

Petroleum, petrochemical and natural gas industries - Lubrication, shaft-sealing and control-oil systems and auxiliaries - Part 1: General requirements

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- Lubrication, shaft-sealing and control-oil systems
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 10438-1:2004 sisaldab Euroopa standardi EN ISO 10438-1:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.04.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 10438-1:2004 consists of the English text of the European standard EN ISO 10438-1:2003.</p> <p>This document is endorsed on 27.04.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of ISO 10438 specifies general requirements for lubrication, shaft-sealing systems and control-oil systems and auxiliaries for use in the petroleum, petrochemical and natural gas industries as well as in other industries by agreement.</p>	<p>Scope:</p> <p>This part of ISO 10438 specifies general requirements for lubrication, shaft-sealing systems and control-oil systems and auxiliaries for use in the petroleum, petrochemical and natural gas industries as well as in other industries by agreement.</p>
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Võtmesõnad:

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English version

Petroleum, petrochemical and natural gas industries –
Lubrication, shaft-sealing and control-oil systems and auxiliaries –
Part 1: General requirements (ISO 10438-1:2003)

Industries du pétrole, de la pétrochimie et du gaz naturel –
Systèmes de lubrification, systèmes d'étanchéité, systèmes
d'huile de régulation et leurs auxiliaires – Partie 1:
Exigences générales (ISO 10438-1:2003)

Erdöl-, petrochemische und Erdgasindustrie –
Schmieröl-, Sperröl und Regelölversorgungsanlagen und
Hilfsanlagen – Teil 1: Allgemeine Anforderungen
(ISO 10438-1:2003)

This European Standard was approved by CEN on 2 December 2003.

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.

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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN ISO 10438-1:2003) 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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 10438-1:2003 has been approved by CEN as EN ISO 10438-1:2003 without any modifications.

Introduction

ISO 10438 is based on API Std 614, 4th edn., April 1999, divided into four parts as follows:

- *Part 1: General requirements* (this part) is based on Chapter 1 of API Std 614;
- *Part 2: Special-purpose oil systems* is based on Chapter 2 of API Std 614;
- *Part 3: General-purpose oil systems* is based on Chapter 3 of API Std 614;
- *Part 4: Self-acting gas seal support systems* is based on Chapter 4 of API Std 614.

Users of this part of ISO 10438 should be aware that further or differing requirements may be needed for individual applications. This part of ISO 10438 is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This may be particularly appropriate where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this part of ISO 10438 and provide details.

This part of ISO 10438 requires the purchaser to specify certain details and features.

A bullet (•) at the beginning of a clause or sub-clause indicates that either a decision is required or further information is to be provided by the purchaser. This information or decision should be indicated on suitable data sheets; otherwise it should be stated in the quotation request (inquiry) or in the order.

1 Scope

This part of ISO 10438 specifies general requirements for lubrication, shaft-sealing systems and control-oil systems and auxiliaries for use in the petroleum, petrochemical and natural gas industries as well as in other industries by agreement. It is intended to be used in conjunction with ISO 10438-2, ISO 10438-3 and ISO 10438-4, as appropriate. ISO 10438 in its entirety specifies requirements for lubrication systems, oil-type shaft-sealing systems, self-acting gas seal systems, control-oil systems and other auxiliaries for general- and special-purpose applications. These systems can serve equipment such as compressions, gears, pumps and drivers.

None of the parts of ISO 10438 is applicable to internal combustion engines.

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 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designations*

ISO 7005 (all parts), *Metallic flanges*

ISO 10437, *Petroleum, petrochemical and natural gas industries — Steam turbines — Special-purpose applications*

ISO 13706, *Petroleum and natural gas industries — Air-cooled heat exchangers*

ISO 16812, *Petroleum and natural gas industries — Shell-and-tube heat exchangers*

IEC 60072 (all parts), *Dimensions and output series for rotating electrical machines*

IEC 60079 (all parts), *Electrical apparatus for explosive gas atmospheres*

API RP 520, Parts I and II, *Sizing, selection and installation of pressure-relieving devices in refineries*

API Std 526, *Flanged steel pressure relief valves*

API RP 551, *Process measurement instrumentation*

API Std 611, *General-purpose steam turbines for petroleum, chemical, and gas industry services*

ASME B1.1, *Unified inch screw threads (UN and UNR thread form)*

ASME B16.11, *Forged fittings, socket-welding and threaded*

ASME Y14.2M, *Line conventions and lettering*

ASTM A 193, *Standard specification for alloy-steel and stainless steel bolting materials for high-temperature service*

ASTM A 194, *Standard specification for carbon and alloy steel nuts for bolts for high-pressure or high-temperature service, or both*

ASTM E 94, *Standard guide for radiographic examination*

ASTM E 125, *Standard reference photographs for magnetic particle indications on ferrous castings*

ASTM E 709, *Standard guide for magnetic particle examination*

NFPA 70:2002, *National electrical code*

TEMA, *Standards of the Tubular Exchanger Manufacturers Association*, 8th edn.