



SLOVENSKI STANDARD SIST EN ISO 20486:2018

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Neporušitveno preskušanje - Preiskava tesnosti - Umerjanje referenčne tesnosti za plin (ISO 20486:2017)

Non-destructive testing - Leak testing - Calibration of reference leaks for gases (ISO 20486:2017)

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Zerstörungsfreie Prüfung - Dichtheitsprüfung - Kalibrieren von Referenzlecks für Gase (ISO 20486:2017)

Essais non destructifs - Contrôle d'étanchéité - Étalonnage des fuites de référence des gaz (ISO 20486:2017)

Ta slovenski standard je istoveten z: EN ISO 20486:2018

ICS:

19.100 Neporušitveno preskušanje Non-destructive testing

SIST EN ISO 20486:2018

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Non-destructive testing - Leak testing - Calibration of reference leaks for gases (ISO 20486:2017)

Essais non destructifs - Contrôle d'étanchéité -
Étalonnage des fuites de référence des gaz (ISO
20486:2017)

Zerstörungsfreie Prüfung - Dichtheitsprüfung -
Kalibrieren von Referenzlecks für Gase (ISO
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European foreword

This document (EN ISO 20486:2018) has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" in collaboration with Technical Committee CEN/TC 138 "Non-destructive testing", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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**Non-destructive testing — Leak
testing — Calibration of reference
leaks for gases**

*Essais non destructifs — Contrôle d'étanchéité — Étalonnage des
fuites de référence des gaz*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 6, *Leak testing*.

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Non-destructive testing — Leak testing — Calibration of reference leaks for gases

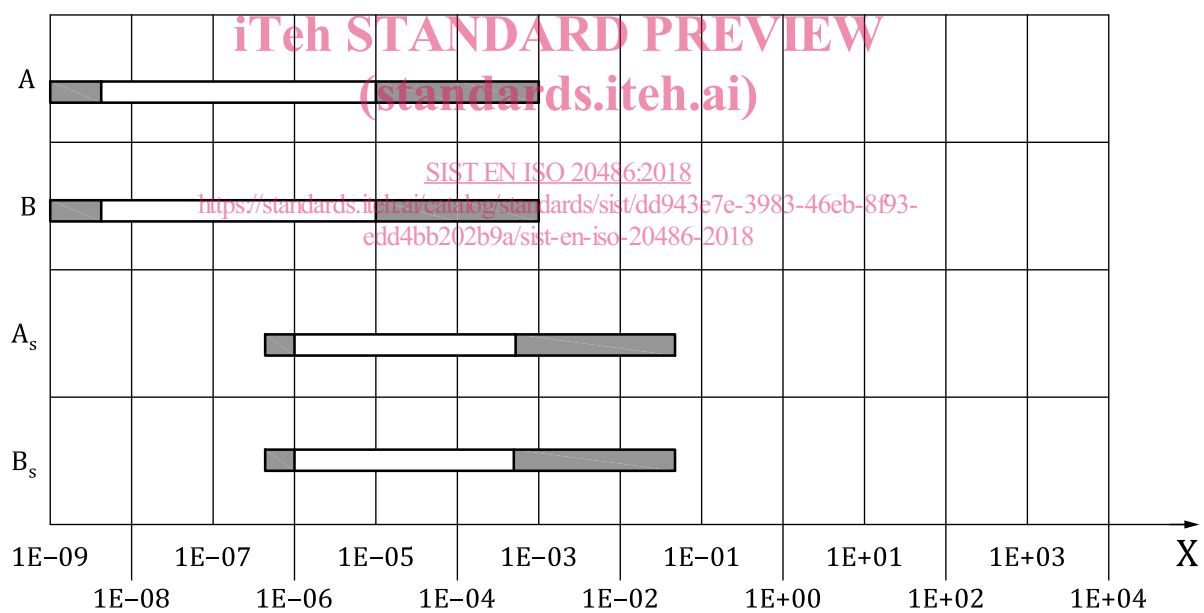
1 Scope

This document specifies the calibration of those leaks that are used for the adjustment of leak detectors for the determination of leakage rate in everyday use. One type of calibration method is a comparison with a reference leak. In this way, the leaks used for routine use become traceable to a primary standard. In other calibration methods, the value of vapour pressure was measured directly or calculated over a known volume.

The comparison procedures are preferably applicable to helium leaks, because this test gas can be selectively measured by a mass spectrometer leak detector (MSLD) (the definition of MSLD is given in ISO 20484).

Calibration by comparison (see methods A, A_s, B and B_s below) with known reference leaks is easily possible for leaks with reservoir and leakage rates below 10^{-7} Pa·m³/s.

[Figure 1](#) gives an overview of the different recommended calibration methods.



a) Calibration by comparison