



**SLOVENSKI STANDARD**  
**SIST EN 13289:2002/kFprA1:2012**  
**01-julij-2012**

---

**Stroji za izdelavo testenin - Sušilniki in ohlajevalniki - Varnostne in higienske zahteve - Dopolnilo A1**

Pasta processing plants - Dryers and coolers - Safety and hygiene requirements

Maschinen zur Teigwarenherstellung - Trockner und Kühler - Sicherheits- und Hygieneanforderungen

Installations de production de pâtes - Séchoirs et refroidisseurs - Prescriptions relatives à la sécurité et à l'hygiène

**Ta slovenski standard je istoveten z: EN 13289:2001/FprA1**

---

**ICS:**

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

**SIST EN 13289:2002/kFprA1:2012**      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 13289:2001**

**FprA1**

April 2012

---

ICS 67.260

English Version

## Pasta processing plants - Dryers and coolers - Safety and hygiene requirements

Installations de production de pâtes - Séchoirs et refroidisseurs - Prescriptions relatives à la sécurité et à l'hygiène

Maschinen zur Teigwarenherstellung - Trockner und Kühler - Sicherheits- und Hygieneanforderungen

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

This draft amendment A1, if approved, will modify the European Standard EN 13289:2001. 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.

CEN members are the national standards bodies of 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

---

## Contents

Page

Foreword.....	4
1 <b>Modification to the Foreword</b> .....	5
2 <b>Modification to the Introduction</b> .....	5
3 <b>Correction of the numbering of clauses and sub-clauses</b> .....	5
4 <b>Modification to Clause 1, Scope</b> .....	6
5 <b>Modification to Clause 2, Normative references</b> .....	6
6 <b>Modification to Clause 3, Terms and definitions</b> .....	8
7 <b>Modification to Clause 5, Safety requirements and/or measures</b> .....	8
8 <b>Modification to 5.1.2.1</b> .....	8
9 <b>Modification to 5.1.2.2</b> .....	8
10 <b>Modification to 5.1.2.3</b> .....	8
11 <b>Modification to 5.1.2.5</b> .....	9
12 <b>Modification to 5.1.4, Openings</b> .....	9
13 <b>Modification to 5.1.4.1</b> .....	9
14 <b>Modification to 5.1.4.2</b> .....	9
15 <b>Modification to 5.1.5, Fluid ejection</b> .....	9
16 <b>Modification to 5.1.6, Unexpected start or failure of emergency device</b> .....	9
17 <b>Modification to 5.1.6.1, Supply disconnecting device</b> .....	9
18 <b>Modification to 5.1.6.2, Emergency stop device</b> .....	11
19 <b>Modification to 5.1.6.3, Control circuits and control functions of stop device</b> .....	11
20 <b>Modification to 5.1.6.4, Safety related parts of control system</b> .....	11
21 <b>Modification to 5.1.6.5, Automatic start warning</b> .....	11
22 <b>Modification to 5.1.6.6, Safety limit device</b> .....	11
23 <b>Modification to 5.1.6.7, Interlocking system of guards</b> .....	11
24 <b>Modification to 5.1.6.9, Controls for maintenance operations</b> .....	12
25 <b>Modification to 5.2, Electrical hazards</b> .....	12
26 <b>Modification to 5.2.1.1, Direct contact</b> .....	12
27 <b>Modification to 5.2.1.2, Indirect contact</b> .....	12
28 <b>Modification to 5.2.2, Degrees of protection (see 12.3 of EN 60204-1:1997)</b> .....	12
29 <b>Modification to 5.2.3, Cable section and colours</b> .....	12
30 <b>Modification to 5.2.4, Electromagnetic compatibility</b> .....	13
31 <b>Modification to 5.4, Noise reduction</b> .....	13
32 <b>Modification to 5.5, Vibration hazard</b> .....	13
33 <b>Modification to 5.6, Protective measures against slip, trip and fall</b> .....	13
34 <b>Modification to 5.7, Protective measures against hazards due to neglecting of hygienic principles</b> .....	14

