



**NSAI**  
Standards

Irish Standard  
I.S. EN 12853:2001+A1:2010

# Food processing machinery - Hand-held blenders and whisks - Safety and hygiene requirements

## I.S. EN 12853:2001+A1:2010

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

EN 12853:2001+A1:2010/AC:2010

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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12853:2001+A1:2010/AC

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December 2010

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ICS 67.260

English version  
Version Française  
Deutsche Fassung

Food processing machinery - Hand-held blenders and whisks - Safety and hygiene requirements

Machines pour les produits alimentaires -  
Batteurs et fouets portatifs - Prescriptions  
relatives à la sécurité et à l'hygiène

Nahrungsmittelmaschinen - Handmixer und  
Handrührer - Sicherheits- und  
Hygieneanforderungen

This corrigendum becomes effective on 22 December 2010 for incorporation in the official English version of the EN.

Ce corrigendum prendra effet le 22 décembre 2010 pour incorporation dans la version anglaise officielle de la EN.

Die Berichtigung tritt am 22. Dezember 2010 zur Einarbeitung in die offizielle Englische Fassung der EN in Kraft.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Ref. No.: EN 12853:2001+A1:2010/AC:2010 E

## 1 Modification to Clause 4, List of significant hazards

*Replace*

### "4 <sup>A1</sup> List of significant hazards

#### 4.1 Mechanical hazards

##### 4.1 General

This clause contains all the significant hazards, hazardous situations and events, as far as they are dealt with in this European Standard, identified by risk assessment as significant for this type of machinery, and which require action to eliminate or reduce the risk. <sup>A1</sup>"

*with*

### "4 <sup>A1</sup> List of significant hazards

#### 4.1 General

This clause contains all the significant hazards, hazardous situations and events, as far as they are dealt with in this European Standard, identified by risk assessment as significant for this type of machinery, and which require action to eliminate or reduce the risk. <sup>A1</sup>

#### 4.2 Mechanical hazards

The mechanical hazards of impact, cutting, trapping, crushing are due to contact of the hands with the rotating parts. They may arise from the following:

- unintended starting;
- ejection of parts due to bursting or breaking during operation, or disconnection of parts;
- falling of parts and ejection of tools;
- falling of the machine.

NOTE As it would take a too long time to develop a test for checking the relevant requirement this last item will be dealt with at the stage of the revision of this standard."

*Update the following subtitle numbering as follows:*

4.3 Electrical hazards

4.4 Thermal hazards

4.5 Hazards generated by neglecting hygiene principles in machine design

4.5.1 Hazards to the operator

4.5.2 Hazards to the consumer

4.6 Hazards generated by neglecting ergonomic principles in machine design

## **2 Modification to 7.3, Marking**

*Update the field formatting of the header to ensure the right numbering "7.3".*

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English Version

## Food processing machinery - Hand-held blenders and whisks - Safety and hygiene requirements

Machines pour les produits alimentaires - Batteurs et fouets  
portatifs - Prescriptions relatives à la sécurité et à l'hygiène

Nahrungsmittelmaschinen - Handmixer und Handrührer -  
Sicherheits- und Hygieneanforderungen

This European Standard was approved by CEN on 20 April 2001 and includes Amendment 1 approved by CEN on 25 March 2010.

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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 Management Centre has the same status as the official versions.

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## Foreword

<sup>A1</sup> This document (EN 12853:2001+A1:2010) 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. <sup>A1</sup>

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 November 2010, and conflicting national standards shall be withdrawn at the latest by November 2010.

This document includes Amendment 1, approved by CEN on 2010-03-25.

This document supersedes EN 12853:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags <sup>A1</sup> <sup>A1</sup>.

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.

It is one of a series of standards on the design and construction of machines used in catering:

- vegetable cutting machines;
- catering attachments for machines having an auxiliary drive hub;
- food processors and blenders;
- hand-held blenders and whisks;
- beam mixers;
- salad dryers;
- vegetable peelers;
- cooking kettles equipped with stirrer and/or mixer.

<sup>A1</sup> 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, which is an integral part of this document. <sup>A1</sup>

<sup>A1</sup> *deleted text* <sup>A1</sup>

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, 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

The use of hand-held blenders and whisks generates various mechanical or other hazards.

A1 Their extensive use justifies the need for a standard covering both safety and the hazards to food hygiene. A1

A1 *deleted text* A1

A1 This European Standard is a type C standard as stated in EN ISO 12100. A1

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this 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 the safety and hygiene requirements for the design and manufacture of hand-held blenders and whisks used in the commercial and institutional catering, and in food shops.

The term "hand-held blenders" is used to refer to the equipment covered by this standard.

The machines covered by this standard are hand-held appliances whose tool is intended to process a foodstuff in a container. Tools are designed to crush, mix, mash, emulsify, etc. foodstuffs such as vegetables into soups, mashes, purees, sauces, mayonnaise, cream, dairy products and more generally to process all solid, liquid, pasty or powdery foodstuffs to obtain a homogeneous fluid.

