

Machinery for forestry — Portable hand-held brush cutters and grass trimmers with backpack mounted combustion engine power source — Safety requirements and testing

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee AGE/29, Forestry machinery, which has the responsibility to:

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- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, pages ii to iv, pages 1 to 18 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

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INTERNATIONAL STANDARD

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14865**

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Machinery for forestry — Portable hand-held brush-cutters and grass-trimmers with backpack-mounted combustion-engine power source — Safety requirements and testing

Matériel forestier — Débroussailleuses et coupe-herbe portatifs équipés d'une source motrice portée à dos à moteur à combustion interne — Exigences de sécurité et essais



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Descriptors: Agricultural machinery, forest equipment, accident prevention, operator protection, portable equipment, mechanically-operated devices, grass-trimmers, brush cutters, specifications, safety requirements, tests, marking, instructions for use.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 14865 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable forest machinery*.

Annex A, Annex B and Annex C form an integral part of this International Standard.

Introduction

This International Standard covers brush-cutters as well as grass-trimmers, because the design of both machines is basically identical. Frequently one and the same unit can be either a brush-cutter or a grass-trimmer, depending on what type of cutting attachment is used. As grass-trimmers are often used in forestry, the relevant requirements have been included in this International Standard.

The requirements for backpack-powered brush-cutters and grass-trimmers are equivalent to those for brush-cutters and grass-trimmers with an integrated power source as given in ISO 11806:1997, *Agricultural and forestry machinery — Portable hand-held combustion engine driven brush cutters and grass trimmers — Safety*.

In addition, machinery is to comply as appropriate with ISO/TR 12100 for hazards which are not covered by this International Standard.

1 Scope

This International Standard specifies safety requirements and their verification for design and construction of portable hand-held brush-cutters and grass-trimmers with a backpack-mounted combustion-engine power source.

It is not applicable to units with an integrated power source, to lawn edge-trimmers or to brush-cutters equipped with metallic blades consisting of several parts.

It describes methods for the elimination or reduction of hazards arising from their use. In addition, it specifies the type of information on safe working practices to be provided by the manufacturer. It does not however give any technical requirements to reduce noise and vibration hazards. Indeed the different means available to reduce these hazards are a matter for the technical aids to which the manufacturer may resort, through specialized books or specific bodies.

The list of significant hazards dealt with requiring action to reduce the risk is given in Annex A.

Environmental aspects have not been considered in this International Standard.

This International Standard is primarily applicable to machines which are manufactured after the date of issue of the International Standard.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7112:—, *Machinery for forestry — Portable hand-held brush-cutters and grass-trimmers — Vocabulary*¹⁾.

ISO 7113:—, *Portable hand-held forestry machines — Brush-cutters — Cutting attachments*²⁾.

ISO 7916:1989, *Forestry machinery — Portable brush-saws — Measurement of hand-transmitted vibration*.

ISO 7917:1987, *Acoustics — Measurement at the operator's position of airborne noise emitted by brush saws*³⁾.

ISO 7918:1995, *Forestry machinery — Portable brush-cutters and grass-trimmers — Cutting attachment dimensions*.

ISO 8380:1993, *Forestry machinery — Portable brush-cutters and grass-trimmers — Cutting attachment guard strength*.

ISO 8893:1997, *Forestry machinery — Portable brush-cutters and grass-trimmers — Engine performance and fuel consumption*.

ISO 10884:1995, *Manually portable brush-cutters and grass-trimmers with internal combustion engine — Determination of sound power levels — Engineering method (Grade 2)*.

¹⁾ To be published. (Revision of ISO 7112:1982)

²⁾ To be published. (Revision of ISO 7113:1991)

³⁾ Equivalent to EN 27917:1991.