35	Modification to Clause 6, Verification of safety requirements and/or measures.....	14
36	Modification to Clause 7, Information for use (see clause 5 of EN 292-2:1991) .....	14
37	Modification to 7.1, Technical information .....	14
38	Modification to 7.2.1, General .....	14
39	Modification to 7.2.2, Warning signs for residual hazard.....	15
40	Modification to 7.3, Marking .....	15
41	Modification to A.2.1.2, Materials for splash area.....	15
42	Modification to A.2.1.3, Materials for non-food area.....	15
43	Modification to A.2.2, Surface conditions.....	15
44	Modification to A.3.1, Connections of internal surfaces .....	16
45	Modification to A.3.3.1, Fasteners for food area .....	16
46	Modification to B.1, Terms and definitions.....	16
47	Modification to B.2, Installation and mounting conditions .....	16
48	Modification to B.5, Emission sound pressure level determination .....	16
49	Modification to B.6, Sound power level determination .....	16
50	Modification to B.7, Measurement uncertainties .....	16
51	Modification to B.10, Declaration and verification of noise emission value .....	16
52	Modification of Annex ZA .....	17
53	Modification of the Bibliography .....	17

**EN 13289:2001/FprA1:2012 (E)****Foreword**

This document (EN 13289:2001/FprA1:2012) 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 Unique Acceptance Procedure.

The first reasons for amending the published standard EN 13289:2001 is the revision of the EU-Machinery Directive 98/37/EC into 2006/42/EC, requiring the adaptation of published European Standards cited in the Official Journal of the European Union under that Directive.

Additionally, at this occasion the normative references have been updated, while also some other limited improvements and corrections have been made.

## 1 Modification to the Foreword

*Replace the 5<sup>th</sup> paragraph with the following:*

“For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.”

## 2 Modification to the Introduction

*Delete the existing introduction and replace it with the following:*

“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 hazardous events 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 type C standard.

Complementary to the hygiene requirements common to all food processing machines, specific requirements for cleanability and sanitation of the machines in the scope are formulated.”

## 3 Correction of the numbering of clauses and sub-clauses

*According to CEN rules it is not admissible any more to have in an EN standard a clause that is followed by a text passage which in turn is then followed by one or several sub-clauses to the aforementioned clause.*

*In other words:*

*If there is a "head clause" with several sub-clauses, e.g. a clause 5.1 with sub-clauses 5.1.1, 5.1.2 etc., there should be no standard text directly below 5.1, but rather in 5.1.1 and 5.1.2 etc.*

*Therefore the following editorial modifications to EN 13289 are needed:*

- *Insert a new clause "3.1 General" as a subheading under "3 Terms and definitions".*
- *Insert a new clause "4.1 General" as a subheading under "4 List of significant hazards".*
- *Insert a new clause "5.1 General" as a subheading under "5 Safety requirements and/or measures".*
- *Insert a new clause "5.1.4.1" as a subheading under "5.1.4 Openings".*
- *Insert a new clause "5.1.6.1 General" as a subheading under "5.1.6 Unexpected start or failure of emergency device".*
- *Insert a new clause "5.2.1 General" as a subheading under "5.2 Electrical hazards".*
- *Insert a new clause "5.7.1 General" as a subheading under "5.7 Protective measures against hazards due to neglecting of hygienic principles".*
- *Insert a new clause "A.1.1 General" as a subheading under "A.1 Terms and definitions".*
- *Insert a new clause "A.3.1.1 General" as a subheading under "A.3.1 Connections of internal surfaces".*
- *Insert a new clause "B.1.1 General" as a subheading under "B.1 Terms and definitions".*

**EN 13289:2001/FprA1:2012 (E)**

*The text passages directly following the main headings of each of the above-listed items are to be placed under the respective new subheadings. The subsequent clauses and sub-clauses, are to be re-numbered accordingly.*

*NOTE: All of the following modification instructions in this document still refer, however, to the "old" (current) numbering of EN 13289:2001!*

**4 Modification to Clause 1, Scope**

*Delete the last paragraph and replace it with the following:*

"This European Standard is not applicable to machines in its scope which are manufactured before the date of its publication as EN".

**5 Modification to Clause 2, Normative references**

*Replace the 1<sup>st</sup> paragraph with the following:*

"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."

