SLOVENSKI STANDARD
oSIST prEN ISO 8437-4:2016

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Snežne freze - Varnostne zahteve in preskusni postopki - 4. del: Informacije o nacionalnih in regionalnih določilih (ISO/DIS 8437-4:2016)

Snow throwers - Safety requirements and test procedures - Part 4: Information on national and regional provisions (ISO/DIS 8437-4:2016)

Schneefräsen - Sicherheitsanforderungen und Prüfverfahren - Teil 4: Informationen über nationale und regionale Bestimmungen (ISO/DIS 8437-4:2016)

Chasse-neige - Exigences de sécurité et essais - Partie 4: Informations sur les dispositions nationales et régionales (ISO/DIS 8437-4:2016)

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Snow throwers — Safety requirements and test procedures —

Part 4:
Information on national and regional provisions

Chasse-neige — Exigences de sécurité et essais —

Partie 4: Informations sur les dispositions nationales et régionales

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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.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC

ISO 8437 was prepared by Technical Committee ISO/TC 23, *Tractors and Machinery for Agriculture and Forestry*, Subcommittee SC 13, *Powered lawn and garden equipment*.

ISO 8437 consists of the following parts under the general title Snow thrower – Safety requirements and test procedures.

Part 1: Terminology and common tests

Part 2: Pedestrian controlled snow throwers

Part 3: Ride-on snow throwers

Part 4: National and regional provision

Introduction

The structure of safety standards in the field of machinery is as follows:

a) Type-A standards (basic standards) give basic concepts, principles for design, and general aspects that can be applied to machinery;

b) Type-B standards (generic safety standards) deal with one or more safety aspects or safeguards that can be used across a wide range of machinery:

- type-B1 standards on particular safety aspects (e.g. safety distances, surface temperature, noise);
- type-B2 standards on safeguards (e.g. two-handed controls, interlocking devices, pressure sensitive devices, guards);

c) Type-C standards (machinery safety standards) deal with detailed safety requirements for a particular machine or group of machines.

This international standard is a type-C standard as stated in ISO 12100.

When provisions of this type-C standard are different from those which are stated in type-A or type-B standards, the provisions of this type-C standard shall take precedence over the provisions of the other standards for machines that have been designed and built according to the provisions of this type-C standard.

Snow throwers – Safety requirements and test procedures – Part 4: Information on national and regional provisions

1 Scope

This part of ISO 8437 provides information on national and regional provisions applicable to powered pedestrian controlled and ride-on snow throwers. It is not intended to apply to hand-held snow throwers nor to airport, highway, agricultural or other types of snow removal machines and equipment.

This standard deals with significant hazards, hazardous situations and events relevant to snow throwers used as intended and under the conditions foreseen by the manufacturer.

This international standard does not deal with hazards related to:

– mains-operated electrical, snow throwers

– battery powered snow throwers

This international standard does not deal with hazards related to:

– battery circuits exceeding 42 V;

– magneto grounding circuits;

– working environment;

– electromagnetic compatibility

This international standard is not applicable to machines which are manufactured before the date of its publication.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 3864	2002	*Graphical symbols -- Safety colours and safety signs -- Part 1: Design principles for safety signs in workplaces and public areas*
ISO 5673 - 1	2004	*Agricultural tractors and machinery -- Power take-off drive shafts and power-input connection -- Part 1: General manufacturing and safety requirements*
ISO 8437 – 1	201x	*Snow throwers – Safety requirements and test procedures – Part 1: Terminology and common tests*
ISO 8437 – 2	201x	*Snow throwers – Safety requirements and test procedures – Part 2: Pedestrian controlled snow throwers*

ISO 8437 - 3	201x	*Snow throwers – Safety requirements and test procedures – Part 3: Ride-on snow throwers*
EN ISO 11688	2009	*Acoustics — Recommended practice for the design of low-noise machinery and equipment*
ISO 11684	1995	*Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Safety signs and hazard pictorials – General principles*
ISO 12100	2010	*Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology*
ISO 13857	2008	*Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs*
EN ISO 14982	2009	*Agricultural and forestry machinery — Electromagnetic compatibility — Test methods and acceptance criteria*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100 and ISO 8437-1 apply.

4 National/regional provisions related to ISO 8437-1 – Terminology and common tests - EU

See table 1.

