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Food processing machinery - Craft bakery and pastry depositors - Safety and hygiene requirements

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/25

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Food processing machinery - Craft bakery and pastry depositors - Safety and hygiene requirements

Machines pour les produits alimentaires - Dresseuses de pâtes pour boulangerie et pâtisserie - Prescriptions relatives à la sécurité et l'hygiène

Nahrungsmittelmaschinen - Dressiermaschinen - Sicherheits- und Hygieneanforderungen

This European Standard was approved by CEN on 23 September 2024.

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COMITÉ EUROPÉEN DE NORMALISATION
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EN 17677:2024 (E)**European foreword**

This document (EN 17677:2024) 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of an identical text or by endorsement, at the latest by May 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document is a type-C standard as stated in EN ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document. The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A- or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

EN 17677:2024 (E)

1 Scope

1.1 This document specifies safety and hygiene requirements for the design and manufacture of craft bakery and pastry depositors as described in the normative Annex A and which:

- a) are intended to be:
 - only for professional use;
 - used by one operator at a time;
 - used to deposit only pasty food (i.e.: cream, dough, batter, etc.);
 - used to deposit only on trays;
 - used as standalone machines;
 - used with manual loading of the dough into the hopper;
 - used with manual loading and unloading of the tray/s on/from the tray conveyor.
- b) can carry out only the following movements and relevant directions (see Figure 1a)):
 - Z: vertical movement of the table and/or the deposit unit;
 - X: horizontal movement of the tray conveyor;
 - Y: possible horizontal component of the movement only of the spouts themselves inside the deposit unit;
- c) are fitted with one or more hoppers whose capacity is $\leq 60 \text{ dm}^3$ each;
- d) have a total length of the tray conveyor $\leq 1\,600 \text{ mm}$;
- e) have a vertical movement between spouts and tray conveyor (H) $\leq 200 \text{ mm}$ (see Figure 1c));
- f) have a deposit performance (see 3.5):
 - ≤ 60 cycles/minute with up/down movement of the table or the deposit unit;
 - ≤ 100 cycles/minute without up/down movement of the table or the deposit unit;
- g) have a trays performance (see 3.6) ≤ 4 trays/minute.

This document deals with all significant hazards, hazardous situations and events relevant to adjustment, operation and cleaning of craft bakery and pastry depositors, when they are used as intended or under conditions of misuse which are reasonably foreseeable by the manufacturer.

This document covers requirements for the safe operation of the machine, including loading, depositing, unloading and cleaning.

1.2 The following hazards are not covered by this document:

- hazards arising from the use of an automatic hopper loading system;
- hazards due to packaging, handling or transport;
- hazards arising from electromagnetic compatibility issues;
- hazards due to dismantling and disassembling;
- hazards due to operational stop;
- hazards due to selection of control or operating modes;
- hazards due to failure of the power supply;
- hazards due to surfaces, edges or angles;
- hazards due to uncontrolled movements;
- hazards due to machinery maintenance.

This standard does not deal with any specific requirements on noise emitted from craft bakery and pastry depositor as the generated noise does not cause a relevant hazard.

The significant hazards covered by this document are described in Annex B.

1.3 The following machines are excluded from the scope of this document:

- a) machines which deposit pasty food by means of needles (injection);
- b) machines where the trays are put onto and/or removed from the tray conveyor automatically;
- c) machines which require a blade for the cutting system;
- d) domestic appliances;
- e) machines for industrial production;
- f) machines to deposit other products than food for bakery and pastry products.

1.4 This document is not applicable to machines which are manufactured before the date of publication of this European Standard.

EN 17677:2024 (E)**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1672-2:2020, *Food processing machinery — Basic concepts — Part 2: Hygiene and cleanability requirements*

EN 60204-1:2018, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2016, modified)*

EN ISO 7010:2020, *Graphical symbols — Safety colours and safety signs — Registered safety signs (ISO 7010:2019, Corrected version 2020-06)*

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

EN ISO 13849-1:2023, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2023)*

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 13857:2019, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2019)*

EN ISO 14118:2018, *Safety of machinery — Prevention of unexpected start-up (ISO 14118:2017)*

EN ISO 14119:2013, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection (ISO 14119:2013)*

EN ISO 14120:2015, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards (ISO 14120:2015)*

EN ISO 14122-3:2016, *Safety of machinery — Permanent means of access to machinery — Part 3: Stairs, stepladders and guard-rails (ISO 14122-3:2016)*

EN IEC 61496-2:2020, *Safety of machinery — Electro-sensitive protective equipment — Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:2020)*

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