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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 21412.8-2010

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

石油天然气工业 水下生产系统的设计和操作 第8部分：水下生产系统的水下机器人（ROV）接口

(English Translation)

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Foreword

GB/T 21412 "oil and gas industry subsea production system design and operation" now includes the following nine sections.

- Part 1. General requirements and recommended practices;
- Part 2. Flexible pipe systems and underwater marine use;
- Part 3. Through flowline (TFL) systems;
- Part 4. subsea wellhead and Christmas tree equipment;
- Part 5. underwater umbilical;
- Part 6. Subsea production control systems;
- Part 7. Completion/Maintenance riser system;

--- Part 8. subsea production systems underwater robot (ROV) interfaces;

--- Part 9. remotely operated tool (ROT) Maintenance System.

This part of GB/T 21412 Part 8.

This part identical with ISO 13628-8:2002 Design of "Oil and Gas Industry and operation of subsea production systems - Part 8. Water A production system underwater robot (ROV) interfaces "(in English).

This section is equivalent translation ISO 13628-8:2002.

For ease of use, this section made the following editorial changes.

--- "This part of ISO 13628" to "GB/T 21412 in this section";

--- With a decimal point instead of a comma as the decimal point, "";

--- Remove the foreword and introduction of international standards;

--- Normative references added two criteria cited in the text. GB/T 21412.1 and ISO 13628 (all parts);

--- Unit of measurement of the main legal units of measurement, ie legal units of measurement of the value of the former, the corresponding value of the standard English units thereafter Within brackets (for the standard formula without changing the original shape of the characteristic curve, constants and coefficients, the former imperial units still used in Britain Units).

This section of the Appendix A, Appendix B, Appendix C, Appendix D and Appendix E are informative appendices.

This part is proposed by the China National Petroleum Corporation.

This part of the National Oil and Gas Standardization Technical Committee (TC355) centralized.

This section drafted by. CNOOC (China) Co., Ltd. Research Center.

Introduction

GB/T 21412 This section presents the main technical requirements for interfaces ROV subsea production systems, it does not involve the use of a drill pipe or Special tool guide retractable cable that is remote maintenance operations operating tool (ROT) carried out, only in the case of a suitable interface parameters as ROT test. Interface subsea production systems and ROV tools to ROT equally applicable.

Oil and Gas Industry Design and operation of subsea production systems AUV underwater production systems. Part 8 (ROV) interfaces

1 Scope

GB/T 21412 in this section shows the functional requirements of underwater robot interface for the oil and gas industry and subsea production systems Guidelines, both for selecting and using underwater robots underwater production equipment interface also provides guidance for the design and operation of interface requirements, So that the potential of standard equipment and design principles to maximize play. ROV operating system according to the underwater system interface provided identifiable and other information for docking operation, and this information is the design of underwater production system interface needs to be considered. Framework proposed in this section and detailed technical requirements will allow users to select the interface correctly under specific application conditions.

2 Normative references

The following documents contain provisions which, through reference GB/T 21412 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 21412.1 oil and gas industry of subsea production systems design and operation - Part 1. General requirements and recommended practices (GB/T 21412.1-2010, ISO 13628-1:2005, IDT) ISO 10423 Oil and gas industry drilling equipment wellhead and tree equipment Design and operation of ISO 13628 (all parts) oil and gas industry of subsea production systems

3 Terms, definitions and abbreviations

The following terms, definitions and abbreviations apply to this section.

3.1 Terms and Definitions

3.1.1

Functional requirements functional requirement in order to achieve the minimum standards for a given target to be met.

Note: The performance-oriented functional requirements can be applied to a wide range of development concepts.

3.1.2

Guide guideline

In considering the appropriate legal requirements, industry standards, standard practices and principles on the basis of generally accepted recommended practices.

3.1.3

Manufacturer the company responsible for manufacturing the interface.

3.1.4

Operator

Operation ROV (including suppliers) of the company.