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Standards

Irish Standard  
I.S. EN 61029-2-10:2010

# Safety of transportable motor-operated electric tools -- Part 2-10: Particular requirements for cutting-off grinders (IEC 61029-2-10:1998 (MOD))

## I.S. EN 61029-2-10:2010

*Incorporating amendments/corrigenda issued since publication:*

EN 61029-2-10:2010/A11:2013

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61029-2-10/A11**

August 2013

ICS 25.080.60; 25.140.20

English version

**Safety of transportable motor-operated electric tools -  
Part 2-10: Particular requirements for cutting-off grinders**

Sécurité des machines-outils électriques  
semi-fixes -  
Partie 2-10: Règles particulières pour les  
torets à couper

Sicherheit transportabler motorbetriebener  
Elektrowerkzeuge -  
Teil 2-10: Besondere Anforderungen für  
Trennschleifmaschinen

This amendment A11 modifies the European Standard EN 61029-2-10:2010; it was approved by CENELEC on 2013-07-22. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC 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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**CENELEC**

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

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

## Foreword

This document (EN 61029-2-10:2010/A11:2013) has been prepared by CLC/TC 116 "Safety of motor-operated electric tools".

The following dates are fixed:

- latest date by which this document has to be implemented (dop) 2014-07-22  
at national level by publication of an identical national  
standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2016-07-22  
this document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This amendment was developed to streamline Table Z102 and to bring EN 61029-2-10:2010 in line with current practice and machines in production.

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

NOTE In this European Standard the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type*;
- explanatory matter: in smaller roman type.

EUROPEAN STANDARD

**EN 61029-2-10**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2010

ICS 25.080.60; 25.140.20

English version

**Safety of transportable motor-operated electric tools -  
Part 2-10: Particular requirements for cutting-off grinders  
(IEC 61029-2-10:1998, modified)**

Sécurité des machines-outils électriques  
semi-fixes -  
Partie 2-10: Règles particulières pour  
les tourets à couper  
(CEI 61029-2-10:1998, modifiée)

Sicherheit transportabler  
Elektrowerkzeuge -  
Teil 2-10: Besondere Anforderungen  
für Trennschleifmaschinen  
(IEC 61029-2-10:1998, modifiziert)

This European Standard was approved by CENELEC on 2009-12-01. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of the International Standard IEC 61029-2-10:1998, prepared by SC 61F (transformed into IEC TC 116, Safety of hand-held motor-operated electric tools), together with the common modifications prepared by the Technical Committee CENELEC TC 116, former TC 61F, Safety of hand-held motor-operated electric tools, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 61029-2-10 on 2009-12-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2010-12-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2012-12-01

This European Standard is divided into two parts:

- Part 1 General requirements that are common to most transportable electric motor operated tools (for the purpose of this European Standard referred to simply as tools) which could come within the scope of this European Standard;
- Part 2 Requirements for particular types of tool which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools.

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 2006/42/EC. See Annex ZZ.

Compliance with the relevant clauses of Part 1 together with this Part 2 provides one means of conforming with the specified essential health and safety requirements of the Directive.

The standard follows the overall requirements of EN ISO 12100-1 and EN ISO 12100-2.

For noise and vibration this standard covers the requirements for their measurement, the provision of information arising from these measurements and the provision of information about the personal protective equipment required. Specific requirements for the reduction of the risk arising from noise and vibration through the design of the tool are not given as this reflects the current state of the art.

As with any standard, technical progress will be kept under review so that any development can be taken into account.

**Warning:** Other requirements arising from other EC Directives can be applicable to the products falling within the scope of this standard.

This Part 2-10 is to be used in conjunction with EN 61029-1:2009. This Part 2-10 supplements or modifies the corresponding clauses of EN 61029-1, so as to convert it into the European Standard: "Safety requirements for transportable cutting-off grinders".

Where a particular subclause of Part 1 is not mentioned in this Part 2-10, that subclause applies as far as reasonable. Where this Part 2-10 states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Clauses, subclauses, notes, tables and figures which are additional to those in Part 1 are numbered starting from 101.

