International

ISO 7935

Stationary source emissions — Determination of the mass concentration of sulfur dioxide in flue gases — Performance characteristics of automated measuring systems

Émissions de sources fixes — Détermination de la concentration en masse de dioxyde de soufre — Caractéristiques de performance des systèmes de mesurage automatiques

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

This second edition cancels and replaces the first edition (ISO 7935:1992), which has been technically revised.

The main changes are as follows:

— the structure and the components have been updated to be similar to the latest editions of e.g. ISO 10849 (measurement of nitrogen oxides), ISO 12039 (measurement of CO, CO_2 and O_2), ISO 17179 (measurement of NH_3), ISO 13199 (measurement of total VOC), ISO 25140 (measurement of CH_4), ISO 21258 (measurement of N_2O);

— Clause 3 has been revised with the addition or deletion and change in terms and definitions;

— a new analytical technique has been added (laser spectroscopic technique or tunable laser spectroscopy) for measurement of SO_2;

— the performance characteristics and criteria as well as QA/QC procedures have been changed to harmonize with latest ISO standards;

— examples of performance test results and the results of uncertainty calculation have been added for SO_2 measurement.

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Sulfur dioxide (SO_2) can arise in considerable quantities from combustion of fossil fuels used for energy generation, industrial activities processing sulfur or sulfur containing material, and from combustion of sulfur containing waste. The waste gas from these processes, containing sulfur dioxide, is usually discharged into the ambient atmosphere, via a duct or a chimney.

For evaluating the mass concentration of sulfur dioxide present in the waste gas of stationary source emissions, a number of highly developed methods of integrated sampling and subsequent determination by chemical analysis and automated measuring systems are available.