

## SLOVENSKI STANDARD SIST EN 12042:2014/oprA1:2018

01-februar-2018

# Stroji za predelavo hrane - Avtomatski delilniki testa - Varnostne in higienske zahteve

Food processing machinery - Automatic dough dividers - Safety and hygiene requirements

Nahrungsmittelmaschinen - Teigteilmaschinen - Sicherheits- und Hygieneanforderungen iTeh STANDARD PREVIEW

Machines pour les produits alimentaires - Diviseuses automatiques - Prescriptions relatives à la sécurité et à l'hygiène

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<u>ICS:</u>

67.260 Tovarne in oprema za živilsko industrijo Plants and equipment for the food industry

SIST EN 12042:2014/oprA1:2018

en,fr,de

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## DRAFT EN 12042:2014

### prA1

December 2017

ICS 67.260

**English Version** 

### Food processing machinery - Automatic dough dividers -Safety and hygiene requirements

Machines pour les produits alimentaires - Diviseuses automatiques - Prescriptions relatives à la sécurité et à l'hygiène Nahrungsmittelmaschinen - Teigteilmaschinen -Sicherheits- und Hygieneanforderungen

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 153.

This draft amendment A1, if approved, will modify the European Standard EN 12042:2014. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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#### SIST EN 12042:2014/oprA1:2018

#### EN 12042:2014/prA1:2017 (E)

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#### **European foreword**

This document (EN 12042:2014/prA1:2017) 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 document is currently submitted to the CEN Enquiry.

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(s).

For relationship with EU Directive(s), see informative Annex ZA of EN 12042:2014.

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#### 1 Modification to Clause 1, "Scope"

#### Replace paragraph 1.1 with the following:

**"1.1** This European Standard applies to the design and manufacture of standalone automatic dough dividers having a feed hopper, and which can be used separately or in a line in the food industry and shops (pastry making, bakeries, confectionery etc.) for dividing and additionally for moulding/rounding dough or pastry into adjustable portions to produce the required weight of dough piece during a dividing process. These machines can be fed by hand or mechanically.

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

These machines are not intended to be cleaned with pressurized water.".

#### 2 Modification to 5.2.1, "General"

*Replace the text in 5.2.1 with the following:* 

"The safety-related parts of the control systems referring to the safeguarding of the access to hazardous zones through the hopper shall present at least a performance level "d" defined in accordance with EN ISO 13849-1:2008.

The safety-related parts to other safety systems shall present at least a performance level "c" defined in accordance with EN ISO 13849-1:2008.".

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#### 3 Modifications to 5.2.2.2.1, "General"

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Replace the second sentence of 5:2.2.2.1 with the following is/sist/d5e65144-0a41-4dfd-9dbb-

"The access to the danger zones in the feed intake hopper shall be restricted or shall be prevented by example with one of the following:".

*Delete the last sentence* ("If none of the previous solution is used, the height of the protective structure and the position of danger zone shall comply with EN ISO 13857:2008, Table 2.").

#### 4 Modifications to 5.2.2.2, "Pressure sensitive edge"

After the 4th indent of 5.2.2.2.2, add the following indent:

u

 the vertical distance between the floor and the upper edge of the hopper shall be more than or equal to 1 600 mm, and".

#### At the end of 5.2.2.2.2, add the following sentence:

"If the vertical distance between the floor and the upper edge of the hopper is less than 1 600 mm, all distances shall comply with EN ISO 13857:2008, Table 2.".

#### 5 Modification to 5.2.2.2.3, "AOPD"

#### *Replace the text in 5.2.2.3 with the following:*

"If an electro-sensitive protective equipment (ESPE) as defined in EN ISO 13855:2010, 3.1.4, employing active optoelectronic protective devices (AOPD as defined in EN ISO 12100:2010, 3.28.6, laser scanner (AOPDDR) and vision-based protective devices (VBPD) included), is used the following requirements apply:

- If a protective device which detects an area (for instance light curtain, multi-beam device, laser scanner) and/or a volume (for instance vision-based protective device), is used:
  - the distance between the AOPD and the edge of the hopper shall be less than 20 mm, and
  - the whole upper opening of the hopper shall be detected by the protective device, except the space between the rays of a light curtain or multi-beam, if used, and
  - the minimum distance *S* between the safeguard and any hazard zone shall be calculated, according to the overall system stopping performance, as defined in EN ISO 13855:2010.
- If a one beam light barrier is used around the upper edge of the hopper:
  - the distance between the one-beam light barrier and the edge of the hopper shall be less than or equal to 8 mm, and
  - the height of the protective structure and the position of danger zone shall comply with EN ISO 13857:2008, Table 2 and ards.iten.ai)
  - a distance bar shall be provided when the vertical distance (D) is less than 850 mm. In that case: https://standards.iteh.ai/catalog/standards/sist/d5e65144-0a41-4dfd-9dbb-e84a15a5621b/sist-en-12042-2014-kfpra1-2020
    - the safety distance from the distance bar or from the edge of the hopper to the danger zone shall be more than or equal to  $E+F \ge 850$  mm, and
    - the distance bar shall be placed at a maximum height (*G*) comprised between 0 mm and 50 mm from the edge of the hopper, and with a minimal horizontal distance (*F*) from the edge of the hopper of 200 mm.".

#### 6 Modification to 5.2.2.2.6, "Cleaning of the hopper"

In the 2nd indent replace "25 mm" with "20 mm".

# 7 Modification to 5.2.3, "Zone 2: Access to the dividing mechanism and other moving parts via the discharge opening"

Replace the text in 5.2.3 with the following:

"In principle, there is no significant hazard at the discharge side of a drum and piston type dividing mechanism.

When a cutting/shearing zone could be reached by a person through the discharge opening, access to the hazard zone shall be prevented by:

- either a fixed guard with opening according to EN ISO 13857:2008, Table 4; or
- a movable interlocking guard in accordance with EN ISO 13857:2008, Table 4; or

— a movable interlocking guard acting as a trip device (see Table 2 and Figure 7); The guard shall comply with Table 2 and be free to move vertically or near vertically at the products outlet opening.

If the guard has openings, the distance between bars or mesh shall comply with EN ISO 13857:2008, Table 4, except for the products outlet opening.

#### Table 2 — Dimensions of movable interlocking guard acting as a trip device

Dimensions in millimetres

L	35	40	45	50	55	60	65	70	105	140	150			
D	205	230	250	300	350	400	450	500	550	600	850			
E	EN ISO 13857:2008, Table 4													
Where (standards.iteh.ai)														
L =	= distance between the conveyor belt and the front opening of the guard when the interlocking device actuates; https://standards.iteh.ai/catalog/standards/sist/d5e65144-0a41-4dfd-9dbb-													
D =	distance fro	listance from the edge of the tunnel-toi danger point of the mechanism; 1-2020												
E =	listance between the lower edge of the guard and the surface where the piece/s of dough is/are lying, when the interlocking device is activated.													



Figure 7 — Movable interlocking distance guard

#### 8 Modifications to 5.2.4, "Zone 3: Discharge belt"

*In the first sentence, replace reference to* "Figure 7" *with reference to* "Figure 8". *In the figure title, replace* "Figure 7" *with* "Figure 8". ".