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Electric motor-operated hand-held tools, transportable
tools and lawn and garden machinery - Safety - Part
4-7: Particular requirements for pedestrian controlled
walk-behind lawn scarifiers and aerators

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62841-4-7:2022 sisaldab Euroopa standardi EN IEC 62841-4-7:2022 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62841-4-7:2022 consists of the English text of the European standard EN IEC 62841-4-7:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.09.2022.	Date of Availability of the European standard is 30.09.2022.
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English Version

Electric motor-operated hand-held tools, transportable tools and
lawn and garden machinery - Safety - Part 4-7: Particular
requirements for pedestrian controlled walk-behind lawn
scarifiers and aerators
(IEC 62841-4-7:2022)

Outils électroportatifs à moteur, outils portables et machines
pour jardins et pelouses - Sécurité - Partie 4-7: Exigences
particulières pour les scarificateurs à gazon et les aérateurs
de gazon à conducteur à pied
(IEC 62841-4-7:2022)

Elektrische motorbetriebene handgeführte Werkzeuge,
transportable Werkzeuge und Rasen- und
Gartenmaschinen - Sicherheit - Teil 4-7: Besondere
Anforderungen für personengeführte Rasenvertikutierer und
Rasenbelüfter
(IEC 62841-4-7:2022)

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Comité Européen de Normalisation Electrotechnique
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European foreword

The text of document 116/589/FDIS, future edition 1 of IEC 62841-4-7, 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 IEC 62841-4-7:2022.

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In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62841-4-3 NOTE Harmonized as EN IEC 62841-4-3

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –
Part 4-7: Particular requirements for pedestrian controlled walk-behind lawn scarifiers and aerators**

**Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses – Sécurité –
Partie 4-7: Exigences particulières pour les scarificateurs à gazon et les aérateurs de gazon à conducteur à pied**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –
Part 4-7: Particular requirements for pedestrian controlled walk-behind lawn scarifiers and aerators**

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Partie 4-7: Exigences particulières pour les scarificateurs à gazon et les aérateurs de gazon à conducteur à pied**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS,
TRANSPORTABLE TOOLS AND LAWN AND GARDEN
MACHINERY – SAFETY –****Part 4-7: Particular requirements for pedestrian controlled
walk-behind lawn scarifiers and aerators**

FOREWORD

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IEC 62841-4-7 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
116/589/FDIS	116/621/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 the first edition of 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 pedestrian controlled walk-behind lawn scarifiers and aerators.

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.

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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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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.

INTRODUCTION

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

Part 4-7: Particular requirements for pedestrian controlled walk-behind lawn scarifiers and aerators

1 Scope

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

Addition:

This document applies to pedestrian controlled walk-behind **lawn scarifiers** and **lawn aerators** which are designed for regenerating lawns by combing out materials such as grass, thatch and moss or cutting vertically into the lawn face using

- metallic **tines**; and/or
- rigid non-metallic **tines**

which rotate about a horizontal axis.

This document does not apply to

- pedestrian controlled walk-behind lawnmowers;
- towed/semi-mounted **lawn scarifiers** and **lawn aerators**;
- ride-on machines;
- non-powered **lawn scarifiers** and **lawn aerators**;
- combustion engine powered **lawn scarifiers** and **lawn aerators**;
- plug aerators (corers);
- hybrid and fuel cell powered machines and associated charging systems; and
- garden tractors or their attachments.

NOTE 101 Pedestrian controlled walk-behind lawnmowers are covered by IEC 62841-4-3.

2 Normative references

IEC 62841-1:2014, Clause 2 is applicable, except as follows:

Addition:

IEC 60664-3:2016, *Insulation coordination for equipment within low-voltage systems – Part 3: Use of coating, potting or moulding for protection against pollution*

IEC 60664-4:2005, *Insulation coordination for equipment within low-voltage systems – Part 4: Consideration of high-frequency voltage stress*

IEC 61058-2-6:2018, *Switches for appliances – Part 2-6: Particular requirements for switches used in electric motor-operated hand-held tools, transportable tools and lawn and garden machinery*

IEC 61672-1:2013, *Electroacoustics – Sound level meters – Part 1: Specifications*

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

ISO 354:2003, *Acoustics – Measurement of sound absorption in a reverberation room*

ISO 2758:2014, *Paper – Determination of bursting strength*

ISO 13857:2019, *Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs*

Replacement:

IEC 61058-1:2016, *Switches for appliances – Part 1: General requirements*

ISO 3744:2010, *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering methods for an essentially free field over a reflecting plane*

ISO 11201:2010, *Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections*

3 Terms and definitions

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

Addition:

3.101 catcher

part or combination of parts, intended to be used with the **lawn scarifier** or **lawn aerator**, which provides a means for collecting material such as grass, thatch, moss or other debris

3.102 cutting width

total width of scarification/aeration measured across the **tines** at 90° to the direction of travel

3.103 discharge chute

extension of the **tines enclosure** from the **discharge opening**, generally used to control the discharge of material from the **tines**

3.104 discharge opening

gap or opening in the **tines enclosure** through which grass, thatch, moss and other debris may be discharged

3.104.1 front discharge

discharge opening for throwing out grass, thatch and moss so that they will be collected in a **catcher** which is located in front of the **tines**