

**Petroleum and natural gas industries -
Design and operation of subsea
production systems - Part 8: Remotely
Operated Vehicle (ROV) interfaces on
subsea production systems**

Petroleum and natural gas industries - Design and operation of subsea production systems - Part 8: Remotely Operated Vehicle (ROV) interfaces on subsea production systems

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 13628-8:2007 sisaldab Euroopa standardi EN ISO 13628-8:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.01.2007 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 13628-8:2007 consists of the English text of the European standard EN ISO 13628-8:2006.</p> <p>This document is endorsed on 29.01.2007 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: This part of ISO 13628 gives functional requirements and guidelines for ROV interfaces on subsea production systems for the petroleum and natural gas industries. It is applicable to both the selection and use of ROV interfaces on subsea production equipment, and provides guidance on design as well as the operational requirements for maximising the potential of standard equipment and design principles. The auditable information for subsea systems it offers will allow interfacing and actuation by ROV-operated systems, while the issues it identifies are those that have to be considered when designing interfaces on subsea production systems. The framework and detailed specifications set out will enable the user to select the correct interface for a specific application.</p>	<p>Scope: This part of ISO 13628 gives functional requirements and guidelines for ROV interfaces on subsea production systems for the petroleum and natural gas industries. It is applicable to both the selection and use of ROV interfaces on subsea production equipment, and provides guidance on design as well as the operational requirements for maximising the potential of standard equipment and design principles. The auditable information for subsea systems it offers will allow interfacing and actuation by ROV-operated systems, while the issues it identifies are those that have to be considered when designing interfaces on subsea production systems. The framework and detailed specifications set out will enable the user to select the correct interface for a specific application.</p>
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English Version

Petroleum and natural gas industries - Design and operation of
subsea production systems - Part 8: Remotely Operated Vehicle
(ROV) interfaces on subsea production systems (ISO 13628-
8:2002)

Industries du pétrole et du gaz naturel - Conception et
exploitation des systèmes de production immergés - Partie
8: Véhicules commandés à distance pour l'interface avec
les matériels immergés (ISO 13628-8:2002)

Erdöl- und Erdgasindustrie - Konstruktion und Betrieb von
Unterwasser-Produktionssystemen - Teil 8: Schnittstellen
ferngelenkter Fahrzeuge (ROV) mit Unterwasser-
Produktionssystemen (ISO 13628-8:2002)

This European Standard was approved by CEN on 13 November 2006.

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Foreword

The text of ISO 13628-8:2002 has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum and natural gas industries" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 13628-8:2006 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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

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Endorsement notice

The text of ISO 13628-8:2002 has been approved by CEN as EN ISO 13628-8:2006 without any modifications.

**Petroleum and natural gas industries —
Design and operation of subsea
production systems —**

**Part 8:
Remotely Operated Vehicle (ROV)
interfaces on subsea production systems**

*Industries du pétrole et du gaz naturel — Conception et exploitation
des systèmes de production immergés —*

*Partie 8: Véhicules commandés à distance pour l'interface avec
les matériels immergés*



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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.

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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 13628-8 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*.

ISO 13628 consists of the following parts, under the general title *Petroleum and natural gas industries — Design and operation of subsea production systems*:

- *Part 1: General requirements and recommendations*
- *Part 2: Flexible pipe systems for subsea and marine applications*
- *Part 3: Through flowline (TFL) systems*
- *Part 4: Subsea wellhead and tree equipment*
- *Part 5: Subsea umbilicals*
- *Part 6: Subsea production control systems*
- *Part 7: Completion/workover riser systems*
- *Part 8: Remotely Operated Vehicle (ROV) interfaces on subsea production systems*
- *Part 9: Remotely Operated Tool (ROT) intervention systems*

Introduction

This part of ISO 13628 is a revision, major amendment and expansion of Annex C of API¹⁾ 17D^[1].

The recommended practices for the selection and use of ROV interfaces have generally selected one interface for a specific application. The inclusion of a particular approach or recommendation does not imply that it is the only approach or the only interface to be used for that application.

In determining the suitability of standardization of ROV intervention interfaces for installation, maintenance or inspection tasks on subsea equipment, it is necessary to adopt a general philosophy regarding subsea intervention. This intervention philosophy is more fully described within this part of ISO 13628, as are the associated evaluation criteria used in selecting the interfaces incorporated into these recommendations.

This part of ISO 13628 is not intended to obviate the need for sound engineering judgement as to when and where its provisions are to be utilized, and users need to be aware that additional or differing details may be required to meet a particular service or local legislation.

With this part of ISO 13628, it is not wished to deter the development of new technology. The intention is to facilitate and complement the decision processes, and the responsible engineer is encouraged to review standard interfaces and re-use intervention tooling in the interests of minimizing life-cycle costs and increasing the use of proven interfaces.

This part of ISO 13628 does not cover intervention by remote operated tools (ROTs), which are dedicated tools deployed on drill pipe or guidelines. Instead, it focuses upon defining the requirements of ROV interfaces with subsea production systems, with further reference to ROT interfaces only being made where deemed appropriate. The interfaces on the subsea production system can apply equally to ROTs and ROVs.

1) American Petroleum Institute, 1220 L Street NW, Washington D.C. 20005, USA.

Petroleum and natural gas industries — Design and operation of subsea production systems —

Part 8: Remotely Operated Vehicle (ROV) interfaces on subsea production systems

1 Scope

This part of ISO 13628 gives functional requirements and guidelines for ROV interfaces on subsea production systems for the petroleum and natural gas industries. It is applicable to both the selection and use of ROV interfaces on subsea production equipment, and provides guidance on design as well as the operational requirements for maximising the potential of standard equipment and design principles. The auditable information for subsea systems it offers will allow interfacing and actuation by ROV-operated systems, while the issues it identifies are those that have to be considered when designing interfaces on subsea production systems. The framework and detailed specifications set out will enable the user to select the correct interface for a specific application.

2 Normative references

The following referenced document is 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 10423, *Petroleum and natural gas industries — Drilling and production equipment — Wellhead and christmas tree equipment*

3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms, definitions and abbreviated terms apply.

3.1 Terms and definitions

3.1.1

functional requirement

minimum criterion which shall be satisfied in order to meet a stated objective or objectives

NOTE Functional requirements are performance oriented and are applicable to a wide range of development concepts.

3.1.2

guideline

recommendation of recognized practice to be considered in conjunction with applicable statutory requirements, industry standards, standard practices and philosophies