Clauses, subclauses, notes, tables and figures which are additional to those in IEC 61029-2-10 are prefixed "Z".

NOTE In this European Standard the following print types are used:

- requirements proper: in roman type;
  - *test specifications: in italic type*;
  - explanatory matter: in smaller roman type.
-

## **1 Scope**

This clause of Part 1 is applicable except as follows:

### **1.1 Addition:**

This European Standard applies to cutting-off grinders intended to cut metal by means of a rotating abrasive cutting-off wheel:

- with an abrasive cutting-off wheel diameter not exceeding 406 mm;
- with a peripheral speed not exceeding 80 m/s.

## **2 Definitions**

This clause of Part 1 is applicable except as follows:

### **2.21 Replacement:**

#### **2.21**

##### **normal load**

normal load is the load to obtain rated input. The normal load is based on the rated voltage or on the upper limit of the rated voltage range

#### **2.101**

##### **cutting-off grinder**

tool having a rotating abrasive cutting-off wheel fitted on an arm suspended over a table. The table supports and positions the workpiece, which is fixed in a vice. The arm is pivoted on the support frame or attached directly to the table. See Figure Z101

#### **2.102**

##### **spindle**

spindle of the cutting-off grinder which supports and transmits the rotation to the abrasive cutting-off wheel

#### **2.103**

##### **wheel guard**

device which partially encloses the abrasive cutting-off wheel in order to protect the user against contact with the wheel in normal use and against ejection of fragments of the wheel in the protected area in case of a breakage of the wheel

#### **2.104**

##### **rear guard**

device behind the abrasive cutting-off wheel that prevents the ejection of sparks

#### **2.105**

##### **fixing device**

device intended to support and maintain the workpiece in position



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### **SAFETY OF TRANSPORTABLE MOTOR-OPERATED ELECTRIC TOOLS –**

#### **Part 2: Particular requirements for cutting-off grinders**

#### FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 61029 has been prepared by subcommittee 61F: Safety of hand-held motor-operated electric tools, of IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this standard is based on the following documents:

FDIS	Report on voting
61F/235/FDIS	61F/242/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This part 2 is to be used in conjunction with the IEC 61029-1.

This part 2 supplements or modifies the corresponding clauses in IEC 61029-1, so as to convert it into the IEC standard: Safety requirements for cutting-off grinders.

Where a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant text in part 1 is to be adapted accordingly.

#### NOTES

1 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

2 Subclauses, notes and figures which are additional to those in part 1 are numbered starting from 101.

A bilingual version of this standard may be issued at a later date.

## SAFETY OF TRANSPORTABLE MOTOR-OPERATED ELECTRIC TOOLS –

### Part 2: Particular requirements for cutting-off grinders

#### 1 Scope

This clause of part 1 is applicable, except as follows:

##### 1.1 Addition:

This standard applies to cutting-off grinders intended mainly for cutting metal with a plain abrasive cutting-off wheel whose diameter does not exceed 406 mm and has a rated peripheral speed not exceeding 80 m/s.

#### 2 Definitions

This clause of part 1 is applicable, except as follows:

##### 2.21 Replacement:

##### normal load

load obtained when the tool is operated continuously, with the torque applied to the spindle such that the input, in watts, is equal to the rated input

NOTE – The normal load is based on the rated voltage or on the upper limit of the rated voltage range.

##### Addition:

##### 2.101

##### cutting-off grinders

machine designed to cut metal by means of a plain abrasive cutting-off wheel which is fixed on the tool spindle. The tool spindle is mounted on the outer end of an arm which is pivoted at its inner end on the machine frame. The machine table has a clamping device to secure the workpiece. The table can be traversed towards the cutting-off wheel (see figure 101).

##### 2.102

##### tool spindle

spindle of the cutting-off grinder which supports and transmits the rotation of the plain abrasive cutting-off wheel

##### 2.103

##### guard

device which partially encloses the plain abrasive cutting-off wheel in order to protect the users against accidental contact with the wheel in normal use and against the ejection of fragments of the wheel in the protected area in the case of breakage of the wheel

##### 2.104

##### flange assembly

means provided to clamp the plain abrasive cutting-off wheel to the machine spindle

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