

**Kantavad käeshoitavad ajamiga
tööriistad. Vibratsiooni mõõtmine
käepidemel. Osa 8: Poleerseadmed ning
pöörlevad, tald- ning
ekstsentrisklihvmasinad**

Hand-held portable power tools - Measurement of
vibrations at the handle - Part 8: Polishers and
rotary, orbital and random orbital sanders

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8662-8:1999 sisaldab Euroopa standardi EN ISO 8662-8:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 8662-8:1999 consists of the English text of the European standard EN ISO 8662-8:1997.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: See standard esitab laborimeetodi vibratsiooni mõõtmiseks käeshoitava pneumoajamiga poleerseadmete, pöörlevate, tald- või ekstsentrilihvmasinade käepidemetele.</p>	<p>Scope:</p>
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ICS 13.160, 25.140.01

Võtmesõnad: ajamiga tööriistad, käeshoitavad tööriistad, kämb-la-käsi- varre vibratsioon, lihvseadmed, pneumoseadmed, poleerseadmed, teimid, teisaldatavad seadmed, tööriista käepidemed, tööriistad, vibratsioon, vibratsiooniteimid

ICS 13.160; 25.140.01

Descriptors: Power tools, polishers, rotary sanders, vibration, testing.

English version

Hand-held portable power tools

Measurement of vibrations at the handle

Part 8: Polishers and rotary, orbital and random orbital sanders
(ISO 8662-8 : 1997)

Machines à moteur portatives –
Mesurage des vibrations au niveau
des poignées – Partie 8: Polisseuses-
lustreuses et ponceuses rotatives,
orbitales et orbitales spéciales
(ISO 8662-8 : 1997)

Handgehaltene motorbetriebene
Maschinen – Messung mechanischer
Schwingungen am Handgriff – Teil 8:
Poliermaschinen und Rotations-
schleifer, Schwingschleifer und
Exzentrerschleifer (ISO 8662-8 : 1997)

This European Standard was approved by CEN on 1997-07-16.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 8662-8 : 1997 Hand-held portable power tools – Measurement of vibrations at the handle – Part 8: Polishers and rotary, orbital and random orbital sanders,

which was prepared by ISO/TC 118 'Compressors, pneumatic tools and pneumatic machines' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 231 'Mechanical vibration and shock', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by March 1998 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 8662-8 : 1997 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

Introduction

This part of ISO 8662, which specifies a type test for the measurement of vibrations at the handles of hand-held pneumatic polishers or rotary, orbital or random orbital sanders, supplements ISO 8662-1, which gives the general specifications for the measurement of vibrations at the handles of hand-held portable power tools. It specifies the operation of the tool under the type test and other requirements for the performance of the type test.

Polishers and rotary sanders both have circular flexible abrasive pads, driven in a simple rotating motion. In addition, polishers are generally fitted with a sheepskin or felt pad, whereas rotary sanders generally use a circular abrasive paper. The pad may be coupled to the motor directly, or via a gearbox which may include an angular drive.

The principle of the operation of both orbital and random orbital sanders is that the pad holding the abrasive paper is caused to orbit at a small radius about the axis of the tool. The pads of orbital sanders may be coupled to the motor directly, or via a gearbox. In a random orbital sander, the motor is connected to the pad via a ball bearing, causing it to operate with both rotary and circular movements (dual action). The pads of orbital sanders are generally, but not exclusively, rectangular; those of random orbital sanders are circular.

It has been found that the magnitude of the vibration generated by an orbital or random orbital sander sanding a workpiece varies considerably. The variation is due to many different parameters, for example, the way the operator holds the tool and the precision with which he applies the feed force. In order to provide a method which gives good measurement repeatability, this part of ISO 8662 strictly specifies the working conditions for the test.

1 Scope

This part of ISO 8662 specifies a laboratory method for measuring the vibrations at the handles of a hand-held pneumatic polisher or rotary, orbital or random orbital sander. It is a type test procedure for establishing the magnitude of vibrations at the handles of the power tool when operating under a specified load.

Four types of power tools are concerned:

- a) polisher, with circular polishing pad;
- b) vertical rotary sander, with circular sanding pad;
- c) orbital sander, with rectangular, circular (or other) sanding pad;
- d) random orbital sander (including grinding-type tools fitted with a dual-action orbital hub), with circular sanding pad.

This part of ISO 8662 is not applicable to straight rotary sanders and belt sanders.

It is intended that the results be used to compare different power tools or different models of the same type of power tool. With the operation specified for the power tool, the values obtained will give an indication of those found in real work situations.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8662. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8662 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 2787:1984, *Rotary and percussive pneumatic tools — Performance tests*.

ISO 8662-1:1988, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 1: General*.