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Food processing machinery - Centrifugal machines for  
processing edible oils and fats - Safety and hygiene  
requirements CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12505:2000+A1:2009 sisaldab Euroopa standardi EN 12505:2000+A1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 21.10.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12505:2000+A1:2009 consists of the English text of the European standard EN 12505:2000+A1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 21.10.2009.

The standard is available from Estonian standardisation organisation.

ICS 67.260

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English Version

**Food processing machinery - Centrifugal machines for  
processing edible oils and fats - Safety and hygiene  
requirements**

Machines pour les produits alimentaires - Centrifugeuses  
pour le traitement des huiles et des graisses alimentaires -  
Prescriptions de sécurité et d'hygiène

Nahrungsmittelmaschinen - Zentrifugen zur Verarbeitung  
von eßbaren Ölen und Fetten - Sicherheits- und  
Hygieneanforderungen

This European Standard was approved by CEN on 21 April 2000 and includes Amendment 1 approved by CEN on 23 July 2009.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION  
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## Foreword

This document (EN 12505:2000+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 April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.

This document includes Amendment 1, approved by CEN on 2009-07-23.

This document supersedes EN 12505:2000.

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 United Kingdom.

## Introduction

**A1** This document is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazard, hazardous situation and hazardous event 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 C standard.

This European Standard is independent of EN 12547 because it deals specifically with the requirements of the processing of edible oils and fats. EN 12547 is included in the Annex D "Bibliography". **A1**

## 1 Scope

This European Standard covers all significant hazards as identified by risk assessment (see EN 1050), which are listed in clause 4 of this standard, relevant to centrifuges for processing edible oils and fats, when they are used as intended and under the conditions foreseen by the manufacturer.

It specifies safety and hygiene requirements for the design, manufacture, use, maintenance and cleaning of centrifugal machines.

The normal operating methods are described in 3.2.

This standard does not apply to machines using solvent extraction and ancillary machines (e.g. conveyors, hoppers, etc.).

It is not applicable to basket centrifuges.

This European Standard is applicable primarily to machines which are manufactured after the date of approval by CEN.

## 2 Normative references

**A1** 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 documents (including any amendments) applies. **A1**

**A1** *deleted text* **A1**

EN 294:1992, *Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs*

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

**A1** *deleted text* **A1**

EN 953:1997, *Safety of machinery - General requirements for the design and construction of guards fixed, movable)*

**A1** deleted text **A1**

**A1** EN 1005-2:2003, *Safety of machinery — Human physical performance — Part 2: Manual handling of machinery and component parts of machinery* **A1**

**A1** EN 1005-3:2002, *Safety of machinery — Human physical performance — Part 3: Recommended force limits for machinery operation* **A1**

EN 1037:1995, *Safety of machinery - Prevention of unexpected start-up*

EN 1050:1996, *Safety of machinery - Principles of risk assessment*

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

**A1** EN 60204-1:2006, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements* **A1**

**A1** deleted text **A1**

EN 60529:1991, *Classification of degree of protection provided by enclosures (code IP)*

EN ISO 3744:1995, *Acoustic - Determination of sound power levels of noise sources – Engineering method employing and enveloping measurement surface in an essentially free field over a reflecting plane*

EN ISO 4871:1996, *Acoustic - Verification and declaration of noise emission values of machinery and equipment*

EN ISO 11201:1995, *Acoustic - Noise emitted by machinery and equipment - Measure of emission sound pressure levels at the work station and at other specified positions – Engineering method in an essentially free fields over a reflecting plane*

EN ISO 11688-1, *Acoustic - Recommended practice for the design of low noise machinery and equipment, Part 1: Planning*

**A1** 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)*

EN ISO 13850:2008, *Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)* **A1**

**A1** deleted text **A1**

ISO 468:1982, *Surface roughness - Parameters, their values and general rules for specifying requirements*

**A1** ISO 1940-1:2003, *Mechanical vibration — Balance quality requirements for rotors in a constant (rigid) state — Part 1: Specification and verification of balance tolerances* **A1**

**A1** deleted text **A1**

IEC 60651:1979, *Sound level meters and Amendment 1:1993*

IEC 60804:1985, *Integrating-averaging sound level meters*