

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety -  
Part 2-24: Particular requirements for hand-held oscillating multifunction tools**

**Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité -  
Partie 2-24: Exigences particulières pour les outils oscillants à fonctions multiples portatifs**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Electric motor-operated hand-held tools, transportable tools  
and lawn and garden machinery - Safety -  
Part 2-24: Particular requirements for hand-held  
oscillating multifunction tools**

## FOREWORD

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IEC 62841-2-24 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools. It is an International Standard.

The text of this International Standard is based on the following documents:

| Draft        | Report on voting |
|--------------|------------------|
| 116/931/FDIS | 116/937/RVD      |

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

This document is to be used in conjunction with IEC 62841-1:2014 and IEC 62841-1:2014/AMD1:2025.

This document supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for hand-held oscillating multifunction tools.

Where a particular subclause of IEC 62841-1 is not mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition", "modification" or "replacement", the relevant text in IEC 62841-1 is to be adapted accordingly.

The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- terms defined in Clause 3: in **bold** type;
- notes: in small roman type.

Subclauses, notes, tables and figures which are additional to those in IEC 62841-1 are numbered starting from 101.

Subclauses, notes, tables and figures in Annex K which are additional to those in the main body of this document are numbered starting from 301.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 36 months from the date of publication.

A list of all parts in the IEC 62841 series, published under the general title *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

## 1 Scope

IEC 62841-1:2014, Clause 1 is applicable, except as follows:

*Addition:*

This document applies to **oscillating multifunction tools**.

## 2 Normative references

IEC 62841-1:2014, Clause 2 and IEC 62841-1:2014/AMD1:2025, Clause 2 are applicable, except as follows:

*Addition:*

IEC 62841-1:2014, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 1: General requirements*  
IEC 62841-1:2014/AMD1:2025

## 3 Terms and definitions

IEC 62841-1:2014, Clause 3 and IEC 62841-1:2014/AMD1:2025, Clause 3 are applicable, except as follows:

*Addition:*

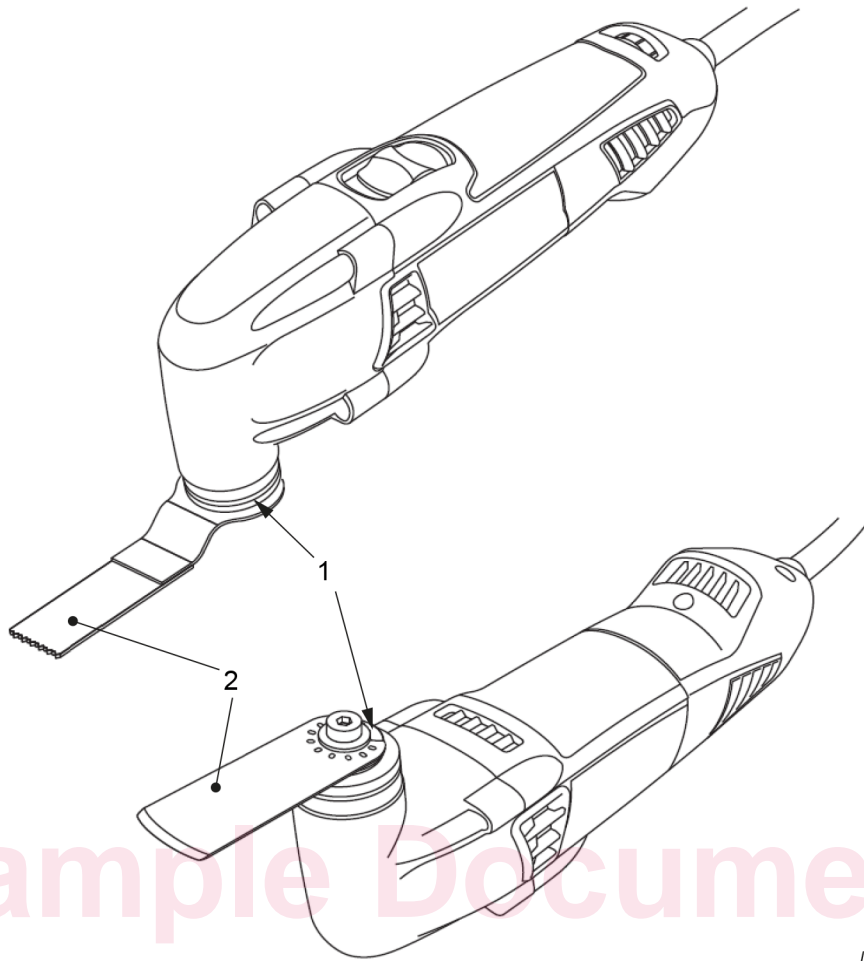
### 3.101

#### **oscillating multifunction tool**

tool with an **accessory** holder such that an attached **accessory** oscillates laterally with a linear amplitude

Note 101 to entry: **Oscillating multifunction tools** are intended to be used with a variety of **accessories** for sawing, grinding, cutting and the like.

