Petroleum and natural gas industries - Equipment for well cementing - Part 2: Centralizer placement and stopcollar testing

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EESTI STANDARDI EESSÕNA

Käesolev Eesti standard EVS-EN ISO 10427-2:2004 sisaldab Euroopa standardi EN ISO 10427-2:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 23.09.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 10427-2:2004 consists of the English text of the European standard EN ISO 10427-2:2004. This document is endorsed on 23.09.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

NATIONAL FOREWORD

Käsitlusala: This part of ISO 10427 provides calculations for determining centralizer spacing, based on centralizer performance and desired standoff, in deviated and dogleg holes in wells for the petroleum and natural gas industries. It also provides a procedure for testing stop collars and reporting test results.	**Scope:** This part of ISO 10427 provides calculations for determining centralizer spacing, based on centralizer performance and desired standoff, in deviated and dogleg holes in wells for the petroleum and natural gas industries. It also provides a procedure for testing stop collars and reporting test results.

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Petroleum and natural gas industries – Equipment for well cementing – Part 2: Centralizer placement and stop-collar testing (ISO 10427-2:2004)

Industries du pétrole et du gaz naturel – Equipement de cimentation de puits – Partie 2: Mise en place des centreurs et essai des colliers d'arrêt (ISO 10427-2:2004)

Erdöl- und Erdgasindustrie – Zentriereinrichtungen für Futterrohre – Teil 2: Anordnung des Zentrierers und Prüfung des Anschlagbundes (ISO 10427-2:2004)

This European Standard was approved by CEN on 16 April 2004.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN ISO 10427-2:2004) has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum and natural gas industries" in collaboration with Technical Committee CEN/TC 12 "Materials, equipment and offshore structures for petroleum and natural gas industries", 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 November 2004, and conflicting national standards shall be withdrawn at the latest by November 2004.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 10427-2:2004 has been approved by CEN as EN ISO 10427-2:2004 without any modifications.

Introduction

This part of ISO 10427 is based on API Specification 10D, 5th edition, January 1995 [1].

In this part of ISO 10427, where practical, U.S. Customary units are included in brackets for information.

1 Scope

This part of ISO 10427 provides calculations for determining centralizer spacing, based on centralizer performance and desired standoff, in deviated and dogleg holes in wells for the petroleum and natural gas industries. It also provides a procedure for testing stop collars and reporting test results.

2 Normative references

The following referenced documents are indispensable for the application 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 11960, *Petroleum and natural gas industries — Steel pipes for use as casing or tubing for wells*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply:

3.1
annular clearance for perfectly centred casing
wellbore diameter minus casing outside diameter divided by two

3.2
centralizer permanent set
change in centralizer bow height after repeated flexing

NOTE A bow-spring centralizer is considered to have reached permanent set after being flexed 12 times.

3.3
flexed
condition of a bow-spring when a force three times the specified minimum restoring force (± 5 %) has been applied to it

[ISO 10427-1:2001, 3.1]

NOTE Specified minimum restoring force values are found in Table 1 of ISO 10427-1:2001.

3.4
holding device
device employed to fix the stop collar or centralizer to the casing

EXAMPLE Set screws, nails, mechanical dogs and epoxy resins.

[ISO 10427-1:2001, 3.2]

3.5
holding force
maximum force required to initiate slippage of a stop collar on the casing

[ISO 10427-1:2001, 3.3]

3.6
hole size
diameter of the wellbore

[ISO 10427-1:2001]