

**Toidutöötlemismasinad. Köögiviljade
lõikamismasinad. Ohutus- ja
hügieeninõuded**

Food processing machinery - Vegetable cutting
machines - Safety and hygiene requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1678:1999 sisaldab Euroopa standardi EN 1678:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1678:1999 consists of the English text of the European standard EN 1678:1998.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: Käesolev standard kirjeldab ohutus- ja hügieeninõudeid transporditava ja vähem kui 3 kW maksimaalse nimivõimsusega köögiviljade lõikamismasinade projekteerimiseks ja valmistamiseks. Standard ei rakendu kodumajapidamises kasutatavatele masinatele.</p>	<p>Scope:</p>
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Võtmesõnad: agrotööstusseadmed, hügieen, hügieeningimused, informatsioon, kontrollimine, köögiviljad, lõikamismasinad, ohtlikud piirkonnad, ohud, ohutusmeetmed, ohutusnõuded, toiduainetööstuse seadmed, utiliseerimine, õnnetuste ärahoidmine

ICS 67.260

Descriptors: Food processing machinery, hygiene, safety.

English version

Food processing machinery
Vegetable cutting machines
Safety and hygiene requirements

Machines pour les produits
alimentaires – Coupe-légumes –
Prescriptions relatives à la sécurité et
à l'hygiène

Nahrungsmittelmaschinen –
Gemüseschneidemaschinen –
Sicherheits- und Hygiene-
anforderungen

This European Standard was approved by CEN on 1998-02-28.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 153 " Food processing machinery - Safety and hygiene specifications", 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 1998, and conflicting national standards shall be withdrawn at the latest by September 1998.

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

This European Standard 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 standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

0 Introduction

The use of vegetable cutting machines involves various mechanical and other hazards.

Their extensive use justifies the need of a standard covering both safety and the hazards to food hygiene arising from machine design.

This European standard is a type C standard as stated in clause 0 of EN 292:1991.

The machinery concerned and the extent to which hazards are covered is indicated in the scope of this standard. In addition, machinery should comply as appropriate with EN 292 for hazards which are not covered by this standard.

1 Scope

This standard specifies the safety and hygiene requirements for the design and manufacture of vegetable cutting machines which are transportable and have a maximum rated power less than 3 kW.

It does not apply to domestic machines.

It applies when such machines are used to operate under the intended conditions of use as defined in 3.12 of EN 292-1:1991 and stated in the instruction handbook (see 7.1), including cleaning, removal of jammed food, feeding and changing the cutting device.

NOTE : If the machine is not used under the above conditions, the manufacturer should, when informed of such a situation, check by a new risk analysis that the preventive measures remain valid.

All types of vegetable cutting machines are contained within the scope of this standard including all machines carrying out the function of cutting, shredding, dicing, chipping and grating food products according to the specification of the manufacturer whatever the cutting motion. In particular, this standard covers those vegetable cutting machines consisting of a chamber in which a knife or cutting disc rotates, machines of rotating drum type in which the cutting is done by fixed knives and potato chipping machines with a horizontal reciprocating motion. It applies to all such machines in which the product passes through the machines.

This standard does not cover those machines as food processors or peelers which are covered by specific standards. The hazards of automatic feeding devices are not covered by this standard.

This standard excludes vegetable cutting attachments which are mounted onto machines having an auxiliary drive hub such as planetary mixers, and which are dealt with in a specific Standard.

It covers all significant hazards at such machines, as identified by risk assessment (see EN 1050), which are listed in clause 4 of this standard.

Noise can be a significant hazard for some large machines. At the present time, there is insufficient information of emission value and noise attenuation measures to enable an achievable noise emission level to be set nor requirement specified. In the meantime noise measurements shall be made according to annex A and information given to users and where the noise is significant makers have to comply with Directive requirements to reduce noise emission as far as possible.

This standard does not deal with the hazard of vibrations.

This standard applies primarily to machines which are manufactured after its date of issue.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 292-1:1991	Safety of machinery - Basic concepts, general principles for design - Part 1 : Basic terminology, methodology
EN 292-2:1991	Safety of machinery - Basic concepts, general principles for design - Part 2 : Technical principles and specifications
EN 292-2/A1:1995	Safety of machinery - Basic concepts, general principles for design - Part 2 : Technical principles and specifications
EN 294:1992	Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs
EN 614-1:1995	Safety of machinery - Ergonomic design principles - Part 1 : Terminology and general principles
EN 954-1:1996	Safety of machinery - Safety related parts of control systems - Part 1 : General principles for design
EN 1088:1995	Safety of machinery - Interlocking devices with guards - Principles associated for design and selection
EN 1672-2:1997	Food processing machinery - Basic concepts - Part 2 : Hygiene requirements
EN 60204-1:1992	Safety of machinery - Electrical equipment of machines - Part 1 : General requirements (IEC 204-1:1992, modified)
EN 60529:1991	Degrees of protection provided by enclosures (code IP)
EN ISO 3744:1995	Acoustics - Determination of sound power levels of noise sources - Engineering method employing an enveloping measurement surface in an essentially free field over a reflecting plane
EN ISO 4871:1996	Acoustics - Declaration and verification of noise emission values of machinery and equipment
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
ENV 1070:1993	Safety of machinery - Terminology.
ISO 468:1982	Surface roughness - Parameters, their values and general rules for specifying requirements
EN 953:1997	Safety of machinery - General requirements for the design and construction of guards (fixed, movable)