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

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

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1093-8:1999 sisaldab Euroopa standardi EN 1093-8:1998 ingliskeelset teksti. Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 1093-8:1999 consists of the English text of the European standard EN 1093-8:1998. This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: Käesolev Euroopa standard määrab kindlaks katsestendimeetodi seadmetest õhku leviva, määratud ohtliku aine saaste kontsentratsiooniparameetri mõõtmiseks täpselt piiritletud töötingimustes. Seda meetodit saab kasutada ainult emiteerunud gaaside, aurude ja hõljuvate osakeste määramiseks.	**Scope:**

ICS 13.040.40

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

Hinnagrupp D

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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 1998-09-04.

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CEN

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

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Contents

Foreword

This European Standard 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 March 1999, and conflicting national standards shall be withdrawn at the latest by March 1999.

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).

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

0 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:

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.