



# SLOVENSKI STANDARD SIST EN ISO 19432:2008

01-julij-2008

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SIST EN ISO 19432:2006

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Building construction machinery and equipment - Portable, hand-held, internal combustion engine driven cut-off machines - Safety requirements and testing (ISO 19432:2006)

## iTeh STANDARD PREVIEW

Baumaschinen und -ausrüstungen - Tragbare, handgeführte Trennschleifmaschinen mit Verbrennungsmotor - Sicherheit und Prüfverfahren (ISO 19432:2006)

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**Ta slovenski standard je istoveten z: EN ISO 19432:2008**

### **ICS:**

91.220      Gradbena oprema      Construction equipment

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English Version

Building construction machinery and equipment - Portable,  
hand-held, internal combustion engine driven cut-off machines -  
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Verbrennungsmotor - Sicherheit und Prüfverfahren (ISO  
19432:2006)

This European Standard was approved by CEN on 25 March 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

The text of ISO 19432:2006 has been prepared by Technical Committee ISO/TC 195 "Building construction machinery and equipment" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 19432:2008 by Technical Committee CEN/TC 151 "Construction equipment and building material machines - Safety" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 19432:2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

For relationship with EC Directives, see informative Annex ZA and ZB, which are integral part of this document.

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According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

### Endorsement notice

The text of ISO 19432:2006 has been approved by CEN as a EN ISO 19432:2008 without any modification.

## Annex ZA (informative)

### Relationship between this International Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/EC

This International Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive Machinery Directive 98/37/EC, amended by Directive 98/79/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this International standard confers, within the limits of the scope of this standard, a presumption of conformity with Essential Requirement 2.2 of that Directive and associated EFTA regulations.

**WARNING:** Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this International standard.

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## Annex ZB (informative)

### Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive *except Essential Requirements 1.7.3 (additional marking of business address and the designation of machines), 1.7.4.2 u) (uncertainty of noise measurement) and 2.2.1.1 (uncertainty of vibration measurements)*, and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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**Building construction machinery and  
equipment — Portable, hand-held,  
internal combustion engine driven cut-off  
machines — Safety requirements and  
testing**

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*Machines et matériel pour la construction des bâtiments —  
Tronçonneuses à disques, portatives, à moteur à combustion interne —  
Exigences de sécurité et essais*

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 19432 was prepared by Technical Committee ISO/TC 195, *Building construction machinery and equipment*.

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## Introduction

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

- a) Type-A standards (basis 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 aspect(s) or one or more type(s) of 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-hands 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 12100-1.

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 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.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered as indicated in the scope of this International Standard.

This International Standard is based on EN 1454:1998 and an ANSI draft.

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# Building construction machinery and equipment — Portable, hand-held, internal combustion engine driven cut-off machines — Safety requirements and testing

## 1 Scope

This International Standard specifies safety requirements and their verification by testing for the design and construction of portable, hand-held, internal combustion engine driven, cut-off machines, intended to be used by a single operator in the cutting of construction materials, such as asphalt, concrete, stone and metal. It is applicable to those machines designed purposely for use with a rotating, bonded-abrasive and/or superabrasive (diamond) cut-off wheel having a maximum outside diameter of 406 mm, centre-mounted on, and driven by, a spindle shaft, where the top of the wheel rotates away from the operator (see Figure 1).

This International Standard deals with all significant hazards related to the hand-held use of such machines (see Clause 4). It specifies methods for the elimination or reduction of hazards arising from their use, as well as the type of information on safe working practices to be provided with the machines. Cut-off machines designed in accordance with this International Standard are intended to be used by persons who have read and understood the safety requirements given in the “instruction handbook” and who use the appropriate personal protective equipment (PPE).

Except for noise, environmental aspects are not considered by this International Standard; nor are cut-off wheel specifications given — for such specifications, see for example EN 12413<sup>[1]</sup> and EN 13236<sup>[2]</sup>.

This International Standard is not applicable to machines manufactured before the date of its publication.

## 2 Normative references

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

ISO 3744:1994, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane*

ISO 4871:1996, *Acoustics — Declaration and verification of noise emission values of machinery and equipment*

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

ISO 5349-2:2001, *Mechanical vibration — Measurement and evaluation of human exposure to hand-transmitted vibration — Part 2: Practical guidance for measurement at the workplace*

ISO 7293:1997, *Forestry machinery — Portable chain-saws — Engine performance and fuel consumption*

ISO 7914:2002, *Forestry machinery — Portable chain-saws — Minimum handle clearance and sizes*

ISO 8041:1990, *Human response to vibration — Measuring instrumentation*