### BS EN 60745-2-18: 2004

# Hand-held motor-operated electric tools — Safety —

Part 2-18: Particular requirements of strapping tools

The European Standard EN 60745-2-18:2004 has the status of a British Standard

ICS 25.140.20



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This British Standard is the official English language version of EN 60745-2-18:2004, including Corrigendum July 2004. It was derived by CENELEC from IEC 60745-2-18:2003.

The CENELEC common modifications have been implemented at the appropriate places in the text and are indicated by tags  $\mathbb{C}$   $\langle \mathbb{C} \rangle$ .

The UK participation in its preparation was entrusted by Technical Committee CPL/61, Safety of household electrical appliances, to Subcommittee CPL/61/6, Portable motor operated tools, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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#### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 9 and a back cover.

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### Hand-held motor-operated electric tools – Safety Part 2-18: Particular requirements of strapping tools (IEC 60745-2-18:2003, modified)

Outils électroportatifs à moteur – Sécurité Partie 2-18: Règles particulières pour les outils de cerclage (CEI 60745-2-18:2003, modifiée) Handgeführte motorbetriebene Elektrowerkzeuge – Sicherheit Teil 2-18: Besondere Anforderungen für Umreifungswerkzeuge (IEC 60745-2-18:2003, modifiziert)

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## CENELEC

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

#### Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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#### Foreword

The text of the International Standard IEC 60745-2-18:2003, prepared by SC 61F, Safety of hand-held motor-operated electric tools, of IEC TC 61, Safety of household and similar electrical appliances, together with the common modifications prepared by the Technical Committee CENELEC TC 61F, Safety of hand-held and transportable motor-operated electric tools, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60745-2-18 on 2004-03-01.

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)	2005-03-01
_	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2007-03-01

Other standards referred to in this European standard are listed in Clause 2. Clause 2 lists the valid edition of those documents at the time of issue of this EN.

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 CEN and CENELEC by the European Commission and the European Free Trade Association and supports the essential health and safety requirements of the Machinery Directive.

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 electrically driven strapping tools (EN 792-?).

**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 292-1 and EN 292-2.

This Part 2-18 is to be used in conjunction with EN 60745-1:2003. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses, tables 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 60745-2-18 are prefixed "Z".

NOTE In this standard the following print types are used:

- Requirements proper;
- Test specifications;
- Explanatory matter.

The contents of the corrigendum of July 2004 have been included in this copy.

#### Endorsement notice

The text of the International Standard IEC 60745-2-18:2003 was approved by CENELEC as a European Standard with agreed common modifications.

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#### HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

#### Part 2-18: Particular requirements for strapping tools

#### 1 Scope

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

#### **1.1** Addition:

This standard applies to strapping tools.

#### 2 Normative references

This clause of Part 1 is applicable.

#### 3 Definitions

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

#### 3.101

strapping tool tool for clinching straps on boxes

#### 4 General requirements

This clause of Part 1 is applicable.

#### **5** General conditions for the tests

This clause of Part 1 is applicable.

#### 6 C Environmental requirements

This clause of Part 1 is applicable except as follows:

#### 6.1.2.4 Modification:

**Strapping tools** are suspended with the motor axis horizontal.

#### 6.1.2.5 Modification:

#### Strapping tools are tested at no-load. (C

#### C 6.2.2.4 Modification:

Strapping tools are tested under the conditions specified in 6.1.2.5. (C)

#### 7 Classification

This clause of Part 1 is applicable.

#### 8 Marking and instructions

This clause of Part 1 is applicable.

#### 9 Protection against access to live parts

This clause of Part 1 is applicable.

#### 10 Starting

This clause of Part 1 is applicable.

#### 11 Input and current

This clause of Part 1 is applicable.

#### 12 Heating

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

#### **12.2** Replacement:

The tool is operated for 30 cycles, each cycle comprising of clinching four straps around a test package within 2 min then the tool switched off for a period of 1 min. The test package is a wooden box 1 m cubic with an internal bracing to prevent collapsing.

#### **12.4** *Replacement:*

The temperature rises are measured at the end of the "on" period of the 30<sup>th</sup> cycle of 12.2 or, at the manufacturers option, the tool can be operated continuously until thermal stabilization.

#### 13 Leakage current

This clause of Part 1 is applicable.

#### **14 Moisture resistance**

This clause of Part 1 is applicable.

#### **15 Electric strength**

This clause of Part 1 is applicable.

#### **16** Overload protection of transformers and associated circuits

This clause of Part 1 is applicable.

#### 17 Endurance

This clause of Part 1 is applicable.

#### 18 Abnormal operation

This clause of Part 1 is applicable.

#### **19 Mechanical hazards**

This clause of Part 1 is applicable.

#### 20 Mechanical strength

This clause of Part 1 is applicable.

#### 21 Construction

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

21.Z1 This clause of Part 1 is not applicable. (C)

#### 22 Internal wiring

This clause of Part 1 is applicable.

#### 23 Components

This clause of Part 1 is applicable.

#### 24 Supply connection and external flexible cords

This clause of Part 1 is applicable.

#### 25 Terminals for external conductors

This clause of Part 1 is applicable.

#### 26 Provision for earthing

This clause of Part 1 is applicable.

#### 27 Screws and connections

This clause of Part 1 is applicable.

#### 28 Creepage distances, clearances and distances through insulation

This clause of Part 1 is applicable.

#### 29 Resistance to heat, fire and tracking

This clause of Part 1 is applicable.

#### 30 Resistance to rusting

This clause of Part 1 is applicable.

#### 31 Radiation, toxicity and similar hazards

This clause of Part 1 is applicable.

#### Annexes

The annexes of Part 1 are applicable except as follows.

#### Annex K

#### (normative)

#### Battery tools and battery packs

K.1.1 Addition:

All clauses of this Part 2 apply unless otherwise specified in this annex.

#### Annex L

#### (normative)

#### Battery tools and battery packs provided with mains connection or non-isolated sources

L.1.1 Addition:

All clauses of this Part 2 apply unless otherwise specified in this annex.

## Bibliography

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The bibliography of Part 1 is applicable.

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