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**Naftna in plinska industrija, vključno z nizkoogljično energijo - Tekočine in materiali za zaključna dela - 2. del: Merjenje lastnosti podpornih materialov, ki se uporabljajo v postopkih frakcioniranja in pri filtrskih zasipih s prodrom (ISO 13503-2:2024)**

Oil and gas industries including lower carbon energy - Completion fluids and materials - Part 2: Measurement of properties of proppants used in hydraulic fracturing and gravel-packing operations (ISO 13503-2:2024)

Öl- und Gasindustrie einschließlich kohlenstoffarmer Energieträger - Komplettierungsflüssigkeiten und Materialien - Teil 2: Messung der Eigenschaften von Stützmaterialien zum Einsatz bei hydraulischen Fraktionierungs- und in Kiespackungsvorgängen (ISO 13503-2:2024)

Industries du pétrole et du gaz, y compris les énergies à faible teneur en carbone - Fluides de complétion et matériaux - Partie 2: Mesurage des propriétés des agents de soutènement utilisés dans les opérations de fracturation hydraulique et de gravillonnage (ISO 13503-2:2024)

**Ta slovenski standard je istoveten z: EN ISO 13503-2:2024**

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**ICS:**

75.100	Maziva	Lubricants, industrial oils and related products
75.180.30	Oprema za merjenje prostornine in merjenje	Volumetric equipment and measurements

**SIST EN ISO 13503-2:2025**

**en,fr,de**



EUROPEAN STANDARD

EN ISO 13503-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2024

ICS 75.180.10

Supersedes EN ISO 13503-2:2006, EN ISO 13503-2:2006/A1:2009

English Version

Oil and gas industries including lower carbon energy -  
Completion fluids and materials - Part 2: Measurement of  
properties of proppants used in hydraulic fracturing and  
gravel-packing operations (ISO 13503-2:2024)

Industries du pétrole et du gaz, y compris les énergies  
à faible teneur en carbone - Fluides de complétion et  
matériaux - Partie 2: Mesurage des propriétés des  
agents de soutènement utilisés dans les opérations de  
fracturation hydraulique et de gravillonnage (ISO  
13503-2:2024)

Öl- und Gasindustrie einschließlich kohlenstoffarmer  
Energieträger - Komplettierungsflüssigkeiten und  
Materialien - Teil 2: Messung der Eigenschaften von  
Stützmaterialien zum Einsatz bei hydraulischen  
Fraktionierungs- und in Kiespackungsvorgängen (ISO  
13503-2:2024)

This European Standard was approved by CEN on 14 December 2024.

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Contents	Page
European foreword.....	3

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## European foreword

This document (EN ISO 13503-2:2024) has been prepared by Technical Committee ISO/TC 67 "Oil and gas industries including lower carbon energy" in collaboration with Technical Committee CEN/TC 12 "Oil and gas industries including lower carbon energy" 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 June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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.

This document supersedes EN ISO 13503-2:2006.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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## Endorsement notice

The text of ISO 13503-2:2024 has been approved by CEN as EN ISO 13503-2:2024 without any modification.

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# International Standard

**ISO 13503-2**

## **Oil and gas industries including lower carbon energy — Completion fluids and materials —**

Part 2:

### **Measurement of properties of proppants used in hydraulic fracturing and gravel-packing operations**

*Industries du pétrole et du gaz, y compris les énergies à faible  
teneur en carbone — Fluides de complétion et matériaux —*

*Partie 2: Mesurage des propriétés des agents de soutènement  
utilisés dans les opérations de fracturation hydraulique et de  
remplissage de gravier*

**Second edition  
2024-12**

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**ISO 13503-2:2024(en)****Contents**

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Supplements to API Std 19C, 2nd edition (2018)</b> .....	<b>2</b>
4.1 General requirements.....	2
4.2 Sampling device.....	2
4.3 Sieve analysis.....	2
4.3.1 Procedure.....	2
4.3.2 Specifications — Sieve analysis of proppants.....	2
4.4 Proppant crush resistance.....	4
4.4.1 Equipment and materials.....	4
4.4.2 Sample preparation.....	4
4.4.3 Assemble and set up the crush cell and PropPaver loading device.....	5
4.4.4 Proppant placing procedure—Crush resistance testing.....	7
<b>Annex A (Informative) Comparison of revised clauses</b> .....	<b>8</b>
<b>Bibliography</b> .....	<b>9</b>

iTeh Standards  
(<https://standards.itih.ai>)  
Document Preview

[SIST EN ISO 13503-2:2025](https://standards.itih.ai/catalog/standards/sist/7b2c5fad-e0d8-4533-a86e-5e1d3534166c/sist-en-iso-13503-2-2025)

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## ISO 13503-2:2024(en)

### 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 document 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)).

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This document was prepared by Technical Committee ISO/TC 67, *Oil and gas industries including lower carbon energy*, Subcommittee SC 3, *Drilling and completion fluids, well cements and treatment fluids*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 12, *Oil and gas industries including lower carbon energy*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 13503-2:2006), which has been technically revised. It also incorporates the Amendment ISO 13503-2:2006/Amd 1:2009. <http://www.iso.org/iso/534166c/sist-en-iso-13503-2-2025>

This document supplements API Std 19C, 2nd edition (2018).

The technical requirements of this document and API Std 19C used to be identical. In the meantime API Std 19C has been technically revised as API Std 19C, 2nd edition (2018). The purpose of this edition of ISO 13503-2 is to bring it up to date, by referencing the current edition of API Std 19C and including supplementary content.

The main changes are as follows:

- a new stand sampling device has been used for proppant packed in bags;
- proppant on the sieves has been removed and directly weighed in sieve analysis testing;
- the average diameter calculation has been added;
- the remaining total amount on the last sieve and in the pan has been updated to not exceed 2 % by mass of the total tested proppant sample;
- PropPaver loading device has been used instead of Pluviator loading device;
- the upper and lower designating sieve sizes have been kept for sample preparation and after pressurizing in crush resistance test;
- shaking duration of 10 min has been maintained for both sample preparation and after pressurizing in crush resistance test.