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BS ISO 3308:2012



BSI Standards Publication

Routine analytical cigarette-smoking machine — Definitions and standard conditions

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This British Standard is the UK implementation of ISO 3308:2012. It supersedes BS ISO 3308:2000+A1:2009 which is withdrawn.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Routine analytical cigarette-smoking machine — Definitions and standard conditions

*Machine à fumer analytique de routine pour cigarettes — Définitions
et conditions normalisées*



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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 3308 was prepared by Technical Committee ISO/TC 126, *Tobacco and tobacco products*.

This fifth edition cancels and replaces the fourth edition (ISO 3308:2000), which has been technically revised. Subclause 5.8, the last formula in Annex C and the figures have been editorially revised. It also incorporates the amendment ISO 3308:2000/Amd.1 2009.

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Introduction

Experience and knowledge gained from the use of analytical cigarette-smoking machines has highlighted a need to specify certain requirements, which are addressed in this International Standard.

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 International Standard;
- 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.

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1 Scope

This International Standard:

- defines smoking parameters and specifies the standard conditions to be provided for the routine analytical machine smoking of cigarettes;
- specifies the requirements for a routine analytical smoking machine complying with the standard conditions.

Annex A specifies the ambient air velocities surrounding cigarettes in a routine analytical smoking machine, the mechanical design of the enclosures immediately surrounding them, and the methods of air velocity measurement including the location where air velocity is measured.

Annex B describes, as an example, the special characteristics of a typical smoking machine incorporating a piston type of puffing mechanism.

Annex C includes a diagram of a puff profile and illustrates definitions and standard conditions.

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 3402, *Tobacco and tobacco products — Atmosphere for conditioning and testing*

3 Terms and definitions

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

3.1

test atmosphere

atmosphere to which a sample or test piece is exposed throughout the test

NOTE 1 It is characterized by specified values for one or more of the following parameters: temperature, relative humidity and pressure, which are kept within the specified tolerances.

NOTE 2 The test may be carried out either in the laboratory or in a special chamber termed the “test chamber”, or in the conditioning chamber, the choice depending on the nature of the test piece and on the test itself. For example, close control of the test atmosphere may not be necessary if the change in properties of the test piece is insignificant over the test period.

NOTE 3 Adapted from ISO 558:1980, definition 2.3.

3.2

butt length

length of unburnt cigarette remaining at the moment when the smoking is stopped

3.3

restricted smoking

condition that exists when the butt end of a cigarette is closed to the atmosphere between successive puffs