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Oil and gas industries including lower carbon energy — Drilling, production and injection equipment —

Part 2: Flow-control devices for side-pocket mandrels

Industries du pétrole et du gaz, y compris les énergies à faible teneur en carbone — Equipement de forage, de production et d'injection —

Partie 2: Dispositifs de régulation de débit pour raccords à poche latérale

Reference number
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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 4, *Drilling, production and injection equipment*, 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 17078-2:2007), which has been technically revised. It also incorporates the Technical Corrigendum ISO 17078-2:2007/Cor 1:2009.

The main changes are as follows:

— the document was fully reorganized;

— definition, description, design optimization and requirements related to tubing-retrievable flow-control devices have been added to the document;

— ISO 16530-1 and ISO 7-1 have been added to the Bibliography.

A list of all parts in the ISO 17078 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.

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Introduction

This document supplements API Spec 19G2, 2nd edition (2020).

The technical requirements of this document and API Spec 19G2 used to be identical. In the meantime, API Spec 19G2 has been technically revised as API Spec 19G2, 2nd edition (2020). The purpose of this edition of ISO 17078-2 is to bring it up to date, by referencing the current edition of API Spec 19G2 and including supplementary content.

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Oil and gas industries including lower carbon energy — Drilling, production and injection equipment —

Part 2: Flow-control devices for side-pocket mandrels

1 Scope

This document provides requirements for subsurface flow-control devices used in side-pocket mandrels intended for use in the worldwide petroleum and natural gas industry. This document addresses injection-pressure-operated (IPO), production-pressure-operated (PPO), pilot, orifice, tubing-retrievable, and dummy flow-control devices. It includes requirements for selecting, designing, manufacturing, quality control, testing, and preparation for the shipping of flow-control devices. Additionally, it includes information regarding performance testing and calibration requirements.

The installation and retrieval of flow-control devices is outside the scope of this document. Additionally, this document is not applicable to flow-control devices with concentric axes.

This document does not include requirements for side-pocket mandrels, running, pulling, kick-over tools, or latches. Reconditioning of used flow-control devices is outside the scope of this document.

This document supplements API Spec 19G2, 2nd edition (2020), the requirements of which are applicable with the exceptions specified in this document.

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 9000, *Quality management systems — Fundamentals and vocabulary*

ISO 17078-1, *Petroleum and natural gas industries — Drilling and production equipment — Part 1: Side-pocket mandrels*

ISO 17078-3, *Petroleum and natural gas industries — Drilling and production equipment — Part 3: Running tools, pulling tools and kick-over tools and latches for side-pocket mandrels*

ISO 17078-4, *Petroleum and natural gas industries — Drilling and production equipment — Part 4: Practices for side-pocket mandrels and related equipment*

API Spec 19G2, *2nd edition (2020), Flow-control Devices for Side-pocket Mandrels*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in API Spec 19G2, 2nd edition (2020) and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

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