

BS EN 12779:2015



BSI Standards Publication

Safety of woodworking machines — Chip and dust extraction systems with fixed installation — Safety requirements

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National foreword

This British Standard is the UK implementation of EN 12779:2015. It supersedes BS EN 12779:2004+A1:2009 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MTE/23, Woodworking machines.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Safety of woodworking machines - Chip and dust extraction systems with fixed installation - Safety requirements

Sécurité des machines pour le travail du bois -
Installations fixes d'extraction de copeaux et de
poussières - Prescriptions de sécurité

Sicherheit von Holzbearbeitungsmaschinen - Ortsfeste
Absauganlagen für Holzstaub und Späne -
Sicherheitstechnische Anforderungen

This European Standard was approved by CEN on 26 September 2015.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 12779:2015) has been prepared by Technical Committee CEN/TC 142 "Woodworking machines - Safety", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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.

This document supersedes EN 12779:2004+A1:2009.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports the basic requirements of EU Directive(s).

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

The European Standards produced by CEN/TC 142 are particular to woodworking machines and compliment the relevant "A" and "B" standards on the subject of general safety (see Introduction of EN ISO 12100:2010 for a description of A, B and C standards).

NOTE Extraction systems as a whole are not intended to be installed in areas, where the presence of potentially explosive atmosphere needs to be taken into account.

In relation to the previous version of the standard, the following main modifications have been made:

- The scope has been adjusted to meet the fields of application of the standard;
- The requirements for safety related controls have been modified for clarification;
- The requirements for electrical equipment and installations have been modified for clarification;
- The requirements for fire and explosion protection have been modified for clarification;
- The requirements for noise protection have been modified for clarification;
- The requirements for protection against hazardous substances have been modified for clarification;
- The requirements for silos have been modified for clarification;
- A new annex for examples of extraction systems have been added for clarification;
- A new annex for the classification of places where explosive atmosphere may occur have been added for clarification.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta,

Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This standard has been prepared to be a harmonized standard to provide one means of conforming to the Essential Health and Safety Requirements of the Machinery Directive and associated EFTA Regulations. This document is a type “C” standard as defined in EN ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e. g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document. The machinery concerned and the extent to which hazards, hazardous situations and events 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 other standards, for machines that have been designed and built in accordance with the provisions of this type C standard.

The requirements of this document are directed to manufacturers and their authorized representatives of chip and dust extraction systems.

This document also includes information to be provided by the manufacturer to the user.

1 Scope

This European Standard deals with the significant hazards, hazardous situations and events relevant for chip and dust extraction systems for fixed installation and for connection with machines for working on solid wood (including hard wood), wood-based materials and wood-like materials, when they are used as intended and under the conditions foreseen by the manufacturer, including reasonably foreseeable misuse.

This European Standard deals also with the technical requirements to minimize the hazards in connection with the temporary storage of wood dust, chips and shavings in a silo, bin or container including charging and discharge systems.

This European standard does not apply to:

- a) chip and dust extraction systems with filters installed indoors (covered by prEN 16770);
- b) extraction equipment (e.g. extraction hoods, ducts) within a woodworking machine including the outlet to which the extraction system is connected;
- c) chip and dust extraction systems designed for K_{ST} values above 200 bar ms⁻¹;
- d) mechanical conveying systems between filter and storage facility;
- e) extraction systems and conveying systems with underpressure below 0,3 bar or overpressure above 0,3 bar;
- f) storage devices for pressed wood products (e.g. pellets) and humid shavings.

Requirements for containers are not dealt with in this standard.

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

2 Normative references

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.

EN 617:2001+A1:2010, *Continuous handling equipment and systems — Safety and EMC requirements for the equipment for the storage of bulk materials in silos, bunkers, bins and hoppers*

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

EN 1093-7:1998+A1:2008, *Safety of machinery — Evaluation of the emission of airborne hazardous substances — Part 7: Separation efficiency by mass, ducted outlet*

EN 1127-1:2011, *Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology*

EN 1366-1:2014, *Fire resistance tests for service installations — Part 1: Ventilation ducts*

EN 1366-2:2015, *Fire resistance tests for service installations — Part 2: Fire dampers*