

INTERNATIONAL STANDARD

**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety -
Part 2-25: Particular requirements for hand-held chain beam saws**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Electric motor-operated hand-held tools, transportable tools
and lawn and garden machinery - Safety -
Part 2-25: Particular requirements for hand-held chain beam saws**

FOREWORD

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IEC 62841-2-25 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
116/980/FDIS	116/1001/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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/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 chain beam 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;*
- notes: in small roman type.

The terms defined in Clause 3 are printed in **bold** typeface.

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.

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 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 hand-held **chain beam saws** for cutting wood or similar material and designed for use by one person.

This document does not apply to **chain beam saw attachments** that convert a circular saw or a chain saw into a **chain beam saw**.

This document does not apply to

- chain saws;
- chain saws for tree service; and
- pole-mounted pruners.

NOTE 101 Chain saws are covered by IEC 62841-4-1.

NOTE 102 Chain saws for tree service will be covered by a future part of IEC 62841.

NOTE 103 Pole-mounted pruners will be covered by a future part of IEC 62841.

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

ISO 630-2:2021, *Structural steels - Part 2: Technical delivery conditions for structural steels for general purposes*

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

auxiliary handle

support handle located at or towards the front of the motor housing

Note 101 to entry: See Figure 101.

3.102

bar tip guard

shield that prevents contact with the **saw chain** near the tip of the **guide bar**

3.103

base plate

part supporting the saw on the material being cut or on a **guide rail**

3.104

bevel angle

angular displacement of the **guide bar** plane with respect to the **base plate** plane, the position of the **guide bar** plane that is perpendicular to the **base plate** being the 0° bevel position

3.105

chain barrier

device located behind and in the plane of the **guide bar** in a fixed proximity to the **saw chain** through the entire depth of cut range of the **chain beam saw**, intended to reduce the risk of chain pinching and binding

3.106

chain beam saw

tool designed to cut wood or similar material with a **saw chain** on a **guide bar** and consisting of an integral unit of handles, cutting attachment, motor, **base plate**, and **chain barrier**, designed to be supported with two hands

Note 101 to entry: See Figure 101.

Note 102 to entry: The **base plate** of a **chain beam saw** is in contact with the workpiece during operation.

3.107

drive sprocket

chain drive wheel with teeth

3.108

guide bar

attachment that supports and guides the **saw chain**

3.109

guide rail

attachment mounted on the material being cut and on which the **base plate** of the **chain beam saw** glides during cutting

3.110

kickback

sudden reaction to a pinched, jammed or misaligned **saw chain**, causing a sudden motion of the **chain beam saw** in a direction opposite to the **saw chain** motion at the point of the **saw chain** being jammed

3.111

main handle

support handle located toward the rear of the motor housing

Note 101 to entry: See Figure 101.

3.112

maximum depth of cut

maximum thickness of the material being cut between the bottom plane of the **base plate** and the top side of the **bar tip guard** when the **guide bar** is set perpendicular to the **base plate** or the tip of the **chain barrier** in cases where a **guard** is not required

Note 101 to entry: See Figure 102.

3.113

maximum speed

highest **saw chain** speed attainable under all conditions of **normal use**, including no load

3.114

run down time

elapsed time from the release of the **power switch** until the **saw chain** stops

3.115

saw chain

attachment, serving as a cutting tool, consisting of drive links and cutters

Note 101 to entry: See Figure 101.

