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**Erdöl- und Erdgasindustrie –
Zemente und Materialien für die Zementation von Tiefbohrungen –
Teil 3: Prüfung von Unterwasser-Bohrlochzement (ISO 10426-3:2003);
Englische Fassung EN ISO 10426-3:2004**

Petroleum and natural gas industries –
Cements and materials for well cementing –
Part 3: Testing of deepwater well cement formulations (ISO 10426-3:2003);
English version EN ISO 10426-3:2004

Industries du pétrole et du gaz naturel –
Ciments et matériaux pour la cimentation des puits –
Partie 3: Essais de formulations de ciment pour puits en eau profonde
(ISO 10426-3:2003);
Version anglaise EN ISO 10426-3:2004

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Nationales Vorwort

Diese Europäische Norm wurde vom Technischen Komitee CEN/TC 12 „Materialien, Ausrüstungen und Offshore-Bauwerke für die Erdöl-, petrochemische und Erdgasindustrie“ (Sekretariat: Frankreich) erstellt. Es handelt sich dabei um die unveränderte Übernahme von ISO 10426-3:2003, erarbeitet von ISO/TC 67 „Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries“, Subkomitee SC 3 „Drilling and completion fluids, and well cements“.

Für Deutschland war der Arbeitskreis NÖG 12/67 AK 3 „Bohrspülung und Zemente“ an der Erarbeitung dieser Norm beteiligt.

„Diese Europäische Norm enthält unter Berücksichtigung des DIN-Präsidialbeschlusses 13/1983 nur die englische Originalfassung der ISO-Norm.“

English version

**Petroleum and natural gas industries - Cements and materials
for well cementing - Part 3: Testing of deepwater well cement
formulations (ISO 10426-3:2003)**

Industries du pétrole et du gaz naturel - Ciments et
matériaux pour la cimentation des puits - Partie 3: Essais
de formulations de ciment pour puits en eau profonde
(ISO 10426-3:2003)

Erdöl- und Erdgasindustrie - Zemente und Materialien für
die Zementation von Tiefbohrungen - Teil 3: Prüfung von
Unterwasser-Bohrlochzement (ISO 10426-3:2003)

This European Standard was approved by CEN on 30 September 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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.

CEN members are the national standards bodies of 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.



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Foreword

The text of ISO 10426-3:2003 has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum and natural gas industries" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10426-3:2004 by 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 April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

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 10426-3:2003 has been approved by CEN as EN ISO 10426-3:2004 without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

1 Scope

This part of ISO 10426 provides procedures for testing well cements and cement blends for use in the petroleum and natural gas industries in a deepwater environment.

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 10426-2:2003, *Petroleum and natural gas industries — Cements and materials for well cementing — Part 2: Testing of well cements*

ASTM C 109, *Standard test method for compressive strength of hydraulic cement mortars*

3 Terms and definitions

For the purposes of this part of ISO 10426, the terms and definitions given in ISO 10426-2 apply.

4 Sampling

Samples of the neat cement or cement blend, solid and liquid additives, and mixing water are required to test a slurry in accordance with this part of ISO 10426. Accordingly, the best available sampling technology should be employed to ensure the laboratory test conditions and materials match as closely as possible those found at the well site. Additionally, the temperature of the mix water, cement or cement blends should be measured with a thermocouple or thermometer capable of measuring temperature with an accuracy of $\pm 2\text{ °C}$ ($\pm 3\text{ °F}$). These temperatures should be recorded. Temperature-measuring devices shall be calibrated (in the case of a thermocouple) or checked (in the case of a thermometer) annually.

NOTE Some commonly used sampling devices and techniques can be found in ISO 10426-2.