

SLOVENSKI STANDARD SIST EN 60745-2-17:2010

01-december-2010

Nadomešča:

SIST EN 60745-2-17:2003

SIST EN 60745-2-17:2003/A11:2007

Električna ročna orodja - Varnost - 2-17. del: Posebne zahteve za rezkalnike in obrezovalnike (IEC 60745-2-17:2010, spremenjen)

Hand-held motor-operated electric tools - Safety - Part 2-17: Particular requirements for routers and trimmers (IEC 60745-2-17:2010, modified)

iTeh STANDARD PREVIEW

Handgeführte motorbetriebene Elektrowerkzeuge - Sicherheit - Teil 2-17: Besondere Anforderungen für Oberfräsen und Kantenfräsen (IEC 60745-2-17:2010, modifiziert)

SIST EN 60745-2-17:2010

Outils électroportatifs à moteur Sécurité Partie 2-17. Règles particulières pour les défonceuses et les affleureuses (CEI 60745-2-17:2010, modifiée)

Ta slovenski standard je istoveten z: EN 60745-2-17:2010

ICS:

25.080.20 Frezalniki Boring and milling machines

25.140.20 Električna orodja Electric tools

SIST EN 60745-2-17:2010 en

SIST EN 60745-2-17:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60745-2-17:2010</u> https://standards.iteh.ai/catalog/standards/sist/92a397bf-ec77-43c9-a325-9fd3b4820526/sist-en-60745-2-17-2010 **EUROPEAN STANDARD**

EN 60745-2-17

NORME EUROPÉENNE EUROPÄISCHE NORM

September 2010

ICS 25.140.20

Supersedes EN 60745-2-17:2003 + A11:2007

English version

Hand-held motor-operated electric tools - Safety -

Part 2-17: Particular requirements for routers and trimmers

(IEC 60745-2-17:2010, modified)

Outils électroportatifs à moteur -Sécurité -Partie 2-17: Règles particulières pour les défonceuses et les affleureuses (CEI 60745-2-17:2010, modifiée) Handgeführte motorbetriebene Elektrowerkzeuge -Sicherheit -Teil 2-17: Besondere Anforderungen für Oberfräsen und Kantenfräsen (IEC 60745-2-17:2010, modifiziert)

iTeh STANDARD PREVIEW (standards.iteh.ai)

This European Standard was approved by CENELEC on 2010-09-01. 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 sixty 92a397bf-ec77-43c9-a325-9fd3b4820526/sist-en-60745-2-17-2010

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 116/38/FDIS, future edition 3 of IEC 60745-2-17, prepared by TC 116, Safety of hand-held motor-operated electric tools, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, prepared by the Technical Committee CENELEC TC 116, Safety of motor-operated electric tools, was submitted to the formal vote.

The combined texts were approved by CENELEC as EN 60745-2-17 on 2010-09-01.

This European Standard supersedes EN 60745-2-17:2003 + A11:2007.

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 amendment has to be implemented at national level by publication of an identical national standard or by endorsement
- (dop) 2011-09-01
- latest date by which the national standards conflicting PREVIEW with the amendment have to be withdrawn (dow) 2013-09-01

(standards.iteh.ai)

This European Standard is divided into two parts:

SIST EN 60745-2-17:2010

- Part 1: General requirements which are common to most hand-held-lectric motor operated tools (for the purpose of this standard referred toosimply as tools) which could come within the scope of this standard;
- Part 2: Requirements for particular types of tools which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools.

This draft European Standard has been prepared under Mandate M/396 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 essential health and safety requirements of the Directive concerned.

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

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

This Part 2-17 is to be used in conjunction with EN 60745-1:2009. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

Subclauses, tables and figures which are additional to those in Part 1 are numbered starting from 101; additional annexes are lettered AA, BB, etc.

Subclauses, tables and figures which are additional to those in IEC 60745-2-17:2010 (116/38/FDIS) are prefixed "Z".

