

SLOVENSKI STANDARD

SIST EN ISO 28927-1:2010

01-februar-2010

Nadomešča:
SIST EN ISO 8662-4:2000

Ročna prenosna električna orodja - Preskusne metode za vrednotenje oddajanja vibracij - 1. del: Kotni in vertikalni brusilniki (ISO 28927-1:2009)

Hand-held portable power tools - Test methods for evaluation of vibration emission - Part 1: Angle and vertical grinders (ISO 28927-1:2009)

Handgehaltene motorbetriebene Maschinen - Messverfahren zur Ermittlung der Schwingungsemission - Teil 1: Winkelschleifer und Vertikalschleifer (ISO 28927-1:2009)

Machines à moteur portatives - Méthodes d'essai pour l'évaluation de l'émission de vibrations - Partie 1: Meuleuses verticales et meuleuses d'angles (ISO 28927-1:2009)

Ta slovenski standard je istoveten z: **EN ISO 28927-1:2009**

ICS:

13.160	Vpliv vibracij in udarcev na ljudi	Vibration and shock with respect to human beings
25.080.50	Brusilni in polirni stroji	Grinding and polishing machines
25.140.20	Električna orodja	Electric tools

SIST EN ISO 28927-1:2010 en,fr

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 28927-1

December 2009

ICS 13.160; 25.140.10

Supersedes EN ISO 8662-4:1995

English Version

**Hand-held portable power tools - Test methods for evaluation of
vibration emission - Part 1: Angle and vertical grinders (ISO
28927-1:2009)**

Machines à moteur portatives - Méthodes d'essai pour
l'évaluation de l'émission de vibrations - Partie 1:
Meuleuses verticales et meuleuses d'angles (ISO 28927-
1:2009)

Handgehaltene motorbetriebene Maschinen -
Messverfahren zur Ermittlung der Schwingungsemission -
Teil 1: Winkelschleifer und Vertikalschleifer (ISO 28927-
1:2009)

This European Standard was approved by CEN on 14 December 2009.

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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN ISO 28927-1:2009) has been prepared by Technical Committee ISO/TC 118 "Compressors and pneumatic tools, machines and equipment" in collaboration with Technical Committee CEN/TC 231 "Mechanical vibration and shock" 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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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 8662-4:1995.

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 EU Directives.

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

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.

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Endorsement notice

The text of ISO 28927-1:2009 has been approved by CEN as a EN ISO 28927-1:2009 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/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 98/37/EC, Machinery, amended by Directive 98/79/EC.

Once this standard is cited in the Official Journal of the European Union 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 corresponding Essential Requirements of that Directive, except ER 1.7.4 d) and 2.2, and associated EFTA regulations.

WARNING — Other requirements and other EU Directives may be applicable to the products falling within the scope of this 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 one 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 Union 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 corresponding Essential Requirement of that Directive, except ER 2.2.1.1, 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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INTERNATIONAL STANDARD

ISO
28927-1

First edition
2009-12-15

Hand-held portable power tools — Test methods for evaluation of vibration emission —

Part 1: Angle and vertical grinders

iTeh STANDARD PREVIEW
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*Machines à moteur portatives — Méthodes d'essai pour l'évaluation de
l'émission de vibrations —
Partie 1: Meuleuses verticales et meuleuses d'angles*

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ISO 28927-1:2009(E)

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 28927-1 was prepared by Technical Committee ISO/TC 118, *Compressors and pneumatic tools, machines and equipment*, Subcommittee SC 3, *Pneumatic tools and machines*.

This first edition of ISO 28927-1, together with ISO 28927-4, cancels and replaces ISO 8662-4:1994, of which it constitutes a technical revision. The most important changes are

- vibration measurement in three axes and at both hand positions,
- new transducer positions,
- improved definition of transducer positions and orientation,
- straight grinders dealt with specifically by ISO 29827-4,
- rotational speed raised to no-load free running speed, and
- test wheels modified and their specification improved.

ISO 29827 consists of the following parts, under the general title *Hand-held portable power tools — Test methods for evaluation of vibration emission*:

- *Part 1: Angle and vertical grinders*
- *Part 2: Wrenches, nutrunners and screwdrivers¹⁾*
- *Part 3: Polishers and rotary, orbital and random orbital sanders²⁾*

1) Replaces ISO 8662-7, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 7: Wrenches, screwdrivers and nut runners with impact, impulse or ratchet action*. All screwdrivers and nutrunners except for one-shot tools now covered.

2) Replaces ISO 8662-8, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 8: Polishers and rotary, orbital and random orbital sanders*.

- Part 4: Straight grinders³⁾
- Part 5: Drills and impact drills⁴⁾
- Part 6: Rammers⁵⁾
- Part 7: Nibblers and shears⁶⁾
- Part 8: Saws, polishing and filing machines with reciprocating action and small saws with oscillating or rotating action⁷⁾
- Part 9: Scaling hammers and needle scalers⁸⁾
- Part 10: Percussive drills, hammers and breakers⁹⁾
- Part 11: Stone hammers¹⁰⁾

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- 3) Together with Part 1, replaces ISO 8662-4, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 4: Grinders*
- 4) Replaces ISO 8662-6, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 6: Impact drills*. Non-impacting drills now covered.
- 5) Replaces ISO 8662-9, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 9: Rammers*.
- 6) Replaces ISO 8662-10, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 10: Nibblers and shears*.
- 7) Replaces ISO 8662-12, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 12: Saws and files with reciprocating action and saws with oscillating or rotating action*.
- 8) Together with Part 11, replaces ISO 8662-14, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 14: Stone-working tools and needle scalers*.
- 9) Replaces ISO 8662-2, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 2: Chipping hammers and riveting hammers*, ISO 8662-3, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 3: Rock drills and rotary hammers*, and ISO 8662-5, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 5: Pavement breakers and hammers for construction work*. Chipping and riveting hammers, rock drills and rotary hammers all covered.
- 10) Together with Part 9, replaces ISO 8662-14, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 14: Stone-working tools and needle scalers*.