

<b>STN</b>	<b>Ropné výrobky a príbuzné výrobky</b> <b>Zhodnosť metód merania a výsledkov merania</b> <b>Časť 3: Monitorovanie a overovanie údajov</b> <b>zhodnosti vo vzťahu k skúšobným metódam (ISO</b> <b>4259-3: 2020)</b>	<b>STN</b> <b>EN ISO 4259-3</b>  65 6004
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Petroleum and related products - Precision of measurement methods and results - Part 3: Monitoring and verification of published precision data in relation to methods of test (ISO 4259-3:2020)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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Petroleum and related products - Precision of  
measurement methods and results - Part 3: Monitoring  
and verification of published precision data in relation to  
methods of test (ISO 4259-3:2020)

Produits pétroliers et connexes - Fidélité des méthodes  
de mesure et de leurs résultats - Partie 3: Surveillance  
et vérification des données de fidélité publiées  
relatives aux méthodes d'essai (ISO 4259-3:2020)

Mineralölerzeugnisse - Präzision von Messverfahren  
und Ergebnissen - Teil 3: Monitoring und Management  
der Präzisionsdaten in Bezug auf Prüfverfahren (ISO  
4259-3:2020)

This European Standard was approved by CEN on 11 January 2020.

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**EN ISO 4259-3:2020 (E)**

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## **European foreword**

This document (EN ISO 4259-3:2020) has been prepared by Technical Committee ISO/TC 28 "Petroleum and related products, fuels and lubricants from natural or synthetic sources" in collaboration with Technical Committee CEN/TC 19 "Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin." the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## **Endorsement notice**

The text of ISO 4259-3:2020 has been approved by CEN as EN ISO 4259-3:2020 without any modification.

**INTERNATIONAL  
STANDARD**

**ISO  
4259-3**

First edition  
2020-01

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**Petroleum and related products —  
Precision of measurement methods  
and results —**

**Part 3:  
Monitoring and verification of  
published precision data in relation to  
methods of test**

*Produits pétroliers et connexes — Fidélité des méthodes de mesure et  
de leurs résultats —*

*Partie 3: Surveillance et vérification des données de fidélité publiées  
relatives aux méthodes d'essai*



Reference number  
ISO 4259-3:2020(E)

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## ISO 4259-3:2020(E)

### 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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 19, *Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 4259 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).



## **Introduction**

ISO 4259-1 specifies the methodology for the design, execution and data processing of a one-time snapshot statistical study to arrive at precision estimates achieved by a random sampling of laboratories. This snapshot estimate is published in the standard test method as the expected precision.

This document explains the methodology for the utilisation of proficiency testing schemes (as defined in ISO 4259-2) to test the hypothesis that the precision achieved by the laboratories in the proficiency testing scheme is statistically consistent with the published precision derived from the ISO 4259-1 study described above. It is therefore a logical follow-up on the other parts.

# Petroleum and related products — Precision of measurement methods and results —

## Part 3: Monitoring and verification of published precision data in relation to methods of test

### 1 Scope

This document specifies the methodology for the regular monitoring of the test method precision achieved versus the precision published in the standard test method using data from proficiency testing schemes (PTSs) supported by the regular users of standard test methods.

The procedures in this document are designed specifically for proficiency testing (PT) conducted on standard test methods, having a published reproducibility, for petroleum and petroleum-related products, which are presumed to be homogeneous, and where the data distribution is approximately normal. In addition, it is applicable to properties of interest that are (known to be) stable over time and transport.

This document specifies the methodology for the statistical comparison of standard deviation under reproducibility conditions achieved in PT programmes versus that published.

The purpose of this comparison is to find out if the published reproducibility precision is representative of that achievable by the regular participants in the PT programmes.

This document also provides guidance on how to use a PT z-score to monitor an individual participant's performance over time (see [Annex B](#)).

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 4259-1, *Petroleum and related products — Precision of measurement methods and results — Part 1: Determination of precision data in relation to methods of test*

ISO 13528:2015, *Statistical methods for use in proficiency testing by interlaboratory comparison*

ISO/IEC 17043, *Conformity assessment — General requirements for proficiency testing*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**