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Powered edgers with rigid cutting means — Definitions, safety requirements and test procedures

Coupe-bordures à moteur avec organe de coupe rigide — Définitions, exigences de sécurité et modes opératoires d'essai

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Contents

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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 11789 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 13, *Powered lawn and garden equipment*.

Annex A forms an integral part of this International Standard. Annex B is for information only.

Powered edgers with rigid cutting means — Definitions, safety requirements and test procedures

1 Scope

This International Standard specifies mechanical safety requirements and test methods applicable to walk-behind powered edgers that employ rigid cutting means with a blade tip circle not more than 305 mm in diameter, and where the plane of the blade tip circle is designed to operate at not more than 15° from the vertical.

This International Standard applies to hand-held portable and powered edgers employing a rigid cutting element with a blade tip circle not more than 305 mm in diameter.

This International Standard also includes test methods for noise and vibration.

This International Standard does not cover edgers with cutting means of non-metallic filament line or freely pivoting non-metallic cutters.

This International Standard does not cover accessories or attachments that alter the function of the machine.

The electrical aspects of electrically powered edgers are not covered by this International Standard. For the electrical requirements applicable to electrically driven machines, reference should be made to IEC 60335-1.

NOTE — For motion control requirements related to self-propelled machines, reference should be made to ISO 5395.

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 the IEC and ISO maintain registers of currently valid International Standards.

ISO 3304:1985, *Plain end seamless precision steel tubes — Technical conditions for delivery.*

ISO 3305:1985, *Plain end welded precision steel tubes — Technical conditions for delivery.*

ISO 3306:1985, *Plain end as-welded and sized precision steel tubes — Technical conditions for delivery.*

ISO 3767-1:1998, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols.*

ISO 3767-3:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 3: Symbols for powered lawn and garden equipment.*

ISO 3767-5:1992, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 5: Symbols for manual portable forestry machinery.*

ISO 3789-1:1982, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Location and method of operation of operator controls — Part 1: Common controls.*

ISO 3789-3:1989, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Location and method of operation of operator controls — Part 3: Controls for powered lawn and garden equipment.*

ISO 4200:1991, *Plain end steel tubes, welded and seamless — General tables of dimensions and masses per unit length.*

ISO 5347-0:1987, *Methods for the calibration of vibration and shock pick-ups — Part 0: Basic concepts.*

ISO 5348:1998, *Mechanical vibration and shock — Mechanical mounting of accelerometers.*

ISO 5349:1986, *Mechanical vibration — Guidelines for the measurement and the assessment of human exposure to hand-transmitted vibration.*

ISO 5395:1990, *Powered lawn mowers, lawn tractors, lawn and garden tractors, professional mowers, and lawn and garden tractors with mowing attachments — Definitions, safety requirements and test procedures.*

ISO 11684:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles.*

IEC 60335–1:1991, *Safety of household and similar electrical appliances — Part 1: General requirements.*

IEC 60651:1979, *Sound level meters.*

3 Definitions

For the purposes of this International Standard, the following definitions apply:

NOTE — For different types of machines, see figures 1 and 2, showing a walk-behind and a hand-held edger.

3.1
blade
cutting means
mechanism used to provide the cutting action of an edger

3.2
blade retainer
mechanism which holds the blade to the driving member

3.3
blade guard
structure covering a portion of the blade arc

3.4
blade-tip circle
path described by the outermost point of the cutting means cutting edge as it rotates about its shaft axis

3.5
clutch
mechanism for connecting and disconnecting a driven member to and from a rotating source of power

3.6
debris deflector
additional guarding made of flexible material fitted to the unit as an extension of the guard to protect the operator from thrown debris