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Food processing machinery - Bowl lifting and tilting machines - Safety and hygiene requirements

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13288:2005+A1:2010 sisaldab Euroopa standardi EN 13288:2005+A1:2009 ingliskeelset teksti.

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English Version

**Food processing machinery - Bowl lifting and tilting machines -
Safety and hygiene requirements**

Machines pour les produits alimentaires - Machines
élévateurs/basculateurs de cuve - Prescriptions relatives à la
sécurité et à l'hygiène

Nahrungsmittelmaschinen - Hub- und Kippeinrichtungen für
Bottiche - 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 13288:2005+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of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.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 2009-11-01.

This document supersedes EN 13288:2005.

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

This European Standard 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).

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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 European Standard.

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.

1 Scope

This European Standard specifies safety and hygiene requirements for the design, installation, operation and maintenance of lifting and tilting machines used, in bakeries, for lifting and/or tilting a container or a machine with non removable bowl containing dough or pastry and for tipping the contents at the top end of the stroke.

The lifting and tilting machines can be stationary or movable and are designed for semi-manufactured products (mixtures of flour, water and other ingredients) or raw material (flour, mixtures etc.). The direction of lifting can be vertical, inclined or combined and follows a track fixed by mechanical guides, or articulated arms.

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

This European Standard does not deal with the hazards due to the mixing or other function of the bowl (for dough mixers see EN 453).

The following machines are excluded:

- experimental and testing machines under development by the manufacturer;
- domestic appliances;
- automatic mobile equipment, for example bucket trucks;
- lift trucks;
- automatic devices working in automatic production lines (where the initiation of the movement is not due to an human action).

A1 This European Standard does not deal with powered equipment that may be provided to assist the mobility of mobile bowl lifting and tilting machines. **A1**

When drafting this European Standard, it has been assumed that the machines are not intended to be cleaned with a water jet.

Noise is not considered to be a significant hazard by lifting and tilting machines for bakery. This does not mean that the manufacturer of the machine is absolved from reducing noise and making a noise declaration. A noise test code is therefore given in Annex A.

This European Standard is not applicable to lifting and tilting machines for bakery which 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 European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 294:1992, *Safety of machinery — Safety distance to prevent danger zones being reached by the upper limbs*.

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

A1 *deleted text* **A1**

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

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.*

EN ^{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) ^{A1}*

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

EN 61310-1, *Safety of machinery — Indication, marking and actuation — Part 1: Requirements for visual, auditory and tactile signals (IEC 61310-1:1995).*

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 workstation and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995).*

EN ISO 12001:1996, *Acoustics — Noise emitted by machinery and equipment — Rules for the drafting and presentation of a noise test code (ISO 12001:1996).*

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) ^{A1}*