Rubber hoses and hose assemblies for rotary drilling and vibration applications -**Specification** 

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# EESTI STANDARDI EESSÕNA

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 6807:2004 sisaldab Euroopa standardi EN ISO 6807:2003 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 6807:2004 consists of the English text of the European standard EN ISO 6807:2003.

Käesolev dokument on jõustatud 27.04.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 27.04.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

## Käsitlusala:

# This International Standard specifies the requirements for textile- and steel reinforced rubber hoses and hose assemblies for use with water-based and/or oil-based muds, up to a maximum temperature of 82°C, which are pumped as high pressure in large volumes in rotary drilling service and which, when tested in accordance with ISO 2977, have a minimum aniline point of 66°C.

## Scope:

This International Standard specifies the requirements for textile- and steel-reinforced rubber hoses and hose assemblies for use with water-based and/or oil-based muds, up to a maximum temperature of 82°C, which are pumped as high pressure in large volumes in rotary drilling service and which, when tested in accordance with ISO 2977, have a minimum aniline point of 66°C.

ICS 75.180.10, 83.140.40

Võtmesõnad:

# **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 6807

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180.10; 83.140.40

# **English version**

Rubber hoses and hose assemblies for rotary drilling and vibration applications

> Specification (ISO 6807: 2003)

Tuyaux et flexibles en caoutchouc pour forage rotatif et amortissement des vibrations - Spécifications (ISO 6807: 2003)

Gummischläuche und -schlauchleitungen für die Anwendung beim Rotary-Bohren und bei Vibrationen -Spezifikation (ISO 6807:2003)

This European Standard was approved by CEN on 2003-10-01.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

3000 European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

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

## **Foreword**

International Standard

ISO 6807 : 2003 Rubber hoses and hose assemblies for rotary drilling and vibration applications – Specification

which was prepared by ISO/TC 45 'Rubber and rubber products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 218 'Rubber and plastics hoses and hose assemblies' the Secretariat of which is held by BSI, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 2004 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

# **Endorsement notice**

**Contents** 

The text of the International Standard ISO 6807: 2003 was approved by CEN as a European Standard without any modification.

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# Introduction

In rotary drilling for oil, fluid muds are pumped at high pressure in large volumes to drill heads. High-pressure hoses are used as flexible connectors in the mud supply circuit.

Rotary drilling hoses are used between the top of the standpipe and the swivel that allows vertical travel. They are also used between barges and offshore drilling rigs, usually in lengths greater than 13,5 m.

Rotary vibrator hoses are shorter (9 m or less) and used between the pump and the derrick or standpipe manifolds to accommodate misalignment and to isolate vibration.

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate health and safety practices and to ensure compliance with any national regulatory conditions.

# 1 Scope

This International Standard specifies the requirements for textile- and steel-reinforced rubber hoses and hose assemblies for use with water-based and/or oil-based muds, up to a maximum temperature of 82 °C, which are pumped at high pressure in large volumes in rotary drilling service and which, when tested in accordance with ISO 2977, have a minimum aniline point of 66 °C.

This International Standard applies to hoses which are suitable for use at ambient temperatures between  $-20\,^{\circ}\text{C}$  and  $+52\,^{\circ}\text{C}$ , unless changed by a supplementary requirement on request of the purchaser, and are resistant to ageing and tropical conditions.

This International Standard does not apply to hoses which are intended for use with gases.

## 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 37, Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties

ISO 188, Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests

ISO 1402:1994, Rubber and plastics hoses and hose assemblies — Hydrostatic testing

ISO 1431-1, Rubber, vulcanized or thermoplastic — Resistance to ozone cracking -Part 1: Static strain test

ISO 1746:1998, Rubber or plastics hoses and tubing — Bending tests

ISO 1817, Rubber, vulcanized — Determination of the effects of liquids

ISO 2977, Petroleum products and hydrocarbon solvents — Determination of aniline point and mixed aniline point

ISO 4649:2002, Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device

ISO 4671, Rubber and plastics hoses and hose assemblies — Methods of measurement of dimensions

ISO 7233:1991, Rubber and plastics hoses and hose assemblies — Determination of suction resistance