Annex ZZ has been added by CENELEC.

NOTE In this standard the following print types are used:

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

Endorsement notice

The text of the International Standard IEC 60745-2-17:2010 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

6 Void

Replace by:

6 Environmental requirements

iTeh STANDARD PREVIEW
is applicable except as follows:

This clause of Part 1 is applicable except as follows:

(standards.iteh.ai)

6.1.2.4 *Modification:*

SIST EN 60745-2-17:2010

Routers and trimmers are suspended. The base plate of the tool shall be norizontal.

9fd3b4820526/sist-en-60745-2-17-2010

6.1.2.5 *Modification:*

Routers and trimmers are tested at no-load.

6.2 Vibration

6.2.4.2 Location of the measurement

Addition:

Figure Z101 shows the positions at both handles.

6.2.6.3 Operating conditions

Modification:

Trimmers are tested at no-load.

Routers are tested under load observing the conditions shown in Table Z101.

Table Z101 - Test conditions

Orientation	Cutting grooves in a horizontal piece of medium density fibreboard (MDF) having the minimum dimensions 800 mm (length) x 400 mm (width) x 30 mm (depth). The board is fixed on a bench by screws, clamps, air cylinders or the like with a resilient material between bench and workpiece
Tool bit	Ø 12 mm straight sided bit as specified for MDF
Feed force	As necessary for smoothly working without overloading the machine. Apply equal force to both handles avoiding excessive gripping forces
Test cycle	Cutting a 10 mm deep groove across the 400 mm width of the MDF. Distance between grooves to be 10 mm using the guide fence if supplied

6.2.7.2 Declaration of the vibration total value

Addition:

The vibration total value a_h of the handle with the highest emission and the uncertainty K shall be declared.

8 Marking and instructions

8.12.2 a) Add to the addition:

Z101) for routers: information on the correct use of the dust collection system

Z102) for routers: advice to wear a dust mask

SIST EN 60745-2-17:2010

21 Construction https://standards.iteh.ai/catalog/standards/sist/92a397bf-ec77-43c9-a325-9fd3b4820526/sist-en-60745-2-17-2010

Replace by:

This clause of Part 1 is applicable except as follows:

21.Z1 Addition:

Routers are considered to be tools where a considerable amount of dust is produced.

Trimmers are considered not to be tools where a considerable amount of dust is produced.

Add the following new figure:

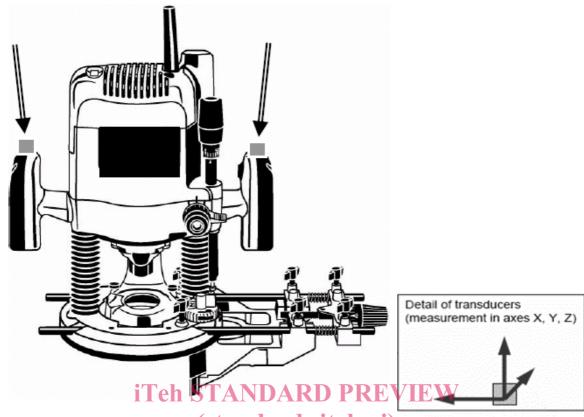


Figure 2101 Position of transducers

SIST EN 60745-2-17:2010 https://standards.iteh.ai/catalog/standards/sist/92a397bf-ec77-43c9-a325-9fd3b4820526/sist-en-60745-2-17-2010

Add the following annex:

Annex ZZ

(informative)

Coverage of Essential Requirements of Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant Essential Requirements as given in EC Directive 2006/42/EC (Machinery Directive).

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directives concerned.