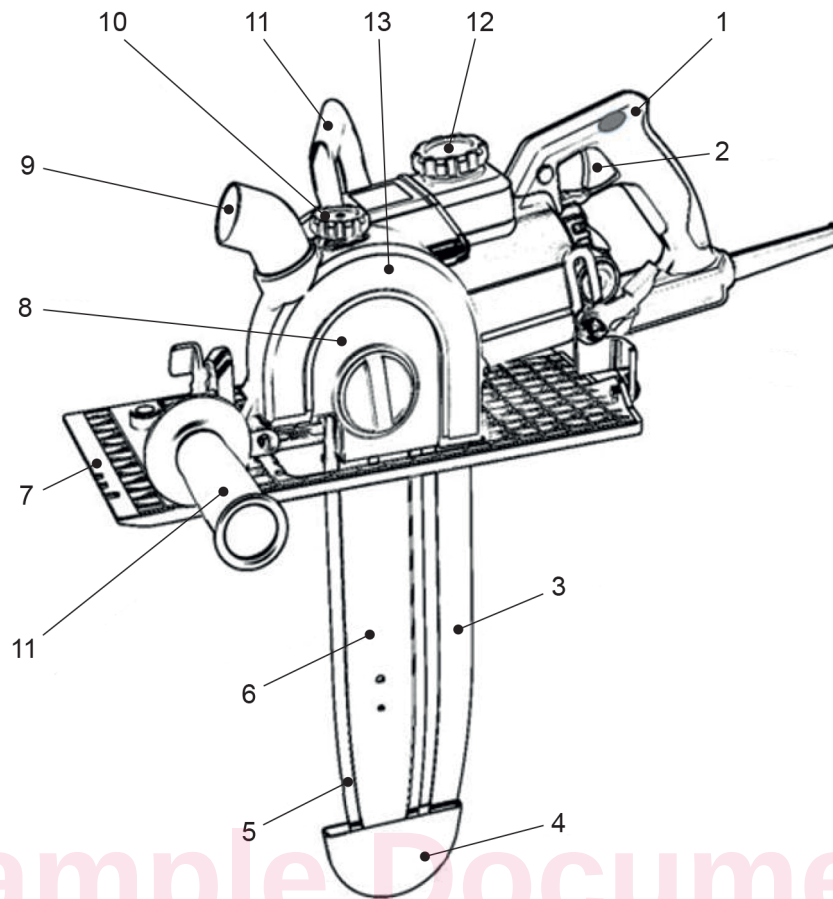
3.116

upper guard

fixed cover of the **saw chain** situated above the **base plate**

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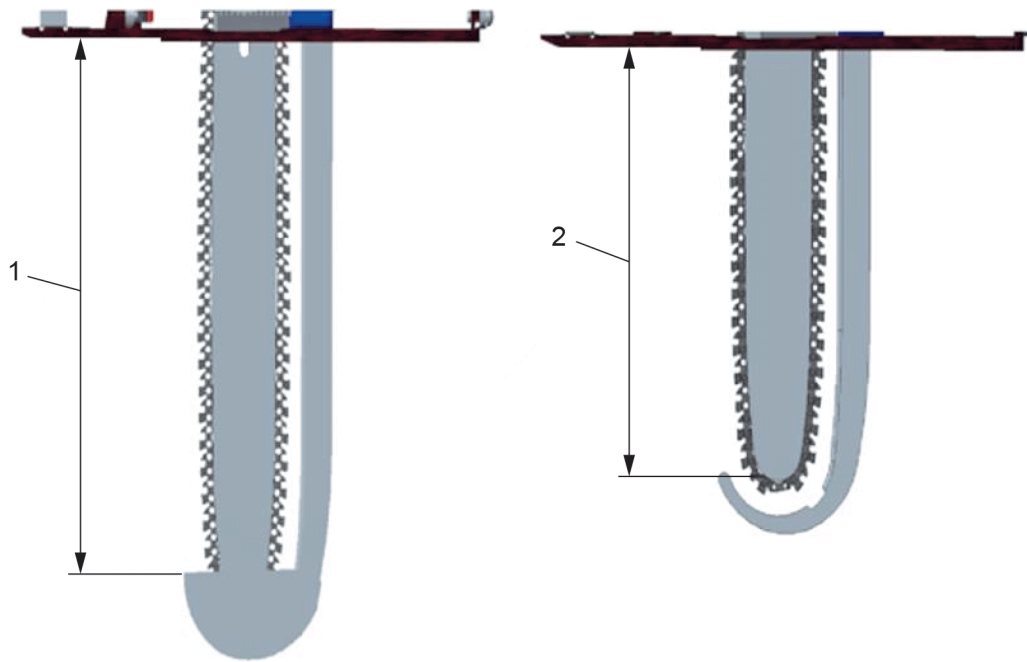
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Key

- 1 **main handle**
- 2 **power switch**
- 3 **chain barrier**
- 4 **bar tip guard**
- 5 **saw chain**
- 6 **guide bar**
- 7 **base plate**
- 8 **drive sprocket cover**
- 9 **dust extraction**
- 10 **chain tensioning knob**
- 11 **auxiliary handle**
- 12 **lubrication oil tank**
- 13 **upper guard**

Figure 101 – Example of a chain beam saw



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Key

- 1 maximum depth of cut (with bar tip guard)
- 2 maximum depth of cut (without bar tip guard)

Figure 102 – Maximum depth of cut**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 includes the heaviest **guide bar** and **saw chain** combination in accordance with 8.14.2 a) 101) as well as the lubrication tank filled to the maximum specified level, but excludes the **guide bar** cover.*

5.101 For tests that are performed at **maximum speed** and no load, the manufacturer may provide special hardware and/or software.

5.102 For tests carried out at any percentage of **rated input** or **rated current**, except for no-load, the **saw chain** and the **guide bar** may be removed and the **chain beam saw** loaded by means of a brake.

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.

8.2 Addition:

Chain beam saws shall be marked with the following additional safety warnings:

For all **chain beam saws**:

- "⚠️ **WARNING** – Hold saw with both hands" or a product safety label that is described in the instruction manual.

NOTE 101 In Canada and the United States of America, the following additional requirements apply.

Chain beam saws must be marked with the following additional safety warning:

- "⚠️ **DANGER** — Keep hands and body away from the saw chain or guide bar. Chain barrier shall always be attached and properly aligned when operating the chain beam saw. Contact with the saw chain will result in serious injury."

In Canada, the equivalent French wording of the above warning is as follows: "DANGER – Maintenir les mains et le corps à l'écart de la chaîne coupante ou du guide-chaîne. La barrière de chaîne doit toujours être fixée et correctement alignée lors de l'utilisation de la scie à chaîne de poutre. Tout contact avec la chaîne coupante causera une blessure grave."

8.3 Addition:

Chain beam saws shall be marked with the following:

- specified nominal **guide bar** length(s) and thickness(es) in mm (in);
- NOTE 101 The nominal **guide bar** size(s) is not necessarily the same as the cutting length(s).
- identification of the direction of rotation of the **saw chain** by a legible and durable mark on the body of the tool; and
- a **guide bar** and **saw chain** combination(s) and corresponding **chain barrier**, if more than one **chain barrier** is permitted to be used with the tool in accordance with 8.14.2 a) 103).

The **chain barrier** shall be permanently marked (e.g., by engraving, stamping, or etching) with its thickness, the **guide bar** thickness, the **maximum depth of cut** and the direction of the **saw chain** rotation.

8.14.1 Addition:

The additional safety instructions as specified in 8.14.1.101 and 8.14.1.102 shall be given. This part may be printed separately from the "General Power Tool Safety Warnings".

8.14.1.101 Safety instructions for chain beam saws

- Wear eye protection. Appropriate protective equipment for face and eyes, hands, legs, and feet is recommended. Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the saw chain.**
- Do not operate the chain beam saw in a tree, on a ladder, from a rooftop, or any unstable support. Operation of a chain beam saw in this manner could result in serious personal injury.**