

**Petroleum, petrochemical and natural gas industries - Lubrication, shaft-sealing and control-oil systems and auxiliaries - Part 4: Self-acting gas seal support systems**

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English Version

**Petroleum, petrochemical and natural gas industries -  
Lubrication, shaft-sealing and control-oil systems and auxiliaries  
- Part 4: Self-acting gas seal support systems (ISO 10438-  
4:2007)**

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 4:  
Systèmes de soutien pour les étanchéités au gaz auto-  
actionnées (ISO 10438-4:2007)

Erdöl-, petrochemische und Erdgasindustrie - Schmieröl-,  
Sperröl- und Regelölversorgungsanlagen und Hilfsanlagen  
- Teil 4: Sperrgasversorgungsanlagen (ISO 10438-4:2007)

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 10438-4:2007) 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, 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of an identical text or by endorsement, at the latest by June 2008, and conflicting national standards shall be withdrawn at the latest by June 2008.

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.

This document supersedes EN ISO 10438-4:2003.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

### Endorsement notice

The text of ISO 10438-4:2007 has been approved by CEN as a EN ISO 10438-4:2007 without any modification.

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## Introduction

This International Standard was developed jointly with API 614, 5th edition. ISO 10438 is divided into four parts corresponding to the four chapters of API 614.

Users of this part of ISO 10438 should be aware that further or differing requirements might 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. It is intended that this part of ISO 10438 be used in conjunction with 10438-1.

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

A bullet (•) at the beginning of a clause or subclause 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 the datasheet(s); otherwise it should be stated in the quotation request or in the order.

In this International Standard, US customary (USC) units are included in brackets for information.

# **Petroleum, petrochemical and natural gas industries — Lubrication, shaft-sealing and control-oil systems and auxiliaries —**

## **Part 4: Self-acting gas seal support systems**

### **1 Scope**

This part of ISO 10438 in conjunction with ISO 10438-1 specifies requirements for support systems for self-acting gas seals (dry gas seals), for example as described in ISO 10439 and ISO 10440-1. These systems can serve equipment such as compressors, gears, pumps and drivers.

NOTE For the purposes of this statement of scope, API 617 is equivalent to ISO 10439 and API 619 is equivalent to ISO 10440-1.

### **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 10438-1:2007, *Petroleum, petrochemical and natural gas industries — Lubrication, shaft-sealing and control-oil systems and auxiliaries — Part 1: General requirements*

ISO 15649, *Petroleum and natural gas industries — Piping*

API RP 520, *Sizing, Selection, and Installation of Pressure-Relieving Devices in Refineries — Part I: Sizing and Selection*

API RP 520, *Sizing, Selection, and Installation of Pressure-Relieving Devices in Refineries — Part II: Installation*

API 526, *Flanged Steel Pressure Relief Valves*

ANSI/ASME B31.3, *Process Piping*

### **3 Terms, abbreviated terms and definitions**

For the purposes of this document, the terms, abbreviated terms and definitions given in ISO 10438-1 apply.