Table 1 – Amendments, exceptions, and requirements additional to ISO 8437-1 specific to EU

Sub clause of ISO 8437-1	EU provision(s)
A.1	All snow throwers shall be marked legibly and indelibly with the following minimum information: – business name and address of the manufacturer or where appropriate, his authorised representative; The address can be simplified as long as the manufacturer (and where applicable, his authorised representative) can be identified. In any event, the address on the plaque shall be sufficient for mail to reach the company. – designation of the machine; The designation of the machinery can be achieved by a combination of letters and/or numbers. – year of construction that is the year in which the manufacturing process is completed; – designation of the series or type; The designation of the series or type is to allow the technical identification of the product and this can be achieved by a combination of letters and/or numbers and can be combined with the designation of the machinery.

	– the mass in kilograms of the machine with empty tanks; – the nominal power in kilowatts; – the serial number.

5 National/regional provisions related to ISO 8437-2 – Pedestrian controlled snow throwers

5.1 EU

See table 2.

Table 2 – Amendments, exceptions, and requirements additional to ISO 8437-2 specific to EU

Sub clause of ISO 8437-2	EU provision(s)
4.2.2.5	Engine Speed The snow thrower shall be designed in such a way that it is not possible to sustain an engine speed greater than the maximum operating engine speed by the use of any control or by simple adjustments made: • Without tools, or • With standard tools, or • Without breaking a manufactures seal Compliance to be checked by inspection.
4.9	**4.9 Electromagnetic Immunity** All electronic components used in the systems to control the machine shall meet the acceptance criteria of 6.3 and 6.6 in EN ISO 14982:2009 concerning electromagnetic immunity.
4.10	**4.10 Noise** **4.10.1 Reduction by design, at source and by protective measures** Noise reduction shall be an integral part of the design process thus specifically taking into account measures at the source. The success of the applied noise reduction measures is assessed on the basis of the actual noise emission values. The main sources causing and influencing noise are generally the air intake system, engine cooling system, engine exhaust system, cutting system, and vibrating surfaces. EN ISO 11688-1:2009 gives general technical information and guidance for the design of low-noise machines. Special care shall be taken in the acoustical design of machines. **4.10.2 Noise measurements** Emission sound pressure levels and sound power levels including the uncertainties shall be determined in accordance with ISO 8437-4:—, Annex A.
4.11	**4.11 Vibration** **4.11.1 Reduction by design, at source and by protective measures** Vibration reduction shall be an integral part of the design process thus specifically taking into account measures at the source. The success of the applied vibration reduction measures is assessed on the basis of the actual vibration values. The main sources causing and influencing vibration are generally the dynamic forces from the engine, cutting means, unbalanced moving parts, impact in gear sprockets, bearings and other mechanisms, travelling surface, speed, tyre pressure and the interaction

	between operator, machine and material being worked. **4.11.2 Vibration measurements** the vibration total value to which the hand-arm system is subjected and the uncertainty of measurement shall be determined in accordance with ISO 8437-4:—, Annex B

5.2 USA and Canada

See table 3.

Table 3 – Amendments, exceptions, and requirements additional to ISO 8437-2 specific to USA & Canada

Sub clause of ISO 8437-2	USA and Canada provision(s)
A 1	Use a grounded three-wire plug-in for all units with electric starting motors except for double insulated starting motors.

6 National/regional provisions related to ISO 8437-3 – Ride-on snow throwers

6.1 EU

See table 4.

Table 4 – Amendments, exceptions, and requirements additional to ISO 8437-3 specific to EU

Sub clause of ISO 8437-3	EU provision(s)
4.1.2	The snow thrower shall be designed in such a way that it is not possible to sustain an engine speed greater than the maximum operating engine speed by the use of any control or by simple adjustments made: • Without tools, or • With standard tools, or • Without breaking a manufactures seal Compliance to be checked by inspection.
4.9	**4.9 Electromagnetic Immunity** All electronic components used in the systems to control the machine shall meet the acceptance criteria of 6.3 and 6.6 in EN ISO 14982:2009 concerning electromagnetic immunity.
4.10	**4.10 Noise** **4.10.1 Reduction by design, at source and by protective measures** Noise reduction shall be an integral part of the design process thus specifically taking into account measures at the source. The success of the applied noise reduction measures is assessed on the basis of the actual noise emission values. The main sources causing and influencing noise are generally the air intake system, engine

