

# SLOVENSKI STANDARD SIST EN 62841-3-1:2014/A1:2021

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#### Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 3-1. del: Posebne zahteve za prenosne namizne žage - Dopolnilo A1

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-1: Particular requirements for transportable table saws

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen Sicherheit - Teil 3-1: Besondere Anforderungen für transportable Tischkreissägen

## (standards.iteh.ai)

Outils électroportatifs à moteur, outils transportables et machines pour jardins et pelouses - Sécurité - Partie 3-1: Exigences particulières pour les scies circulaires à table transportables a90fea231508/sist-en-62841-3-1-2014-a1-2021

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# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 62841-3-1:2014/A1:2021</u> https://standards.iteh.ai/catalog/standards/sist/cc7d9740-9844-4c98-aaf8a90fea231508/sist-en-62841-3-1-2014-a1-2021

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# EN 62841-3-1:2014/A1

June 2021

ICS 25.140.20

**English Version** 

### Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-1: Particular requirements for transportable table saws (IEC 62841-3-1:2014/A1:2021)

Outils électroportatifs à moteur, outils transportables et machines pour jardins et pelouses - Sécurité - Partie 3-1: Exigences particulières pour les scies circulaires à table transportables (IEC 62841-3-1:2014/A1:2021) Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 3-1: Besondere Anforderungen für transportable Tischkreissägen (IEC 62841-3-1:2014/A1:2021)

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#### EN 62841-3-1:2014/A1:2021 (E)

### European foreword

The text of document 116/485/FDIS, future IEC 62841-3-1/A1, prepared by IEC/TC 116 "Safety of motor-operated electric tools" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62841-3-1:2014/A1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-03-12 level by publication of an identical national standard or by endorsement
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For the relationship with EU Directive(s), see informative Annex ZZ, included in EN 62841-3-1:2014/A11:2021.

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The text of the International Standard IEC 62841-3-1:2014/A1:2021 was approved by CENELEC as a European Standard without any modification.





Edition 1.0 2021-03

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

#### AMENDMENT 1 AMENDEMENT 1

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety standards.iteh.ai) Part 3-1: Particular requirements for transportable table saws

SIST EN 62841-3-1:2014/A1:2021

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

#### Part 3-1: Particular requirements for transportable table saws

#### AMENDMENT 1

#### FOREWORD

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Amendment 1 to IEC 62841-3-1:2014 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

The text of this Amendment is based on the following documents:

Draft	Report on voting
116/485/FDIS	116/492/RVD

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

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The language used for the development of this Amendment 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/.

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,
- replaced by a revised edition, or
- amended.

## 2 Normative references STANDARD PREVIEW

## Replace the existing normative reference ISO 180 with the following:

ISO 180:2019, Plastics – Determination of Izod impact strength

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a90fea231508/sist-en-62841-3-1-2014-a1-2021

#### 3 Terms and definitions

Replace the existing definition 3.110 with the following:

#### 3.110

#### kerf width

maximum distance between two parallel planes that are touching the opposing sides of at least three saw blade tooth tips

#### 8 Marking and instructions

Add the following new subclause:

#### **8.2** Addition:

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

The following statements shall be verbatim:

- a) DANGER Never place your hands in the vicinity or in line with the saw blade.
- b) WARNING "Wear eye protection".

NOTE 102 It is possible to replace the above verbatim text with symbol M004 of ISO 7010 (2011-05).

c) WARNING – Always use a properly functioning saw-blade guard, riving knife and anti-kickback device for every operation for which it can be used, including all through sawing.

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NOTE 103 If an **anti-kickback device** is not provided, the text is revised as follows:

WARNING – Always use a properly functioning saw-blade guard and riving knife for every operation for which it can be used, including all through sawing.

NOTE 104 It is possible to replace the term "anti-kickback device" with "anti-kickback pawls" or "anti-kickback rollers".

- d) WARNING Use a push-stick or push-block when required.
- e) WARNING Do not perform any operation freehand.
- f) WARNING Pay particular attention to instructions on reducing risk of kickback. (or "Know how to reduce risk of kickback.")
- g) WARNING Never reach around or over saw blade. (or "Never reach in back of or over saw blade.")
- h) WARNING Turn off tool and wait for saw blade to stop before moving workpiece or changing settings.
- i) WARNING Never stand directly in line with the saw blade. Always position your body on the same side of the saw blade as the fence.

#### 8.14.1.101 Safety instructions for table saws

Replace the existing text of NOTE 1 of 8.14.1.101 1) b) with the following new text:

NOTE 1 If an anti-kickback device is not provided, the warning is revised as follows:

Always use saw blade guard and riving knife for every through-cutting operation. For through-cutting operations where the saw blade cuts completely through the thickness of the workpiece, the guard and other safety devices help reduce the risk of injury.

Replace the existing text of 8.14.1.101 1) c) with the following new text:

c) After completing a non-through cut such as rabbeting, resawing, or dadoing, restore the riving knife to the extended-up position. With the riving knife in the extended-up position, reattach the blade guard and the anti-kickback device. The guard, riving knife, and anti-kickback device help to reduce the risk of injury.

Replace the existing text of NOTE 3 of 8,14,16101 1) c) with the following new text:

NOTE 3 If an anti-kickback device is not provided, the warning is revised as follows:

After completing a non-through cut such as rabbeting, resawing, or dadoing, restore the riving knife to the extended-up position. With the riving knife in the extended-up position, reattach the blade guard. The guard and riving knife help to reduce the risk of injury.

