International Standard

ISO 13503-2

Second edition
2024-12

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

Reference number
ISO 13503-2:2024(en)

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Foreword

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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.

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.

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