ICS 75.180.10 SLOVENSKÁ TECHNICKÁ NORMA December 2014

STN	**Ropný a plynárenský priemysel. Hlbinné zariadenie. Pieskové filtre (ISO 17824: 2009).**	**STN EN ISO 17824** 45 0952

Petroleum and natural gas industries - Downhole equipment - Sand screens (ISO 17824:2009)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/14

Obsahuje: EN ISO 17824:2014, ISO 17824:2009

119814

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 17824

August 2014

ICS 75.180.10

English Version

Petroleum and natural gas industries - Downhole equipment - Sand screens (ISO 17824:2009)

Industries du pétrole et du gaz naturel - Equipement de fond de puits - Tamis de contrôle de sable (ISO 17824:2009)

Erdöl- und Erdgasindustrie - Bohrlochausrüstungen - Sandfilter (ISO 17824:2009)

This European Standard was approved by CEN on 31 July 2014.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents Page

Foreword

The text of ISO 17824:2009 has been prepared by Technical Committee ISO/TC 67 “Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17824:2014 by Technical Committee CEN/TC 12 “Materials, equipment and offshore structures for petroleum, petrochemical 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 February 2015, and conflicting national standards shall be withdrawn at the latest by February 2015.

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

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

Endorsement notice

The text of ISO 17824:2009 has been approved by CEN as EN ISO 17824:2014 without any modification.

INTERNATIONAL STANDARD

ISO 17824

First edition
2009-08-15

Petroleum and natural gas industries — Downhole equipment — Sand screens

Industries du pétrole et du gaz naturel — Equipement de fond de puits — Tamis de contrôle de sable

Reference number
ISO 17824:2009(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.

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

Contents

Page

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.

ISO 17824 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 4, *Drilling and production equipment*.

Introduction

This International Standard has been developed by user/purchasers and supplier/manufacturers of sand control screens intended for use in petroleum and natural gas wells. This International Standard provides requirements and information to both parties regarding the manufacture, mechanical properties and testing of sand control screens. Further, this International Standard addresses supplier/manufacturer requirements that set the minimum parameters with which it is necessary that supplier/manufacturers comply to claim conformity with this International Standard.

This International Standard is structured with grades of increased requirements for both design validation and quality control. Three design validation grades (V1, V2 and V3) and three quality grades (Q1, Q2 and Q3) provide the user/purchaser the choice of requirements to meet a specific preference or application. Design validation grade V3 and quality grade Q3 represent equipment designed and manufactured consistent with minimum industry practice.

Included within this International Standard are normative annexes A and B specifying test methods for determining the collapse and burst strength of sand control screens. Informative annexes C, D, E, F, G and H include measurement criteria for sand control screen filter media, illustrations of the three types of sand control screens, and increased wire-wrap slot size inspection requirements.

It is necessary that users of this International Standard be aware that requirements above those outlined in this International Standard can be needed for individual applications. This International Standard is not intended to inhibit a supplier/manufacturer from offering, or the user/purchaser from accepting, alternative equipment or engineering solutions. This can be particularly applicable where there is innovative or developing technology. Where an alternative is offered, it is the responsibility of the supplier/manufacturer to identify any variations from this International Standard and provide details.

INTERNATIONAL STANDARD **ISO 17824:2009(E)**

Petroleum and natural gas industries — Downhole equipment — Sand screens

1 Scope

This International Standard provides the requirements and guidelines for sand control screens for use in the petroleum and natural gas industries. Included are the requirements for design, design validation, functional evaluation, manufacturing, storage and transport. The requirements of this International Standard are applicable to wire-wrap screens, pre-pack screens and metal-mesh screens as defined herein.

The following items are outside the scope of this International Standard:

— expandable sand screens, slotted liners or tubing and accessory items such as centralizers or bull plugs;

— shunt screen technology, inflow control devices, downhole sensors and selective isolation devices, even where they can be an integral part of the sand control screen;

— screen filtration performance criteria, including test methods or analysis for sand retention efficiency;

— end connections of the basepipe.

2 Normative references

The following referenced documents are indispensable for the application of this document. The way in which these referenced documents are cited determines the extent (in whole or part) to which they apply. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10414-1:2008, *Petroleum and natural gas industries — Field testing of drilling fluids — Part 1: Water-based fluids*

ISO 11960, *Petroleum and natural gas industries — Steel pipes for use as casing or tubing for wells*

NOTE ISO 11960 has been back adopted by API as API SPEC 5CT. Therefore, for the purposes of the provisions of this International Standard which cite ISO 11960, API SPEC 5CT is equivalent to ISO 11960.

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 9000, *Quality management systems — Fundamentals and vocabulary*

ASME, *Boiler and Pressure Vessel Code BPVC — Section II: Materials: Part D: Properties*

ASME, *Boiler and Pressure Vessel Code BPVC — Section VIII: 1998, Div. 1, Appendix 8: Methods for Liquid Penetrant Examination (PT)*

ASME, *Boiler and Pressure Vessel Code BPVC — Section IX: Welding and Brazing Qualifications*

ASTM E11, *Standard Specification for Wire Cloth and Sieves for Testing Purposes*

ASTM E165, *Standard Test Method for Liquid Penetrant Examination*