



**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*

ISO 7935

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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, CO₂ and O₂), ISO 17179 (measurement of NH₃), ISO 13199 (measurement of total VOC), ISO 25140 (measurement of CH₄), ISO 21258 (measurement of N₂O);
- [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 SO₂;
- 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 SO₂ measurement.

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Sulfur dioxide (SO₂) 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.