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Food processing machinery - Intermediate provers - Safety and hygiene requirements

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English Version**

# Food processing machinery - Intermediate provers - Safety and hygiene requirements

Machines pour les produits alimentaires - Chambres de repos - Prescriptions relatives à la sécurité et à l'hygiène

Nahrungsmittelmaschinen - Zwischengärschrank - Sicherheits- und Hygieneanforderungen

This European Standard was approved by CEN on 6 September 2014.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

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#### **Foreword**

This document (EN 12043:2014) 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of an identical text or by endorsement, at the latest by May 2015 and conflicting national standards shall be withdrawn at the latest by May 2015.

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 supersedes EN 12043:2000+A1:2010.

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.

#### Significant changes:

The significant changes with respect to the previous edition EN 12043:2000+A1:2010 are listed below:

- protective measures for the loading were modified;
- requirements for emergency stop were added;
- requirements for nip guards were stated more precisely;
- thermal hazards, lamps, and hazards generated by UV radiation were added;
- the table of verification of safety and hygiene requirements was completely revised.

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.

#### 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

**1.1** This European Standard specifies safety and hygiene requirements for the design and manufacture of intermediate provers with powered moving pocket carriers as described in Clause 3 and used in the food industry, pastry-making, bakeries, etc. for giving a resting time to dough between different phases of the process.

This European Standard deals with all significant hazards, hazardous situations and events relevant to the installation, adjustment, operation, cleaning, maintenance, dismantling, disabling and scrapping of intermediate provers with moving pocket carriers when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

Noise is not considered to be a significant hazard by intermediate provers. This 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 proposed in Annex A.

- 1.2 The following machines are excluded:
- independent automatic loading system not integrated with the machine;
- experimental and testing machines under development by the manufacturer;
- retarder and final proofer.
- **1.3** This European Standard is not applicable to intermediate provers with moving pocket carriers which 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 614-1:2006+A1:2009, 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 1672-2:2005+A1:2009, 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 60204-1:2005, modified)

EN 60529, Degrees of protection provided by enclosures (IP Code) (IEC 60529)

EN 61000-6-1, Electromagnetic compatibility (EMC) — Part 6-1: Generic standards — Immunity for residential, commercial and light-industrial environments (IEC 61000-6-1)

EN ISO 3744:2010, Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)

EN ISO 4287, Geometrical product specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287)

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

EN ISO 11201, Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections (ISO 11201)

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

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

EN ISO 13732-1, Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces (ISO 13732-1)

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, Safety of machinery — Emergency stop — Principles for design (ISO 13850)

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 14119, Safety of machinery — Interlocking devices associated with guards — Principles for design and selection (ISO 14119)

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