Note 102 to entry: An example of an **oscillating multifunction tool** is shown in Figure 101.



IEC

**Key**

- 1 **accessory holder**
- 2 **accessory**

**Figure 101 – Example of an oscillating multifunction tool**

#### **4 General requirements**

IEC 62841-1:2014, Clause 4 is applicable.

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

IEC 62841-1:2014, Clause 5 is applicable, except as follows:

**5.17 Addition:**

*The mass of the tool does not include the dust extraction adapter, if any.*

#### **6 Radiation, toxicity and similar hazards**

IEC 62841-1:2014, Clause 6 is applicable.

## 7 Classification

IEC 62841-1:2014, Clause 7 is applicable.

## 8 Marking and instructions

IEC 62841-1:2014, Clause 8 and IEC 62841-1:2014/AMD1:2025, Clause 8 are applicable, except as follows:

### 8.14.1 Addition:

For **oscillating multifunction tools**, the additional safety instructions as specified in 8.14.1.101 shall be given. This part may be printed separately from the "General Power Tool Safety Warnings".

#### 8.14.1.101 Safety instructions for oscillating multifunction tools

- a) **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.**

### 8.14.2 a) Addition:

101) Information about the types of **accessories** that can be used with the tool.

## 9 Protection against access to live parts

IEC 62841-1:2014, Clause 9 is applicable.

## 10 Starting

IEC 62841-1:2014, Clause 10 is applicable.

## 11 Input and current

IEC 62841-1:2014, Clause 11 is applicable.

## 12 Heating

IEC 62841-1:2014, Clause 12 is applicable.

## 13 Resistance to heat and fire

IEC 62841-1:2014, Clause 13 is applicable.

## 14 Moisture resistance

IEC 62841-1:2014, Clause 14 is applicable.

## 15 Resistance to rusting

IEC 62841-1:2014, Clause 15 is applicable.

## 16 Overload protection of transformers and associated circuits

IEC 62841-1:2014, Clause 16 is applicable.

## 17 Endurance

IEC 62841-1:2014, Clause 17 is applicable.

## 18 Abnormal operation

IEC 62841-1:2014, Clause 18 is applicable, except as follows:

### 18.8.1 General

*Replacement of Table 4:*

**Table 4 – Required performance levels**

| Type and purpose of SCF                                | Minimum Performance Level (PL) |
|--|--------------------------------|
| Power switch – prevent unwanted switch-on              | Not an SCF                     |
| Power switch – provide desired switch-off              | Not an SCF                     |
| Any electronic control to pass the test of 18.3        | Not an SCF                     |
| Any speed limiting device                              | Not an SCF                     |
| Prevent exceeding thermal limits as in 18.4 and 18.5.3 | a                              |

## 19 Mechanical hazards

IEC 62841-1:2014, Clause 19 is applicable, except as follows:

### 19.1 *Replacement of the first paragraph:*

All power-driven hazardous parts (e.g. gears), other than the **accessories** and their mounting means, shall be so positioned or enclosed to provide adequate protection.

**19.6** This subclause of IEC 62841-1:2014 is not applicable.

**19.101** The angle of oscillation of the **accessory** holder shall not exceed  $\pm 3^\circ$ .

*Compliance is checked by measurement.*

## 20 Mechanical strength

IEC 62841-1:2014, Clause 20 is applicable, except as follows:

**20.5** This subclause of IEC 62841-1:2014 is applicable.

## 21 Construction

IEC 62841-1:2014, Clause 21 and IEC 62841-1:2014/AMD1:2025, Clause 21 are applicable, except as follows:

### 21.18.1 *Addition:*

For **oscillating multifunction tools, power switches** other than **momentary power switches** are permitted.

**21.30** This subclause of IEC 62841-1:2014 is applicable.

**21.35** This subclause of IEC 62841-1:2014 is not applicable.

## 22 Internal wiring

IEC 62841-1:2014, Clause 22 is applicable.

## 23 Components

IEC 62841-1:2014, Clause 23 is applicable, except as follows:

**23.3** This subclause of IEC 62841-1:2014 is not applicable.

## 24 Supply connection and external flexible cords

IEC 62841-1:2014, Clause 24 is applicable.

## 25 Terminals for external conductors

IEC 62841-1:2014, Clause 25 is applicable.

## 26 Provision for earthing

IEC 62841-1:2014, Clause 26 is applicable.

## 27 Screws and connections

IEC 62841-1:2014, Clause 27 is applicable.

## 28 Creepage distances, clearances and distances through insulation

IEC 62841-1:2014, Clause 28 is applicable.

## Annexes

The annexes of IEC 62841-1:2014 and of IEC 62841-1:2014/AMD1:2025 are applicable except as follows:

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