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Hand-held motor-operated electric tools - Safety - Part 2-9: Particular requirements for tappers

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60745-2- 9:2009 sisaldab Euroopa standardi EN 60745- 2-9:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 60745-2-9:2009 consists of the English text of the European standard EN 60745-2-9:2009.
Standard on kinnitatud Eesti Standardikeskuse 30.11.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 30.09.2009.	Date of Availability of the European standard text 30.09.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.
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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 60745-2-9

September 2009

Supersedes EN 60745-2-9:2003 + A1:2008 + A11:2007

ICS 25.140.20

English version

Hand-held motor-operated electric tools -Safety -Part 2-9: Particular requirements for tappers

(IEC 60745-2-9:2003, modified + A1:2008)

Outils électroportatifs à moteur -Sécurité -Partie 2-9: Règles particulières pour les taraudeuses (CEI 60745-2-9:2003, modifiée + A1:2008) Handgeführte motorbetriebene Elektrowerkzeuge -Sicherheit -Teil 2-9: Besondere Anforderungen für Gewindeschneider (IEC 60745-2-9:2003, modifiziert + A1:2008)

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CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

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Foreword

The text of the International Standard IEC 60745-2-9:2003, 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 61F (transformed into TC 116) was submitted to the formal vote and was approved by CENELEC as EN 60745-2-9 on 2003-02-01.

A draft amendment (prAB) was prepared to align Subclause 6.2 with the new Subclause 6.2 in EN 60745-1. Moreover, vibration values determined with the new 6.2 are complying with the requirements of the Physical Agents Directive Vibration 2002/44/EC. The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A11 to EN 60745-2-9:2003 on 2007-06-01.

The text of document 61F/674/CDV, future amendment 1 to IEC 60745-2-9:2003, was submitted to the IEC-CENELEC parallel Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 60745-2-9:2003 on 2008-04-01.

A further draft amendment (prAC), extending Annex ZZ to include the new MD 2006/42/EC, was submitted to the formal vote.

The combined texts were approved by CENELEC as a new edition of EN 60745-2-9 on 2009-07-01.

This European Standard supersedes EN 60745-2-9:2003 + A11:2007 + A1:2008.

The following dates were fixed:

 hich the EN has to be implemented by publication of an identical		
d or by endorsement	(dop)	2010-07-01
nich the national standards conflicting eto be withdrawn	(dow)	2011-04-01
		2011 01 01

This standard is divided into two parts:

- Part 1: General requirements which are common to most hand-held electric motor operated tools (for the purpose of this standard referred to simply 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 European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and supports the essential requirements of EC Directive 98/37/EC (Machinery Directive), amended by EC Directive 98/79/EC, and of EC Directive 2006/42/EC. See Annexes ZZA and ZZB.

Compliance with the 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.

CEN/TC 255 is producing standards for non-electric tappers (EN 792-3).

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 2-9 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 and figures which are additional to those in Part 1 are numbered starting from 101.

Subclauses, tables and figures which are additional to those in IEC 60745-2-9 are prefixed "Z".

NOTE In this standard, the following print types are used:

- requirements: in roman type;
- n it. n type: the manual of the second test specifications: in italic type;
- notes: in smaller roman type.

Endorsement notice

The text of the International Standard IEC 60745-2-9:2003 + A1:2008 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

6 Void

Replace by:

6 Environmental requirements

This clause of Part 1 is applicable except as follows:

6.1.2.4 Modification:

Tappers are suspended. The tap holder shall be horizontal.

6.1.2.5 *Modification:*

Tappers are tested at no-load.

6.2 Vibration

6.2.4.2 Location of the measurement

Addition:

Figure Z101 shows the position for tappers.

6.2.6.3 Operating conditions

Modification:

Table Z101 – Operating conditions for tappers

Orientation	Tappers are tested at no load.	
	The tapper is held vertically during the test	
Tool bit	Tool bit of medium length and size	
Grip force	Hold the machine with normal gripping force, avoiding excessive gripping force	
Test cycle	One test cycle is given when the tool is switched on for no load at maximus speed for more than 10 s and then switched off again.	
	The measurement is conducted during 10 s within this period	
NOTE As it is difficult to measure load applications of tappers in laboratories and results have shown that the load has no influence on the vibration results, no-load has been chosen as operating condition.		

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.

21 Construction

Add:

21.Z1 This clause of Part 1 is not applicable.

Add the following new figure:

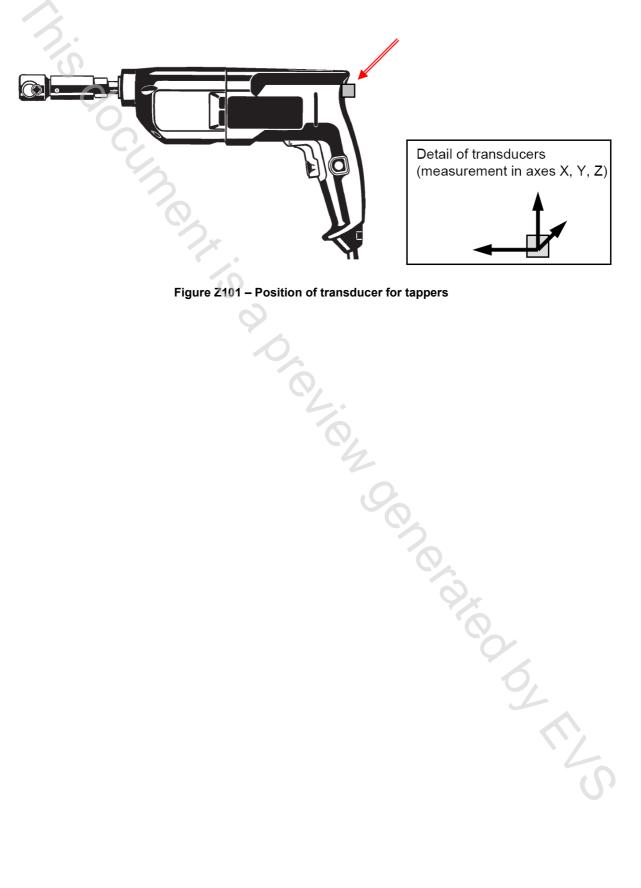


Figure Z101 – Position of transducer for tappers

2 TZ

Add the following annex:

Annex ZZ

(informative)

Coverage of Essential Requirements of EC Directives

Annex ZZA

(informative)

Coverage of Essential Requirements of Directive 98/37/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 98/37/EC (Machinery Directive), amended by Directive 98/79/EC.

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.

Annex ZZB (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 Directive concerned.

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

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HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

Part 2-9: Particular requirements for tappers

1 Scope

This clause of Part 1 is applicable except as follows:

Addition:

This standard applies to tappers.

2 Normative references

This clause of Part 1 is applicable.

3 Terms and definitions

This clause of Part 1 is applicable except as follows:

3.101

tapper tool intended for cutting internal screw threads

4 General requirements

This clause of Part 1 is applicable.

5 General conditions for the tests

This clause of Part 1 is applicable.

6 Void

7 Classification

This clause of Part 1 is applicable.

8 Marking and instructions

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