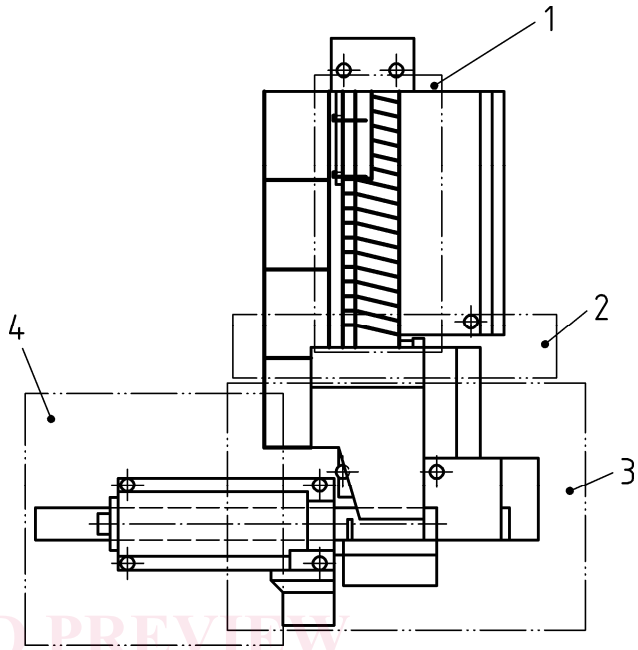
A processing machine usually with one or two endless chains mounted with fixed trays transporting and positioning the fish through the processing. The fish may be placed manually or automatically in the fixed trays.



Key

1 one or two chains with fixed trays
2 processing unit (deheading, filleting, nobbing, gutting, etc.)
3 transfer or discharge
4 operator's platform

a) Example of a tray in-feed machine



Key

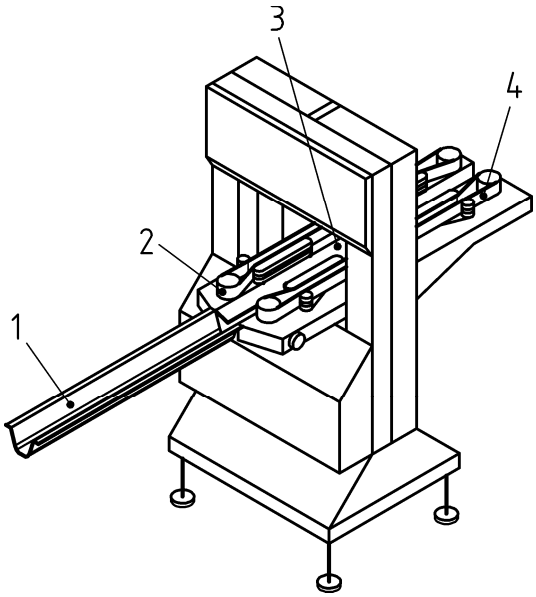
1 in-feed area: The area where the fish is placed in the tray, either manual or by a feeding machine
2 entrance to processing area: The area where the tray-chain and fish moves into the processing area
3 processing area
4 transfer and/or discharge area: The area where the processed fish and the offal leaves the machine

b) Tray-fed machine – Hazard areas

Figure 1 — Tray in-feed machine

3.3 Belt in-feed machine

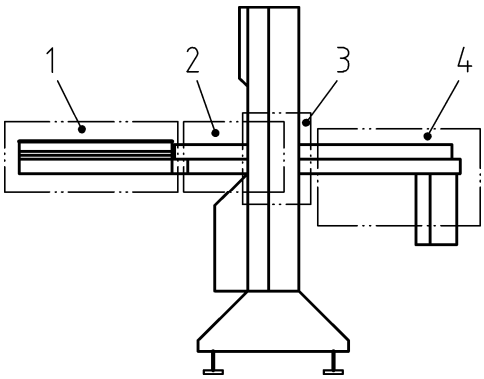
A processing machine usually with two parallel endless belts. The fish is placed between the belts and is fed to the machine.



Key

1 in-fed slide
2 parallel belts
3 processing area
4 transfer or discharge end

a) Example of a belt-fed machine



Key

1 in-feed area: the area where the fish manually is placed between the feeding belts
2 entrance to processing area: the area where the feeding belts and fish moves into the processing area
3 processing area
4 transfer and/or discharge area: the area where the processed fish and the offal leaves the machine

b) Belt in-feed machines – Hazard areas shown without guards

Figure 2 — Belt in-feed machine