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Osa 2: Automaatsed mõõtesüsteemid**

Stationary source emissions - Determination of velocity and volume flow rate in ducts - Part 2: Automated measuring systems (ISO 16911-2:2013)

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English Version

**Stationary source emissions - Manual and automatic
determination of velocity and volume flow rate in ducts - Part 2:
Automated measuring systems (ISO 16911-2:2013)**

Émissions de sources fixes - Détermination manuelle et
automatique de la vitesse et du débit-volume d'écoulement
dans les conduits - Partie 2: Systèmes de mesure
automatiques (ISO 16911-2:2013)

Emissionen aus stationären Quellen - Manuelle und
automatische Bestimmung der Geschwindigkeit und des
Volumenstroms in Abgaskanälen - Teil 2: Kontinuierliche
Messverfahren (ISO 16911-2:2013)

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 16911-2:2013) has been prepared by Technical Committee CEN/TC 264 "Air quality", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 146 "Air quality".

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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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Introduction

EN ISO 16911-2 describes the quality assurance (QA) procedures related to automated measuring systems (AMSs) for the determination of the volume flow rate of flue gas with a total uncertainty that accords with the requirements of Commission Decision of 2007-07-18.^[4]

The calibration and validation of flow AMSs are performed by parallel measurements with the reference manual method described in EN ISO 16911-1.

The purpose of EN ISO 16911-2 is to secure flow monitoring with a minimized uncertainty for use according to EU Directive 2000/76/EC,^[1] EU Directive 2001/80/EC,^[2] and EU Directive 2010/75/EU.^[5]

The purpose of EN ISO 16911-2 is also to secure flow monitoring with an overall uncertainty equal to or less than stipulated in Commission Decision of 2007-07-18^[4] and establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC.^[3]

Stationary source emissions — Manual and automatic determination of velocity and volume flow rate in ducts —

Part 2: Automated measuring systems

1 Scope

EN ISO 16911-2 describes specific requirements for automated measuring system (AMS) flow monitoring. It is partly derived from EN 14181 which is the general document on the quality assurance of AMSs and is applicable in conjunction with that document.

EN ISO 16911-2 specifies conditions and criteria for the choice, mounting, commissioning and calibration of AMSs used for determining the volume flow rate from a source in ducted gaseous streams. EN ISO 16911-2 is applicable by correlation with the manual reference methods described in EN ISO 16911-1.

EN ISO 16911-2 is primarily developed for monitoring emissions from waste incinerators and large combustion plants. From a technical point of view, it can be applied to other processes for which flow rate measurement is required with a defined and minimized 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.

ISO 14956, *Air quality — Evaluation of the suitability of a measurement procedure by comparison with a required measurement uncertainty*

EN ISO 16911-1:2013, *Stationary source emissions — Manual and automatic determination of velocity and volume flow rate in ducts — Part 1 Manual reference method*

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

EN 15267-3:2007, *Air quality — Certification of automated measuring systems — Part 3: Performance criteria and test procedures for automated measuring systems for monitoring emissions from stationary sources*

EN 15259, *Air quality — Measurement of stationary source emissions — Requirements for measurement sections and sites and for the measurement objective, plan and report*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14181 and the following apply.

3.1

automated measuring system

AMS

measuring system permanently installed on site for continuous monitoring of flow

Note 1 to entry: An AMS is a monitoring technology which is traceable to a reference method.