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Irish Standard I.S. EN 1672-2:2005+A1:2009

# Food processing machinery - Basic concepts - Part 2: Hygiene requirements

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## EUROPEAN STANDARD

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**English Version** 

# Food processing machinery - Basic concepts - Part 2: Hygiene requirements

Machines pour les produits alimentaires - Notions fondamentales - Partie 2: Prescriptions relatives à l'hygiène

Nahrungsmittelmaschinen - Allgemeine Gestaltungsleitsätze - Teil 2: Hygieneanforderungen

This European Standard was approved by CEN on 14 February 2005 and includes Amendment 1 approved by CEN on 29 December 2008.

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CEN members are the national standards bodies of 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.



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

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## Foreword

This document (EN 1672-2:2005+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of an identical text or by endorsement, at the latest by September 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-12-29.

This document supersedes At EN 1672-2:2005 (At.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\square$   $\square$ 

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).

A) For relationship with the EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.

This document is complemented by prCEN/TR 1672-1 which deals with safety rules to protect operators.

This document includes a Bibliography.

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

This document is a type C standard as stated in EN ISO 12100-1.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

Here it has to be distinguished between the hazards to the operator and the risks to the food (the product processed by the machinery).

This document addresses only those hazards which are commonly occurring on food processing machines and for which technical specifications can be set which will apply to all (or most) of the classes of machines within the scope of the standard which have that hazard.

In almost all cases at least one of the different methods of design, safeguarding or other safety measures can be chosen which will meet both safety and hygiene essential requirements and adequately control both risks. The option to satisfy both hygiene and safety risks may not be the most obvious option which would have been adopted had the risk only been to safety or to hygiene, but will have to be the one chosen to meet both.

The first choice is to select a design method which removes both hygiene and safety risks: if this is not within the state of the art then safeguarding options for both, or if not, one of the risks should be selected. Where no design or safeguarding options are within the state of the art to adequately control both hygiene and safety risks then one of the risks, or both, would have to be dealt with by safety measures, including instructions to the user. The assessment of the respective safety and hygiene risks will indicate their relative significance and the higher level of protection (i.e. safeguarding) should be implemented to deal with the severest risk and safety measures for the lesser risk.

The technical requirements given in the prCEN/TR 1672-1 and in this document permit both objectives to be met for those significant and common risks identified as justifying common requirements in this document.

Other hazards, for which such common requirements can not be set, remain to be covered in machinery specific type C standard and/or by reference to EN ISO 12100-2 and type A and type B standards.

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.

NOTE The essential requirements of the Machinery Directive should met in respect of both safety risks to the operator of the machinery and hygiene risks to the food (product processed by the machinery). The Directive requirements and the safety and hygiene risks identified by the risk assessment process required by EN 1050 can each usually equally well be met by a range of safeguarding or hygiene design options.

#### 1 Scope

This document specifies common hygiene requirements for machinery used in preparing and processing food for human and, where relevant, animal consumption to eliminate or minimise the risk of contagion, infection, illness or injury arising from this food. It identifies the hazards which are relevant to the use of such food processing machinery and describes design methods and information for use for the elimination or reduction of these risks.

This document does not deal with the hygiene related risks to personnel arising from the use of the machine.

This document applies to food processing machines – Examples of such groups of food processing machinery are given in the informative Annex B.

NOTE Separate hygiene requirements are contained in other EU Directives (see Bibliography).

In addition, the principles contained in this document can be applied to other machinery and equipment used to process food where similar risks apply.

Examples of hygiene risks and acceptable solutions are given in the informative Annex A.

This document is not applicable to machines manufactured before the date of publication of this document by CEN.

#### 2 Normative references

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 document (including any amendments) applies.

EN ISO 4288, Geometrical product specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture (ISO 4288:1996)

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)

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given EN ISO 12100-1:2003 and the following apply.

#### 3.1

food

any product, ingredient or material intended to be orally consumed by human or animal

#### 3.2

#### food hygiene

taking of all measures during the preparation and processing of food to ensure that it is fit for human or animal consumption

#### 3.3

#### adverse influence

effect which gives a significant reduction of the fitness for consumption of a food. A food can be adversely influenced, in particular by microbial pathogens or other unwanted micro-organisms, toxins, vermin and other contaminants



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