



ISO 8454

**Cigarettes — Determination of
carbon monoxide in the vapour phase
of cigarette smoke — NDIR method**

*Cigarettes — Dosage du monoxyde de carbone dans la phase
gazeuse de la fumée de cigarette — Méthode IRND*

**Fourth edition
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This document was prepared by Technical Committee ISO/TC 126, *Tobacco and tobacco products*.

This fourth edition cancels and replaces the third edition (ISO 8454:2007), which has been technically revised. It also incorporates the Amendment(s) ISO 8454:2007/Amd. 1:2019 and ISO 8454:2007/Amd. 2:2019.

The main changes are as follows:

- the scope was edited to improve clarity;
- the repeatability and reproducibility values in [Table 1](#) were updated to include those from ISO/TR 19478 and the total particulate matter values were included;
- [Clause 10](#), Test Report, was harmonized with ISO 10315;
- [subclauses 7.2.2](#) and [7.2.3](#) were edited to better describe the calibration and verification processes.

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No machine smoking regime can represent all human smoking behaviour:

- it is recommended that cigarettes also be tested under conditions of a different intensity of machine smoking than those specified in this document;
- machine smoking testing is useful to characterize cigarette emissions for design and regulatory purposes, but communication of machine measurements to smokers can result in misunderstandings about differences in exposure and risk across brands;
- smoke emission data from machine measurements may be used as inputs for product hazard assessment, but they are not intended to be nor are they valid as measures of human exposure or risks. Communicating differences between products in machine measurements as differences in exposure or risk is a misuse of testing using ISO standards.