

Masinate ohutus. Õhu kaudu levivate kahjulike ainete emissiooni hindamine. Osa 3: Määratud saasteaine emissiooni intensiivsuse määramine katsestendi meetodiga

Safety of machinery - Evaluation of the emission of airborne hazardous substances - Part 3: Bench test method for the measurement of the emission rate of a specified pollutant

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1093-3:2007 sisaldab Euroopa standardi EN 1093-3:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1093-3:2007 consists of the English text of the European standard EN 1093-3:2006.</p> <p>This document is endorsed on 29.01.2007 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: Standard kirjeldab katsestendi meetodit seadmetest lähtuva, õhu kaudu leviva määratud kahjuliku aine emissiooni määra mõõtmiseks, kasutades katsestendi seadme piiritletud töötingimustes. Standard ei määra ära sissehingatavaid osakesi sisaldava õhu kiiruse väärtust.</p>	<p>Scope: This European Standard specifies a test bench method for the measurement of the emission rate of a given airborne hazardous substance from machines using a test bench under specified operating conditions of the machine.</p>
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ICS 13.040.40, 13.300

Võtmesõnad: emissioon, gaasilised saasteained, katsestendid, mõõtmine, määrad ajaühikus, ohtlikud materjalid, seadmete ohutus, õhu saastumine, õnnetuse vältimine

English Version

Safety of machinery - Evaluation of the emission of airborne hazardous substances - Part 3: Test bench method for the measurement of the emission rate of a given pollutant

Sécurité des machines - Evaluation de l'émission de substances dangereuses véhiculées par l'air - Partie 3: Méthode sur banc d'essai pour le mesurage du débit d'émission d'un polluant donné

Sicherheit von Maschinen - Bewertung der Emission von luftgetragenen Gefahrstoffen - Teil 3: Prüfstandverfahren zur Messung der Emissionsrate eines bestimmten luftverunreinigenden Stoffes

This European Standard was approved by CEN on 4 November 2006.

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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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 1093-3:2006) has been prepared by Technical Committee CEN/TC 114 "Safety of machinery", 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 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

This document supersedes EN 1093-3:1996.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This part 3 of EN 1093 *Safety of machinery — Evaluation of the emission of airborne hazardous substances* belongs to a series of documents, the other parts of which are the following:

- Part 1: Selection of test methods;
- Part 2: Tracer gas method for the measurement of the emission rate of a given pollutant;
- Part 4: Capture efficiency of an exhaust system — Tracer method;
- Part 6: Separation efficiency by mass, unducted outlet;
- Part 7: Separation efficiency by mass, ducted outlet;
- Part 8: Pollutant concentration parameter, test bench method;
- Part 9: Pollutant concentration parameter, room method;
- Part 11: Decontamination index.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 European Standard is a type B standard as stated in EN ISO 12100-1.

The provisions of this European Standard can be supplemented or modified by a type C standard.

NOTE For machines which are covered by the scope of a type C standard and which have been designed and built according to the provisions of that standard, the provisions of that type C standard take precedence over the provisions of this type B standard.

1 Scope

This European Standard specifies a test bench method for the measurement of the emission rate of a given airborne hazardous substance from machines using a test bench under specified operating conditions of the machine.

The measurement of the emission rates of a given pollutant emitted from machines can serve for:

- a) the evaluation of the performance of a machine;
- b) the evaluation of the reduction of pollutant emissions of the machine;
- c) the comparison of machines within groups of machines with the same intended use (groups are defined by the function and materials processed);
- d) the ranking of machines from the same group according to their emission rates;
- e) the determination of the state of the art of machines with respect to their emission rates.

This European Standard is not applicable to machinery which is manufactured before the date of its publication as an EN.

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 ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 and the following apply.

3.1

uncontrolled emission rate of a given pollutant

uncontrolled emission rate of a specified pollutant (deprecated)

\dot{m}_u

mass of pollutant emitted from the machine into the space around the machine per unit of time

NOTE 1 Any measures to reduce the air pollution around the machine (e.g. capture devices, containment equipment, wetting process) are not in use or are de-activated.

NOTE 2 In previous language use the term "uncontrolled emission rate of a specified pollutant" was used. This term has been identified as ambiguous in view of its possible translation and should therefore not be used any longer.

[EN 1093-1:1998, 3.2.1]