

SLOVENSKI STANDARD
SIST EN ISO 10426-2:2004/A1:2005
01-december-2005

Industrija za predelavo nafte in zemeljskega plina – Cementi in materiali za cementiranje vrtin – 2. del: Preskušanje cementov za vrtine – Dopolnilo 1: Preskušanje sposobnosti omočenja (ISO 10426-2:2003/A1:2005)

Petroleum and natural gas industries - Cements and materials for well cementing - Part 2: Testing of well cements - Amendment 1: Water-wetting capability testing (ISO 10426-2:2003/A1:2005)

Erdöl- und Erdgasindustrie - Zemente und Materialien für die Zementation von Tiefbohrungen - Teil 2: Prüfungen für Bohrloch-Zemente (ISO 10426-2:2003/A1:2005)

Industries du pétrole et du gaz naturel - Ciments et matériaux pour la cimentation des puits - Partie 2: Essais de ciment pour puits - Amendement 1: Essai de mouillabilité à l'eau (ISO 10426-2:2003/A1:2005)

Ta slovenski standard je istoveten z: EN ISO 10426-2:2003/A1:2005

ICS:

| | | |
|-----------|---------------------------------------|--------------------------------------|
| 75.180.10 | Oprema za raziskovanje in odkopavanje | Exploratory and extraction equipment |
| 91.100.10 | Cement. Mavec. Apno. Malta | Cement. Gypsum. Lime. Mortar |

SIST EN ISO 10426-2:2004/A1:2005 en,fr

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 10426-2:2004/A1:2005

<https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 10426-2:2003/A1

September 2005

ICS 75.020; 91.100.10

English Version

**Petroleum and natural gas industries - Cements and materials
for well cementing - Part 2: Testing of well cements -
Amendment 1: Water-wetting capability testing (ISO 10426-
2:2003/A1:2005)**

Industries du pétrole et du gaz naturel - Ciments et
matériaux pour la cimentation des puits - Partie 2: Essais
de ciment pour puits - Amendement 1: Essai de
mouillabilité à l'eau (ISO 10426-2:2003/A1:2005)

Erdöl- und Erdgasindustrie - Zemente und Materialien für
die Zementation von Tiefbohrungen - Teil 2: Prüfungen für
Bohrloch-Zemente (ISO 10426-2:2003/A1:2005)

This amendment A1 modifies the European Standard EN ISO 10426-2:2003; it was approved by CEN on 13 August 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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.



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

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

EN ISO 10426-2:2003/A1:2005 (E)**Foreword**

This document (EN ISO 10426-2:2003/A1:2005) 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 March 2006, and conflicting national standards shall be withdrawn at the latest by March 2006.

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 10426-2:2003 has been approved by CEN as EN ISO 10426-2:2003/A1:2005 without any modifications.

(standards.iteh.ai)

[SIST EN ISO 10426-2:2004/A1:2005](https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005)

<https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005>

INTERNATIONAL STANDARD

ISO 10426-2

First edition
2003-10-15

AMENDMENT 1
2005-09-01

Petroleum and natural gas industries — Cements and materials for well cementing —

Part 2: Testing of well cements

AMENDMENT 1. Water-wetting capability testing

[SIST EN ISO 10426-2:2004/A1:2005](https://standards.iteh.ai/standards.iteh.ai/SIST-EN-ISO-10426-2:2004/A1-2005)

[https://standards.iteh.ai/standards.iteh.ai/ISO-10426-2:2003/Amd.1:2005\(E\)/c0d8b83b](https://standards.iteh.ai/standards.iteh.ai/ISO-10426-2:2003/Amd.1:2005(E)/c0d8b83b) Industries du pétrole et du gaz naturel — Ciments et matériaux pour la cimentation des puits — 2004-a1-2005

Partie 2: Essais de ciment pour puits

AMENDEMENT 1: Essai de mouillabilité à l'eau



Reference number
ISO 10426-2:2003/Amd.1:2005(E)

© ISO 2005

ISO 10426-2:2003/Amd.1:2005(E)**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 10426-2:2004/A1:2005](https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005)

<https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005>

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to ISO 10426-2:2003 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 3, *Drilling and completion fluids and well cements*.

STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 10426-2:2004/A1:2005](https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005)

<https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 10426-2:2004/A1:2005

<https://standards.iteh.ai/catalog/standards/sist/47444991-a9db-428a-99d5-c0d8b83bded8/sist-en-iso-10426-2-2004-a1-2005>

Petroleum and natural gas industries — Cements and materials for well cementing —

Part 2: Testing of well cements

AMENDMENT 1: Water-wetting capability testing

Page 6, 3.1, add the following term/definition:

3.1.52

water-wetting capability

capability of a fluid to alter the quality or state of being water-wetted

NOTE A fully water-wet state is considered most desirable to provide cement bonding.

Page 96, add the following new 16.8, including the addition of a new Equation (113), thereby changing the numeration of subsequent equations [e.g the existing Equation (113) becomes Equation (114) and so forth]:

16.8 Water-wetting capability test (WWCT)

16.8.1 Introduction

The water-wetting capability test (WWCT) is intended for use in determining the degree of compatibility of wellbore fluids in cementing operations. By the use of this procedure, the selection of proper preflushes and/or spacers, and/or surfactant components may be made when required. User discretion should be exercised in the selection of the portion(s) of the procedure needed.

The WWCT is specific to evaluation of water-wetting capability of spacers and/or preflushes designed to water-wet the surfaces after these surfaces have been exposed to non-aqueous fluids, specifically oil- and synthetic-based drilling fluids. The apparent water-wetting capability of various mud/spacer interface volumes and the apparent wettability of spacer systems against oil-wetted surfaces may be evaluated using this method. This procedure does not address bulk displacement issues, nor does it directly address spacer/mud compatibility issues.

The test is applicable to aqueous spacer systems only. This procedure is not suitable for evaluating non-aqueous or non-conductive systems or mixtures of surfactants in base oils.

16.8.2 Method and apparatus

The apparatus provides a continuous measurement of the electrical conductivity between electrode surfaces. From the conductivity measurements, the emulsion state and apparent wettability of the fluid can be inferred if the titrating spacer fluid is conductive and the titrated drilling fluid is not. Normally, oil-external fluids are not electrically conductive. Water-based or water-external emulsion spacers are electrically conductive with the actual conductivity dependent on the solution chemistry.