

Masinate ohutus. Õhu kaudu levivate ohtlike ainete emissiooni hindamine. Osa 8: Saasteaine kontsentratsiooni parameeter, katsestendimeetod
KONSOLIDEERITUD TEKST

Safety of machinery - Evaluation of the emission of airborne hazardous substances - Part 8:
Pollutant concentration parameter, test bench method
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1093-8:1999+A1:2008 sisaldab Euroopa standardi EN 1093-8:1998+A1:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 18.08.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 16.07.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1093-8:1999+A1:2008 consists of the English text of the European standard EN 1093-8:1998+A1:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 18.08.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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Võtmesõnad: emissioon, katsestend, kontsentratsioon, mõõtmine, ohtlikud ained, seadmete ohutus, õhu saastumine

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English Version

**Safety of machinery - Evaluation of the emission of airborne
hazardous substances - Part 8: Pollutant concentration
parameter, test bench method**

Sécurité des machines - Evaluation de l'émission de
substances dangereuses véhiculées par l'air - Partie 8:
Paramètre de concentration en polluant, méthode sur banc
d'essai

Sicherheit von Maschinen - Bewertung der Emission von
luftgetragenen Gefahrstoffen - Teil 8:
Konzentrationsparameter des luftverunreinigenden Stoffes,
Prüfstandverfahren

This European Standard was approved by CEN on 4 September 1998 and includes Amendment 1 approved by CEN on 8 June 2008.

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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 1093-8:1998+A1:2008) 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 January 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-06-08.

This document supersedes EN 1093-8:1998.

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

This European Standard 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**

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 European Standard is a type B standard as stated in ENV 1070:1993.

This European Standard is a part of EN 1093. Part 1 of this standard presents a selection of different methods for the evaluation of the emission of airborne hazardous substances from machines.

1 Scope

This European Standard specifies a test bench method for the measurement of the pollutant concentration parameter of a specified airborne hazardous substance from machines using a test bench under specified operating conditions.

This method is only applicable for the determination of emitted gases, vapours and respirable particles.

The determination of the emission rate in a test bench (see EN 1093-3) shall be used when possible.

Measurement of the pollutant concentration parameter of a machine can serve for the:

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

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 292-1:1991, *Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology.*

EN 292-2:1991, *Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications.*

EN 292-2/A1:1995, *Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications; Amendment A1.*

ENV 1070:1993, *Safety of machinery – Terminology.*

EN 1093-1, *Safety of machinery - Evaluation of the emission of airborne hazardous substances – Part 1: Selection of test methods.*

ISO 2602:1980, *Statistical interpretation of test results - Estimation of the mean - Confidence interval*.

3 Definitions

For the purposes of this European Standard the definitions of ENV 1070:1993 and the following definition applies:

3.1

pollutant concentration parameter, cabin, P_{cc}

the measured concentration of a specified pollutant in defined position(s) near the machine. For the purpose of this European Standard one measurement point shall be used, preferably in the duct.

4 Principle

The principle of the measurement method is to operate machines under controlled conditions in a test bench and to measure the pollutant concentration at a well defined location (see 5.2) for a specified exhaust air flow rate of the test bench. This concentration gives an indication of the emission from the machine.