

**Pinnatöötlusseadmed. Pinnatöötlusseadmete,
kaasa arvatud lisaseadmed, mürakatse koodid.
Täpsuskategooriad 2 ja 3 KONSOLIDEERITUD
TEKST**

Surface treatment equipment - Noise test code for
surface treatment equipment including its ancillary
handling equipment - Accuracy grades 2 and 3
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14462:2005+A1:2009 sisaldab Euroopa standardi EN 14462:2005+A1:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 29.05.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 08.04.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14462:2005+A1:2009 consists of the English text of the European standard EN 14462:2005+A1:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 29.05.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 08.04.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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Võtmesõnad: operating stations, produc, ratings, sound intensity, sound level, sound pressure level, sound propagation, surface treatment, surface treatment plants, surface treatment technology, testing conditions, treatments of surfaces, working places

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English Version

**Surface treatment equipment - Noise test code for surface
treatment equipment including its ancillary handling equipment -
Accuracy grades 2 and 3**

Équipements de traitement de surface - Code d'essai
acoustique pour équipements de traitement de surface y
compris les équipements de manutention auxiliaires -
Classes de précision 2 et 3

Oberflächenbehandlungsgeräte - Geräuschmessverfahren
für Oberflächenbehandlungsgeräte einschließlich ihrer Be-
und Entladeeinrichtungen - Genauigkeitsklassen 2 und 3

This European Standard was approved by CEN on 22 December 2004 and includes Amendment 1 approved by CEN on 7 March 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.



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Foreword

This document (EN 14462:2005+A1:2009) has been prepared by Technical Committee CEN/TC 271 "Surface treatment equipment — 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 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-03-07.

This document supersedes EN 14462:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

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 Directive(s).

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

It augments the "C"-type safety standards prepared by CEN/TC 271. Its purpose is to provide a means of determination, declaration and verification of noise emission for the equipment within the scope of this document. The determination of noise emission values is a prerequisite for a manufacturer to assess the noise reduction obtained at the design stage.

This document includes a Bibliography.

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 United Kingdom.

Introduction

This noise test code provides manufacturers and third parties with the means to carry out noise emission measurements, determine values for noise declaration purposes under the Machinery Directive 98/79/EC and provides the means for their verification.

Noise emission characteristics include both emission sound pressure levels at workstations and sound power levels. The determination of these characteristics is necessary for:

- manufacturers to declare the noise emitted;
- comparing the noise emitted by machines;
- purposes of noise control at the source during the design stage;
- estimation of noise emission (exposure) at the workplace or workstation.

1 Scope

This document specifies all the information necessary to carry out efficiently and under standardised conditions the determination, declaration and verification of the airborne noise emission of surface treatment machines as stated in Annex A. Surface treatment machines include but are not limited to

- machines for cleaning and pre-treatment of industrial item surfaces,
 - machinery for coating and colour mixing,
 - coating plants
- and
- dryers, ovens and evaporating equipment.

This document describes the determination of emission sound pressure levels at work stations or other specified positions as well as the determination of sound power levels for surface treatment machines as stated in Annex A. This can be small single units (e.g. handheld atomising spraying equipment) and also complex machines with large dimensions (e.g. machines for cleaning and pre-treatment of industrial item surfaces, spray booths, dryers), which could also be linked.

In case of very large machines as defined in 3.10 the determination of sound power level may be very complicated or cannot be done with a reasonable amount of work. Therefore in this document, the measurement for very large machines is simplified by determining an averaged emission sound pressure level instead of the sound power level.

This document specifies noise measurement methods, installation/mounting and operation conditions that shall be used for the test. The use of this document ensures the reproducibility of the determination of the noise emission characteristics within specified limits determined by the grade of accuracy of the basic noise measurement method used (see 5.1 and 6.1). Noise measurement methods allowed by this document are engineering methods (grade 2) and survey methods (grade 3).

For continuous flow dryers for paper, board and foil (see EN 13023).

This document applies to surface treatment machines manufactured after the date of issue of this document.

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.

EN 1539, *Dryers and ovens, in which flammable substances are released — Safety requirements.*

EN 1953, *Atomising and spraying equipment for coating materials — Safety requirements.*

EN 12215, *Coating plants — Spray booths for application of organic liquid coating materials — Safety requirements.*

EN 12581 ^{A1}, *Coating plants — Dip and electrophoretic coating machinery for application of organic liquid coating materials — Safety requirements.*

EN 12621 ^{A1}, *Machinery for the supply and/or circulation of coating materials under pressure — Safety requirements.*

EN 12753 ^{A1}, *Thermal cleaning plants (incinerators) for exhaust gas from surface treatment plants — Safety requirements.*

EN 12757-1 ^{A1}, *Mixing machinery for coating material — Safety requirements — Part 1: Mixing machinery for use in vehicle refinishing.*

EN 12921-1 ^{A1}, *Machines for surface cleaning and pretreatment of industrial items using liquids or vapours — Part 1: Common safety requirements.*

EN 12921-2 ^{A1}, *Machines for surface cleaning and pretreatment of industrial items using liquids or vapours — Part 2: Safety of machines using water based cleaning liquids.*

EN 12921-3 ^{A1}, *Machines for surface cleaning and pretreatment of industrial items using liquids or vapours — Part 3: Safety of machines using flammable cleaning liquids.*

EN 12921-4 ^{A1}, *Machines for surface cleaning and pretreatment of industrial items using liquids or vapours — Part 4: Safety of machines using halogenated solvents.*

EN 12981 ^{A1}, *Coating plants — Spray booths for application of organic powder coating material — Safety requirements.*

EN 13355, *Coating plants — Combined booths — Safety requirements.*

EN 61672-1, *Electroacoustics - Sound level meters – Part 1: Specifications (IEC 61672-1:2002).*

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

EN ISO 3746, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995).*

EN ISO 3747, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Comparison method for use in situ (ISO 3747:2000).*

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

EN ISO 9614-1, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points (ISO 9614-1:1993).*

EN ISO 9614-2, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 2: Measurement by scanning (ISO 9614-2:1996).*

EN ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995).*

EN ISO 11202, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Survey method in situ (ISO 11202:1995).*

EN ISO 11204, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Method requiring environmental corrections (ISO 11204:1995).*