Replace the existing text of NOTE 1 of 8.14.1.101 1) f) with the following new text:

NOTE 1 If an anti-kickback device is not provided, the warning is revised as follows:

**For the riving knife to work, it must be engaged in the workpiece.** The riving knife is ineffective when cutting workpieces that are too short to be engaged with the riving knife. Under these conditions, a kickback cannot be prevented by the riving knife.

Replace the existing text of 8.14.1.101 2) d) with the following new text:

d) When ripping, always keep the workpiece in full contact with the fence and always apply the workpiece feeding force between the fence and the saw blade. Use a push stick when the distance between the fence and the saw blade is less than 150 mm, and use a push block when this distance is less than 50 mm. "Work helping" devices will keep your hand at a safe distance from the saw blade.

Replace the existing text of 8.14.1.101 2) f) with the following new text:

f) **Never use a damaged or cut push stick.** A damaged or cut push stick may break causing your hand to slip into the saw blade.

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Replace the existing text of 8.14.1.101 2) j) with the following new text:

j) Feed the workpiece at an even pace. Do not bend, twist or shift the workpiece from side to side. If jamming occurs, turn the tool off immediately, unplug the tool, then clear the jam. Jamming the saw blade by the workpiece can cause kickback or stall the motor.

#### 18 Abnormal operation

Replace the existing text of 18.8 with the following new text:

**18.8** Replacement of Table 4:

Type and purpose of SCF	Minimum Performance Level (PL)
Power switch - prevent unwanted switch-on	Shall be evaluated using the fault conditions of 18.6.1 without the loss of this SCF
Power switch - provide desired switch-off	Shall be evaluated using the fault conditions of 18.6.1 without the loss of this SCF
Provide desired direction of rotation	Shall be evaluated using the fault conditions of 18.6.1 without the loss of this SCF
Any electronic control to pass the test of 18.3	с
Overspeed prevention to prevent output speed above 130 % of rated no-load speed	
Provide run-down time as required by 19.105	<b>11.21)</b> a
Restart prevention in accordance with 21.18.2.1	b
Lock-off function as required by 21.18 121 ai/catalog/standards/sist/cut	17.2021 17.19740-9844-4c98-aaf8
Prevent exceeding thermal limits asom Clauses18st-en-62841-3-1-	2014-a1-2021 a
Prevent self-resetting as required in 23.3	а

#### Table 4 – Required performance levels

#### 19 Mechanical hazards

Add the following new subclauses:

- **19.6** This subclause of Part 1 is applicable.
- **19.7** This subclause of Part 1 is applicable.
- **19.8** This subclause of Part 1 is applicable.

Replace the existing text of 19.101.2.8 with the following new text:

**19.101.2.8** A **saw blade guard** and its mounting means shall not cause undue resistance when a workpiece is advanced toward and passed through the saw blade.

Compliance is checked by the following test.

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With the saw blade set at the maximum depth of cut, a workpiece of common wood is cut at a rate of approximately 1,2 m/min. The workpiece has a width of at least 50 mm greater than the width of the guarding system and a length of at least 2**D**, with a leading edge that has been cut with a 0° **bevel angle** (i.e. a squared leading edge). One complete cut, the workpiece being centred about the saw blade and being guided by the **rip fence**, is performed for each applicable combination of workpiece thicknesses and **mitre angle** settings as specified below.

Workpiece thickness and *mitre angle* settings of approximately:

- a) 25 % of the maximum cutting capacity and
  - with a mitre angle of 45° right (+);
  - with a mitre angle of 45° left (-);
- b) 50 % of the maximum cutting capacity and
  - with a mitre angle of 45° right (+);
  - with a **mitre angle** of 45° left (-).

The test is conducted in accordance with a) and b), with the saw blade set to 0° **bevel angle**. The test is then repeated in accordance with a) and b), with the saw blade set to the maximum **bevel angle** setting, but not more than 45°.

During the test, the **saw blade guard** shall not be displaced to a point where it contacts the **cutting edge zone** of the saw blade, and the **riving knife shall not** interfere with the passage of the workpiece.

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Replace the existing text of 19.102 with the following new text:

SIST EN 62841-3-1:2014/A1:2021 19.102 Guarding below the table i/catalog/standards/sist/cc7d9740-9844-4c98-aaf8-

Hazardous moving parts below the **table top** shall be guarded.

Compliance is checked by the following test.

A rigid test probe with the dimensions of test probe B of IEC 61032:1997, but without any articulation, is applied with a force not exceeding 5 N to all areas below the **table top**. If an enclosure is fitted, the probe is applied to all sides and from underneath the enclosure. The test probe shall not make contact with the **cutting edge zone** of the saw blade and moving parts of the saw blade drive mechanism, except for flanges and clamping nuts that are circular.

Replace the existing text item f) of 19.103.2 with the following new text:

f) The **riving knife** shall be made of steel with a hardness of between 38 HRC and 48 HRC and an ultimate tensile strength of at least 800 MPa.

Replace the existing text of the last paragraph of 19.103.2 with the following new text:

Compliance is checked by receipt of confirmation of the hardness and of the ultimate tensile strength of the material or through measurement of samples of the material.

Replace the existing text of 19.105 with the following new text:

#### 19.105 Run-down time

Run down time of the saw blade shall not exceed 10 s after switching off the motor. Device(s), if any, to achieve the 10 s run down time shall not be applied directly to the saw blade or to the saw blade driving flanges.