

SLOVENSKI STANDARD

SIST EN ISO 25140:2010

01-november-2010

Emisije nepremičnih virov - Avtomatska metoda za določevanje koncentracije metana s plamensko ionizacijsko detekcijo (FID) (ISO 25140:2010)

Stationary source emissions - Automatic method for the determination of the methane concentration using flame ionisation detection (FID) (ISO 25140:2010)

Emissionen aus stationären Quellen - Automatisches Verfahren zur Bestimmung der Methan-Konzentration mit dem Flammenionisationsdetektor (FID) (ISO 25140:2010)

Émissions de sources fixes - Méthode automatique pour la détermination de la concentration en méthane par détection à ionisation de flamme (FID) (ISO 25140:2010)

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Ta slovenski standard je istoveten z: EN ISO 25140:2010

ICS:

13.040.40 Emisije nepremičnih virov Stationary source emissions

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 25140

August 2010

ICS 13.040.40

English Version

**Stationary source emissions - Automatic method for the
determination of the methane concentration using flame
ionisation detection (FID) (ISO 25140:2010)**

Émissions de sources fixes - Méthode automatique pour la
détermination de la concentration en méthane par détection
à ionisation de flamme (FID) (ISO 25140:2010)

Emissionen aus stationären Quellen - Automatisches
Verfahren zur Bestimmung der Methan-Konzentration mit
dem Flammenionisationsdetektor (FID) (ISO 25140:2010)

This European Standard was approved by CEN on 26 May 2010.

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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 ISO 25140:2010) has been prepared by Technical Committee ISO/TC 146 “Air quality” in collaboration with 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of an identical text or by endorsement, at the latest by February 2011, and conflicting national standards shall be withdrawn at the latest by February 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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, Croatia, 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 the United Kingdom.

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INTERNATIONAL STANDARD

ISO
25140

First edition
2010-08-01

Stationary source emissions — Automatic method for the determination of the methane concentration using flame ionisation detection (FID)

*Émissions de sources fixes — Méthode automatique pour la
détermination de la concentration en méthane par détection à ionisation
de flamme (FID)*

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 25140 was prepared by Technical Committee ISO/TC 146, *Air quality*, Subcommittee SC 1, *Stationary source emissions*.

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Introduction

Methane (CH₄) is a gas of relevance to the climate (greenhouse gas) and contributes directly to the atmospheric greenhouse effect. The emissions of methane originate from natural and anthropogenic sources. Significant sources are, for example, cattle breeding, cultivation of rice, extraction and transport of natural gas, and landfills. Other important sources contributing to emissions of methane are, for example, composting plants, the use of biogas and natural gas, and biomass firings. This International Standard specifies a method of measurement for the determination of methane emissions from stationary sources.

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Stationary source emissions — Automatic method for the determination of the methane concentration using flame ionisation detection (FID)

1 Scope

This International Standard specifies the principle, the essential performance criteria, and quality assurance and quality control procedures for an automatic method for measuring methane in the waste gas of stationary sources using flame ionisation detection. It is applicable to measurements of methane in dry or wet waste gases. The method allows continuous monitoring with permanently installed measuring systems as well as intermittent measurements of methane emissions.

NOTE 1 This International Standard is specific to automatic methods for measuring methane in the waste gas of stationary sources using flame ionisation detection. It supplements the general requirements of other international or national standards on performance testing, QA/QC procedures, and the test report as specified, for example, in EN 15267-3^[7], EN 14181^[5], and EN 15259^[6].

This International Standard does not specify an independent method of measurement.

NOTE 2 An independent method of measurement, e.g. to calibrate or validate permanently installed measuring systems, is specified in ISO 25139^[3].

NOTE 3 In EN 14181^[5], “independent method of measurement” is called “standard reference method (SRM)”.

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 9169:2006, *Air quality — Definition and determination of performance characteristics of an automatic measuring system*

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

ISO 20988, *Air quality — Guidelines to estimating measurement uncertainty*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

automatic measuring system

AMS

⟨air quality⟩ measuring system interacting with the waste gas under investigation, returning an output signal proportional to the physical unit of the measurand in unattended operation

NOTE 1 Adapted from ISO 9169:2006, 2.1.2.