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

GB/T 23803-2009

**Petroleum and natural gas industries -- Design and installation
of piping systems on offshore production platforms**

石油和天然气工业 海上生产平台管道系统的设计和安装

(English Translation)

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Table of Contents

Introduction

Introduction

1 Scope

2 Normative references

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

3.2 Symbols and abbreviations

4 Overview

4.1 Material

Pressure Piping Specification 4.2

Foreword

This standard is equivalent to using ISO 13703:2000 "oil and gas industry offshore production platform piping system design and installation." (December 15, 2000, the first edition).

This standard is equivalent translation ISO 13703:2000.

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

--- "This International Standard" by "this standard";

--- Delete foreword international standards;

--- According to GB/T 1.1-2000 modify the title and the introductory phrase of Chapter 2;

--- 5.4.1 Chinese (6), 5.4.2 Chinese (9) and 5.4.3.3 Chinese (11) in its original expression is wrong, corrections were verified;

--- Appendix A, A. 2.2.4.1, A. 2.2.5.2, A. 2.2.5.3 The results of individual original error, were verified and correct.

This standard Annex A, Annex B and Annex C is informative appendix.

The standard proposed by China National Petroleum Corporation.

This standard by the National Standardization Technical Committee of Oil and Gas.

Introduction

Relates to the use of the original standard decrees, rules and regulations of the host Government or other authority, the People's Republic of China shall be according to the government or corresponding decree issued by the government authorities, rules and regulations.

Data or quantitative method of original standard, who meet our actual can be used; otherwise, should be based on China's specific conditions, the use of Our quantitative data and calculation methods.

Unit of measurement of the main legal units of measurement, ie legal units of measurement of the value of the previous corresponding standard value in the subsequent imperial units include Within the number. Not to change the original standard formula, the shape of the characteristic curve, constants and coefficients, the former imperial units still use imperial units.

GB/T 23803-2009/ISO 13703:2000 Oil and gas industry Design and installation of piping systems on offshore production platforms

1 Scope

This standard gives the oil and gas industry offshore production platform piping system design and installation of the new minimum requirements and guidelines. pipeline Maximum system pressure of up to 69000kPa (G), in a temperature range of material requirements to meet ASMEB31.3 requirements.

NOTE: For beyond the standard pressure and temperature range of application, you can use this standard, but the material properties should be given special consideration.

Appendix A is an example of pipeline design problem solving.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

ISO 13623 petroleum and natural gas industries - Pipeline transportation systems the second part API RP 520-2 refinery pressure relief system design and installation of Recommended Practice ASME Boiler and Pressure Vessel Code Section VIII articles. the first part of the pressure vessel ASME B31.3 process piping NACE MR0175 sulfide stress applied to oilfield equipment damage metal material NACE TM0177 in an environment

containing H₂S resistance to environmental cracking in metal Laboratory tests
NACETM0284 piping, pressure vessels, resistance to hydrogen induced cracking
assessment

3 Terms, definitions, symbols and abbreviations

The following terms and definitions, symbols and abbreviations apply to this standard.

3.1 Terms and Definitions

3.1.1

Treating fluid water and chloride concentration and temperature-sensitive material is sufficient to cause stress corrosion cracking job.

Note: Other factors, such as oxygen (O₂) exists, this may accelerate chloride stress corrosion cracking.

3.1.2

A specialized apparatus for controlling fluid flow.

3.1.3

Corrosion protective film formation process stream is scour erosion fall, new exposed metal surface corrosion of a longer Phenomenon.

Note: In this case, there may be very serious metal loss.

3.1.4

Dissolved in water or other liquids may cause corrosion of metal gas.

Note: Corrosive gases are typically comprised of hydrogen sulfide (H₂S), carbon dioxide (CO₂) and oxygen (O₂).

GB/T 23803-2009/ISO 13703:2000