Irish Standard
I.S. EN ISO 16903:2015

Petroleum and natural gas industries - Characteristics of LNG, influencing the design, and material selection (ISO 16903:2015)

I.S. EN ISO 16903:2015

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EUROPEAN STANDARD

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EN ISO 16903

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English Version

Petroleum and natural gas industries - Characteristics of LNG, influencing the design, and material selection (ISO 16903:2015)

Pétrole et industries du gaz naturel - Caractéristiques du GNL influant sur la conception et le choix des matériaux (ISO 16903:2015)

Erdöl- und Erdgasindustrie - Eigenschaften von Flüssigerdgas mit Einfluss auf die Auslegung und die Materialauswahl (ISO 16903:2015)

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European foreword

This document (EN ISO 16903:2015) has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" in collaboration with Technical Committee CEN/TC 282 “Installation and equipment for LNG” 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of an identical text or by endorsement, at the latest by December 2015, and conflicting national standards shall be withdrawn at the latest by December 2015.

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.

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I.S. EN ISO 16903:2015

INTERNATIONAL STANDARD

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First edition
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Petroleum and natural gas industries — Characteristics of LNG, influencing the design, and material selection

Pétrole et industries du gaz naturel — Caractéristiques du GNL influant sur la conception et le choix des matériaux

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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The committee responsible for this document is ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*.

Petroleum and natural gas industries — Characteristics of LNG, influencing the design, and material selection

1 Scope

This International Standard gives guidance on the characteristics of liquefied natural gas (LNG) and the cryogenic materials used in the LNG industry. It also gives guidance on health and safety matters. It is intended to act as a reference document for the implementation of other standards in the liquefied natural gas field. It is intended as a reference for use by persons who design or operate LNG facilities.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies

EN 1473, *Installation and equipment for liquefied natural gas — Design of onshore installations*

NFPA 59A, *Standard for the production, storage, and handling of liquefied natural gas (LNG)*

3 Terms and definitions

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

3.1
boil-off gas
gas generated during the storage or handling of volatile liquefied gases

3.2
condensate
hydrocarbon liquid that forms by condensation from natural gas, consisting primarily of pentanes (C_5H_{12}) and heavier components

Note 1 to entry: There will be some propane and butane dissolved within the mixture.

3.3
liquefied natural gas
LNG
colourless and odourless cryogenic fluid in the liquid state at normal pressure composed predominantly of methane which can contain minor quantities of ethane, propane, butane, nitrogen, or other components normally found in natural gas

3.4
liquefied petroleum gas
LPG
gaseous hydrocarbons at normal temperatures and pressures, but that readily turns into liquids under moderate pressure at normal temperatures, e.g. propane and butane

3.5
natural gas liquids
NGL
liquid hydrocarbons, such as ethane, propane, butane, pentane, and natural gasoline, extracted from field natural gas