

**Õhu paiksaasteallikate
emissioonitasemed. Tolmu madala
masskontsentratsiooni
kindlaksmääramine. Osa 2:
Automaatsed mõõtesüsteemid**

Stationary source emissions - Determination of low
range mass concentration of dust - Part 2:
Automated measuring systems

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 13284-2:2004 sisaldab Euroopa standardi EN 13284-2:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 13284-2:2004 consists of the English text of the European standard EN 13284-2:2004.</p> <p>This document is endorsed on 21.12.2004 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:</p> <p>This part of EN 13284 specifies conditions and criteria for the choice, commissioning and calibration of automated measuring systems (AMS) used for proving that the emissions from a source are compliant with emission limits below 50 mg/m³ (standard conditions) in ducted gaseous streams</p> | <p>Scope:</p> <p>This part of EN 13284 specifies conditions and criteria for the choice, commissioning and calibration of automated measuring systems (AMS) used for proving that the emissions from a source are compliant with emission limits below 50 mg/m³ (standard conditions) in ducted gaseous streams</p> |
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English version

Stationary source emissions - Determination of low range mass concentration of dust - Part 2: Automated measuring systems

Emissions de sources fixes - Détermination de la faible concentration en masse de poussières - Partie 2: Systèmes automatiques de mesure

Emissionen aus stationären Quellen - Ermittlung der Staubmassenkonzentration bei geringen Staubkonzentrationen - Teil 2: Automatische Messeinrichtungen

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Foreword

This document (EN 13284-2:2004) has been prepared by Technical Committee CEN/TC 264 "Air quality", 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 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

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 bibliography, which is an integral part of this document.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This document describes the quality assurance procedures related to Automated Measuring Systems (AMS) for the determination of dust in flue gas, in order to meet the uncertainty requirements on measured values given by regulations, e.g. EC Directives ([1], [2]), national or other legislation.

This document is only applicable in conjunction with the general document on quality assurance of AMS described in EN 14181, and provides indications which are specific to dust measurements.

The calibration and validation of dust AMS are performed by parallel measurements with the reference manual gravimetric method described in EN 13284-1.

1 Scope

This document specifies specific requirements on automated measuring systems (AMS) for dust monitoring. It is derived from EN 14181 which is the general document on the quality assurance of AMS. It is only applicable in conjunction with EN 14181.

This document specifies test criteria for the QAL1 and specific requirements for QAL2, QAL3 and AST for dust AMS used for proving that the dust emissions from a source are compliant with emission limits below 50 mg/m³ (standard conditions) in ducted gaseous streams. This document is applicable by direct correlation with the standard reference method (SRM) described in EN 13284-1.

This document is primarily developed for emissions from waste incinerators. From a technical point of view, it may be applied to other processes, for which measurement at an emission limit is required with defined uncertainty.

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 13284-1:2001, *Stationary source emissions - Determination of low range mass concentration of dust - Part 1: Manual gravimetric method*.

EN 14181:2004, *Stationary source emissions – Quality assurance of automated measuring systems*.

EN ISO 14956, *Air quality - Evaluation of the suitability of a measurement procedure by comparison with a required measurement uncertainty (ISO 14956:2002)*.

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:1999)*.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13284-1:2001 and EN 14181:2004 and the following apply.

3.1

dust

particles, of any shape, structure or density, dispersed in the gas phase at the sampling point conditions which may be collected by filtration under specified conditions after representative sampling of the gas to be analysed, and which remain upstream of the filter and on the filter after drying under specified conditions

[EN 13284-1:2001]

3.2

automated measuring system (AMS)

measuring system permanently installed on site for continuous monitoring of emissions

NOTE 1 An AMS is a method which is traceable to a reference method.

NOTE 2 Apart from the analyser, an AMS includes facilities for taking samples (e.g. sample probe, sample gas lines, flow meters, regulators, delivery pumps) and for sample conditioning (e.g. dust filter, moisture removal devices, converters, diluters). This definition also includes testing and adjusting devices that are required for regular functional checks.