

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –  
Part 2-20: Particular requirements for hand-held band saws**

**Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses – Sécurité –  
Partie 2-20: Exigences particulières pour les scies à ruban portatives**

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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 25.140.20

ISBN 978-2-8322-9117-7

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE  
TOOLS AND LAWN AND GARDEN MACHINERY –  
SAFETY –**

**Part 2-20: Particular requirements for hand-held band saws**

**FOREWORD**

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IEC 62841-2-20 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
116/755/FDIS	116/794/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 is to be used in conjunction with IEC 62841-1:2014.

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 band saws.

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 and Annex L which are additional to those in the main body of this document are numbered starting from 301.

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.

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/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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.

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.

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# ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

## Part 2-20: Particular requirements for hand-held band saws

### 1 Scope

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

*Addition:*

This document applies to hand-held **band saws**.

### 2 Normative references

IEC 62841-1:2014, Clause 2 is 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*

### 3 Terms and definitions

IEC 62841-1:2014, Clause 3 is applicable, except as follows:

*Addition:*

#### 3.101

#### **band saw**

**hand-held tool** equipped with an endless loop blade

### 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 a **band saw** includes the auxiliary handle, 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 is applicable, except as follows:

### 8.14.1 Addition:

The additional safety instruction 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 Band saw safety warning

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

## 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 Replacement of Table 4:

**Table 4 – Required performance levels**

Type and purpose of SCF	Minimum performance level (PL)
<b>Power switch</b> – prevent unwanted switch-on	b
<b>Power switch</b> – provide desired switch-off	b
Provide desired direction of rotation	Not an <b>SCF</b>
Any electronic control to pass the test of 18.3	a
Prevent exceeding thermal limits as in 18.4 and 18.5.3	a
Prevent self-resetting as required in 23.3	a

## 19 Mechanical hazards

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

**19.6** IEC 62841-1:2014, 19.6 is not applicable.

## 20 Mechanical strength

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

### 20.5 Addition:

**Band saws** are considered to be likely to cut into concealed wiring or their own cord.

## 21 Construction

IEC 62841-1:2014, Clause 21 is applicable, except as follows:

### 21.18.1.1 Addition:

Tools with a no-load speed greater than 125 m/min shall not be equipped with a means of locking the **power switch** in the "on" position.

**21.18.1.2** IEC 62841-1:2014, 21.18.1.2 is not applicable.

### 21.30 Addition:

**Band saws** are considered to be likely to cut into concealed wiring or their own cord.

### **21.35 Dust collection**

IEC 62841-1:2014, 21.35 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 Replacement of the first paragraph:**

Protection devices or circuits shall be of the non-self-resetting type unless the tool is equipped with a **momentary power switch** with no provision for being locked in the "on" position.

## **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.

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## **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 are applicable except as follows.

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