

**Toidutöötlemismasinad. Fikseeritud mehhanismiga
praeahju täitmise seadmed. Ohutus- ja hügieeninõuded**

Food processing machinery - Fixed deck oven loaders -
Safety and hygiene requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13591:2005+A1:2010 sisaldab Euroopa standardi EN 13591:2005+A1:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.12.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13591:2005+A1:2010 consists of the English text of the European standard EN 13591:2005+A1:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 23.12.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Food processing machinery - Fixed deck oven loaders - Safety and hygiene requirements

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

Nahrungsmittelmaschinen - Ofenbeschickungseinrichtungen - Sicherheits- und Hygieneanforderungen

This European Standard was approved by CEN on 1 August 2005 and includes Amendment 1 approved by CEN on 1 November 2009.

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Foreword

This document (EN 13591:2005+A1:2009) 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of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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 includes Amendment 1 approved by CEN on 1 November 2009.

This document supersedes EN 13591:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A_1}$ $\langle A_1 \rangle$.

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 $\boxed{A_1}$ EU Directive(s) $\langle A_1 \rangle$.

$\boxed{A_1}$ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. $\langle A_1 \rangle$

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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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1 Scope

This European Standard applies to the design and manufacture of fixed deck oven loaders used in the food industry, bakeries, pastry-making, etc. These machines are used to place dough pieces on each deck of fixed deck ovens and to remove the baked products from each deck.

This equipment may be:

- manual;
- semi-automatic (some movements powered, some movements requiring manual power).

The European Standard covers technical safety and hygiene requirements for the design, installation, adjustment, operating, cleaning and maintenance of this equipment.

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

Noise from fixed deck oven loaders is not considered to be a significant hazard. That does not mean that the manufacturer of the machine is absolved from reducing noise and making a noise declaration. Therefore a noise test code is given in Annex A.

The following equipment are excluded:

- experimental equipment and equipment under development by the manufacturer;
- loaders for conveyor ovens;
- loaders integral to the oven;
- fully automated fixed deck oven loaders.

This European Standard is not applicable to fixed deck oven loaders that are manufactured before the date of publication of this European Standard by CEN.

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.

EN 574:1996, *Safety of machinery — Two-hand control devices — Functional aspects — Principles for design.*

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

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

A1 *deleted text* **A1**

EN 982, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics.*

EN 983, *Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics.*

EN 1037, *Safety of machinery — Prevention of unexpected start-up.*

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 60204:2005, modified) Ⓐ)*

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

EN ISO 3744:1995, *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 4287, *Geometrical product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287:1997).*

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

EN ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995).*

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) Ⓐ)*

3 Description

3.1 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 12100-1:2003 and the following apply.

NOTE Shifting, lifting, and loading in the oven are the three main functions of a fixed deck oven loader.

3.1.1 shifting

movement of the whole oven loader to the oven face

3.1.2 lifting

vertical movement up and down

3.1.3 loading

action of placing pieces of dough on the oven loader