

**Tööstuslikud termotöötlusseadmed . Mürakatse kood
tööstuslikele termotöötlusseadmetele, sealhulgas nende
käsitsemise tugiseadmetele KONSOLIDEERITUD TEKST**

Industrial thermoprocessing equipment - Noise test code for
industrial thermoprocessing equipment including its ancillary
handling equipment CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1547:2001+A1:2009 sisaldab Euroopa standardi EN 1547:2001+A1:2009 ingliskeelset teksti.

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Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.06.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1547:2001+A1:2009 consists of the English text of the European standard EN 1547:2001+A1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

**Industrial thermoprocessing equipment - Noise test code for
industrial thermoprocessing equipment including its ancillary
handling equipment**

Équipements thermiques industriels - Code d'essai
acoustique pour équipements thermiques industriels, y
compris les équipements de manutention auxiliaires

Industrielle Thermoprozessanlagen -
Geräuschmessverfahren für industrielle
Thermoprozessanlagen einschließlich ihrer Be- und
Entladeeinrichtungen

This European Standard was approved by CEN on 24 January 2001 and includes Amendment 1 approved by CEN on 21 May 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.









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Foreword

This document (EN 1547:2001+A1:2009) has been prepared by Technical Committee CEN/TC 186 "Industrial thermoprocessing - 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 December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-05-21.

This document supersedes EN 1547:2001.

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**

This standard forms one part of safety standards covering Industrial Thermoprocessing Equipment. For a full list of parts it is referred to the EN 746 series.

The working group that drafted this Part comprised experts from the following countries: Belgium, Finland, France, Germany, Switzerland and the United Kingdom.

The annexes A and B are informative.

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 standard has been prepared to be a harmonized standard to provide one means of conforming with the essential safety requirements of the Machinery Directive and associated EFTA Regulations.

This European Standard is a type C-Standard as defined in **EN ISO 12100**.

This noise test code provides manufacturers and third parties with the means to carry out noise emission measurements, determine values for noise declaration purposes and verify declared values.

The determination of noise emission requires manufacturers to acquire a basic technical know-how regarding noise emission metrology. This explains the approach taken in the body of the standard for the determination of the sound power level.

1 Scope

This noise test code specifies all the information necessary to carry out efficiently and under standardized conditions the determination, declaration and verification of the noise emission characteristics of industrial thermoprocessing equipment as described especially in EN 746-1, EN 746-2 and EN 746-3. It also indicates the location of work stations where measurements need to be made.

Noise emission characteristics include emission sound pressure levels at work stations and the sound power level. The determination of these quantities is necessary for:

- manufacturers to declare the noise emitted;
- comparing the noise emitted by machines in the group concerned;
- purposes of noise control at the source at the design stage.

The use of this standard 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. Noise measurement methods allowed by this standard are engineering methods (grade 2) and survey methods (grade 3).

This standard does not cover the computation of personnel daily noise exposure.

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.

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EN 746-1, *Industrial thermoprocessing equipment — Part 1: Common safety requirements for industrial thermoprocessing equipment*

EN 746-2, *Industrial thermoprocessing equipment — Part 2: Safety requirements for combustion and fuel handling systems*

EN 746-3, *Industrial thermoprocessing equipment — Part 3: Safety requirements for the generation and use of atmosphere gases*

prEN ISO 3743-1, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering method for small, movable sources in reverberant fields — Part 1: Comparison method for a hard-walled test room (ISO/DIS 3743-1:2006)*

prEN ISO 3744, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane (ISO/DIS 3744:2006)*

prEN ISO 3746, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO/DIS 3746:2005)*

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)*