These appliances are designed to process up to 100 l of food in one operation.

This standard applies to the following machines, according to their weight and to the operating modes required by their intended use:

- manually operated machines, using one or both hands, actuated throughout the whole operation (see figure 1);
- machines operating resting on the bottom of the container (see figure 2);
- machines fixed to or placed on a special support which can be fitted to the container (see figure 3). The support acts as a substitute for the operator for operations that take a long time or for food processing which may present risks of burns (steam or splashes).

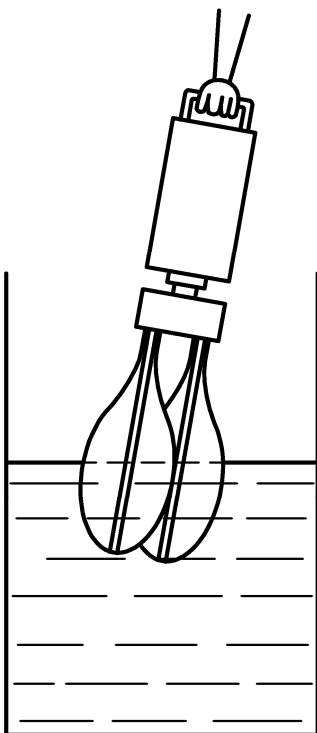


Figure 1 — Manually operated machine

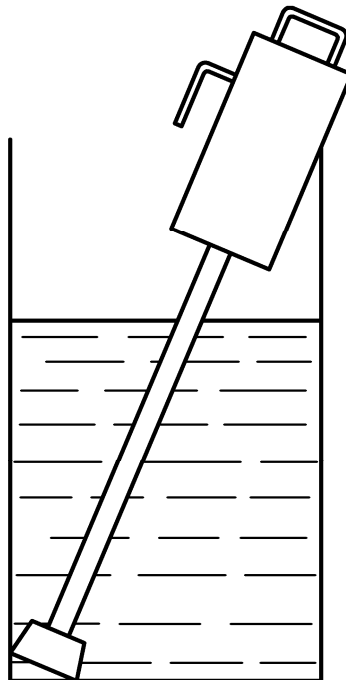


Figure 2 — Free-standing machine

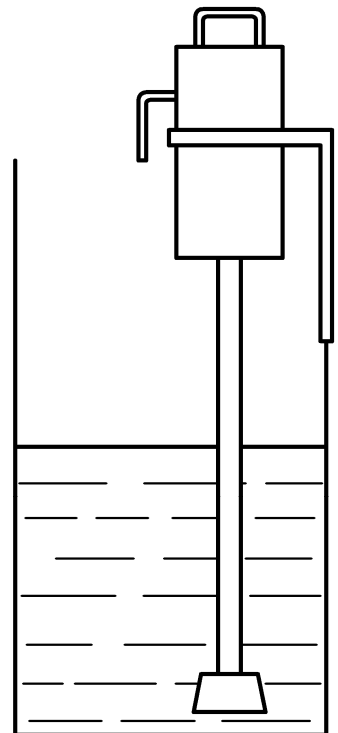


Figure 3 — Fixed machine

**A1** deleted text **A1**

## EN 12853:2001+A1:2010 (E)

1.2 This standard does not apply to:

- domestic machines;
- vertical crushers, sieves mounted on trolleys and beam mixers (beam mixers are covered by  $\overline{A_1}$  EN 12854:2003  $\overline{A_1}$ ).

1.3  $\overline{A_1}$  This European Standard specifies all significant hazards, hazardous situations and events relevant to hand-held blenders and whisks, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

This European Standard deals with the hazards which can arise during commissioning, operation, cleaning, removal of food blockages, feeding, changing the tools, maintenance and decommissioning of the machine.  $\overline{A_1}$

1.4  $\overline{A_1}$  Noise is not considered to be a significant hazard for hand-held blenders and whisks. This does not mean that the manufacturer of these machines is absolved from reducing noise and making a noise declaration. Therefore, the information to be provided and a noise test code are given in this European Standard.  $\overline{A_1}$

1.5  $\overline{A_1}$  This European Standard is not applicable to hand-held blenders and whisks which are manufactured before the date of its publication as EN.  $\overline{A_1}$

## 2 $\overline{A_1}$ 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 614-1:2006, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

EN 953, *Safety of machinery — General requirements for the design and construction of fixed and movable guards*

EN 1672-2:2005, *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 60204:2005, modified)*

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

EN ISO 3744:1995, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994)*

EN ISO 4287:1998, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287:1997)*

EN ISO 4871:1996, *Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

EN ISO 11201:1995, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at the work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995)*

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 and specifications (ISO 12100-2:2003)*

EN ISO 13732-1:2006, *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces (ISO 13732-1:2006)*

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