*Replace the normative references with the following:*

"

EN 953:1997+A1:2009, *Safety of machinery – Guards – General requirements for the design and construction of fixed and movable guards*

EN 982:1996+A1:2008, *Safety of machinery – Safety requirements for fluid power systems and their components – Hydraulics*

EN 1088:1995+A2:2008, *Safety of machinery – Interlocking devices associated with guards – Principles for design and selection*

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 60332-1-1:2004, *Tests on electric and optical fibre cables under fire conditions – Part 1-1: Test for vertical flame propagation for a single insulated wire or cable – Apparatus (IEC 60332-1-1:2004)*

EN 60332-1-2:2004, *Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame (IEC 60332-1-2:2004)*

EN 60332-1-3:2004, *Tests on electric and optical fibre cables under fire conditions – Part 1-3: Test for vertical flame propagation for a single insulated wire or cable – Procedure for determination of flaming droplets/particles (IEC 60332-1-3:2004)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*



- 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 3746:2010, *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:2010)*
- EN ISO 4414:2010, *Pneumatic fluid power – General rules and safety requirements for systems and their components (ISO 4414:2010)*
- EN ISO 4871:2009, *Acoustics – Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*
- EN ISO 7731:2008, *Ergonomics – Danger signals for public and work areas – Auditory danger signals (ISO 7731:2003)*
- EN ISO 9614-1:2009, *Acoustics – Determination of sound power levels of noise sources using sound intensity – Part 1: Measurement at discrete points (ISO 9614-1:1993)*
- EN ISO 9614-2:1996, *Acoustics – Determination of sound power levels of noise sources using sound intensity – Part 2: Measurement by scanning (ISO 9614-2:1996)*
- EN ISO 11204:2010, *Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections (ISO 11204:2010)*
- EN ISO 11688-1:2009, *Acoustics – Recommended practice for the design of low-noise machinery and equipment – Part 1: Planning (ISO/TR 11688-1:1995)*
- EN ISO 12100:2010, *Safety of machinery – General principles for design – Risk assessment and risk reduction (ISO 12100:2010)*
- 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)*
- 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 14122-1:2001, *Safety of machinery – Permanent means of access to machinery – Part 1: Choice of fixed means of access between two levels (ISO 14122-1:2001)*
- EN ISO 14122-2:2001, *Safety of machinery – Permanent means of access to machinery – Part 2: Working platforms and walkways (ISO 14122-2:2001)*
- EN ISO 14122-3:2001, *Safety of machinery – Permanent means of access to machinery – Part 3: Stairs, stepladders and guard-rails (ISO 14122-3:2001)*
- EN ISO 14122-4:2004, *Safety of machinery – Permanent means of access to machinery – Part 4: Fixed ladders (ISO 14122-4:2004)*
- ISO 468:1982, *Surface roughness – Parameters, their values and general rules for specifying requirements (standard withdrawn)*
- ISO 1940-1:2003, *Mechanical vibration – Balance quality requirements for rotors in a constant (rigid) state – Part 1: Specification and verification of balance tolerances*

**EN 13289:2001/FprA1:2012 (E)**

ISO 2631-1:1997, *Mechanical vibration and shock – Evaluation of human exposure to whole body vibration – Part 1: General requirements*  
”

**6 Modification to Clause 3, Terms and definitions**

*In the first sentence replace “EN 1070” with “EN ISO 12100:2010”.*

**7 Modification to Clause 5, Safety requirements and/or measures**

*Replace the heading with:*

**“Safety requirements and/or protective measures”**

*Delete the existing paragraph and replace it with the following:*

“Machinery shall comply with the safety requirements and/or protective measures of this clause. In addition, the machine shall be designed according to the principles of EN ISO 12100 for relevant but not significant hazards, which are not dealt with by this document.”

**8 Modification to 5.1.2.1**

*Delete the first paragraph and replace it with the following:*

“Access to moving parts for pasta conveyance systems defined in 4.1.2.1 and external to insulation booth shall be prevented with fixed guards in accordance with EN 953:1997+A1:2009, 3.2. Fixing systems for fixed guards shall remain attached to these parts or to the machine when the guards are removed.”

**9 Modification to 5.1.2.2**

*Delete the existing paragraph and replace it with the following:*

“Moving parts for drive systems defined in 4.1.2.2 and external to insulation booth shall be protected with fixed guards in accordance with EN 953:1997+A1:2009, 3.2. Fixing systems for fixed guards shall remain attached to these parts or to the machine when the guards are removed.”

**10 Modification to 5.1.2.3**

*Delete the existing paragraphs and replace them with the following:*

“Fan blades placed inside the insulating panels that cannot be reached through openings could be unguarded if the insulating panels are fixed.