WARNING: Other requirements and other EC Directives may be applicable to the products falling within the scope of this standard.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60745-2-17:2010</u> https://standards.iteh.ai/catalog/standards/sist/92a397bf-ec77-43c9-a325-9fd3b4820526/sist-en-60745-2-17-2010



IEC 60745-2-17

Edition 3.0 2010-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Hand-held motor-operated electric tools—Safety EVIEW Part 2-17: Particular requirements for routers and trimmers

Outils électroportatifs à moteur Sécurité T7:2010

Partie 2-17: Règles particulières pour les défonceuses et les affleureuses

9fd3b4820526/sist-en-60745-2-17-2010

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX

V

ICS 25.140.20 ISBN 978-2-88910-990-6

CONTENTS

	FOI	REWORD	4
	1	Scope	6
	2	Normative references	6
	3	Terms and definitions	6
	4	General requirements	6
	5	General conditions for the tests	6
	6	Void	6
	7	Classification	6
	8	Marking and instructions	7
	9	Protection against access to live parts	7
	10	Starting	7
	11	Input and current	7
	12	Heating	7
	13	Leakage current	7
	14	Moisture resistance	8
	15	Electric strength	8
	16	Overload protection of transformers and associated circuits/	8
	17	Endurance (Standards.iteh.ai) Abnormal operation	8
	18		
	19	Mechanical hazards <u>SIST EN 60745-2-17:2010</u>	
	20	Mechanical strengthstandards.iteh.ai/catalog/standards/sist/92a397bf-ec77-43c9-a325-	
	21	Construction 9fd3b4820526/sist-en-60745-2-17-2010	9
	22	Internal wiring	9
	23	Components	9
	24	Supply connection and external flexible cords	
	25	Terminals for external conductors	9
	26	Provision for earthing	9
	27	Screws and connections	10
	28	Creepage distances, clearances and distances through insulation	
	29	Resistance to heat, fire and tracking	10
	30	Resistance to rusting	10
	31	Radiation, toxicity and similar hazards	10
Annexes		12	
	Annexes		
	Annex L (normative) Battery tools and battery packs provided with mains connection or non-isolated sources		
	Annex M (normative) Safety of working stands for operation with hand-held motor-operated electric tools1		
Bibliography			30

Figure 101 – Measurement of distance between handle and cutter	11
Figure M.301 – Working stand with installed hand-held router	23
Figure M.302 – Dimensions of table	23
Figure M.303 – Dimension of table rings	24
Figure M.304 – Fence	24
Figure M.305 – Examples of guides suitable for curved work	25
Figure M.306 – Test probe	26
Figure M.307 – Definition of fence pressure device deflection measuring point and directions of application of test forces	26
Figure M.308 – Definition of fence pressure device deflection measuring point and directions of application of test forces (vertical view)	27
Figure M.309 – Definition of table pressure device deflection measuring point and directions of application of test forces (horizontal view)	27
Figure M.310 – Definition of the adjustable guard deflection measuring points and directions of application of test forces	28
Figure M.311 – Definition of guiding steady deflection measuring points and directions of application of test forces	29
Figure M.312 – Definition of the adjustment of the fence plates in the direction perpendicular to the plane of the fence	29
iTeh STANDARD PREVIEW	
Table M.301 – Fences and table pressure device displacement	21
Table M.302 – Adjustable guard deflection	
Table M.303 – Guiding steady deflection EN 60745-2-17:2010 https://standards.iteh.ai/catalog/standards/sist/92a397bf-ec77-43c9-a325-	22

9fd3b4820526/sist-en-60745-2-17-2010

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

Part 2-17: Particular requirements for routers and trimmers

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 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 IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- https://standards.itch.ai/catalog/standards/sist/92a397bf-cc77-43c9-a3255) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60745-2-17 has been prepared by IEC technical committee 116: Safety of hand-held motor-operated electric tools.

This third edition cancels and replaces the second edition published in 2003, of which it constitutes a technical revision. Main changes include: Clause 8: Marking and instructions, addition of some router specific safety warnings, clarifications in Annex K, the addition of Annex M: Safety of working stands for operation with hand-held motor-operated electric tools, and editorial modifications to match with the fourth edition of IEC 60745-1.