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Refrigerated light hydrocarbon fluids — Measurement of cargoes on board LNG carriers

*Hydrocarbures légers réfrigérés — Mesurage des cargaisons à bord
des navires méthaniers*



Reference number
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Contents

| | Page |
|---|-----------|
| Foreword | v |
| Introduction | vi |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms, definitions and abbreviated terms | 1 |
| 3.1 Terms and definitions..... | 1 |
| 3.2 Abbreviated terms..... | 5 |
| 4 General operating safety precautions and regulatory requirements | 6 |
| 4.1 General..... | 6 |
| 4.2 Electrical equipment classification..... | 7 |
| 4.3 Electromagnetic disturbance..... | 7 |
| 4.4 Maintenance..... | 7 |
| 4.5 Service conditions..... | 7 |
| 4.6 Compatibility..... | 7 |
| 4.7 Personnel protection..... | 7 |
| 4.8 Procedures..... | 7 |
| 5 Measurement systems and equipment | 8 |
| 5.1 General..... | 8 |
| 5.2 Measurement equipment performance..... | 8 |
| 5.3 Calibration and certification of measurement equipment..... | 9 |
| 5.4 Verification of measurement equipment between dry dockings..... | 9 |
| 5.5 Inspection of measurement equipment during transfer operations..... | 9 |
| 5.6 Static measurement systems and equipment..... | 10 |
| 5.6.1 General..... | 10 |
| 5.6.2 Tank capacity tables..... | 10 |
| 5.6.3 Trim and list measurement..... | 12 |
| 5.6.4 Tank gassing-up tables or means of determination..... | 12 |
| 5.6.5 Tank cool-down tables or means of determination..... | 13 |
| 5.6.6 Liquid level measurement equipment..... | 13 |
| 5.6.7 Temperature measurement equipment..... | 17 |
| 5.6.8 Pressure measurement equipment..... | 18 |
| 5.6.9 Custody transfer measurement system..... | 18 |
| 5.7 Dynamic measurement systems and equipment..... | 19 |
| 6 Measurement procedures | 19 |
| 6.1 General..... | 19 |
| 6.2 Static measurement..... | 20 |
| 6.2.1 General..... | 20 |
| 6.2.2 Measuring liquid level..... | 21 |
| 6.2.3 Loading..... | 21 |
| 6.2.4 Discharge..... | 21 |
| 6.2.5 Shipboard measurements..... | 21 |
| 6.2.6 Liquid level..... | 22 |
| 6.2.7 Temperature..... | 23 |
| 6.2.8 Pressure..... | 24 |
| 6.2.9 CTMS..... | 24 |
| 6.2.10 Sampling..... | 24 |
| 6.2.11 Vapour return..... | 25 |
| 6.3 Gas-up and cool-down quantification..... | 25 |
| 6.3.1 General..... | 25 |
| 6.3.2 Inerting..... | 25 |
| 6.3.3 Gas up and cool down..... | 25 |
| 6.4 Dynamic measurement..... | 26 |

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| | | |
|----------|---|-----------|
| 7 | Cargo calculations | 26 |
| 7.1 | General..... | 26 |
| 7.2 | LNG volume determination..... | 26 |
| 7.2.1 | General..... | 26 |
| 7.2.2 | Liquid levels below lower measurable limit..... | 27 |
| 7.3 | LNG density determination..... | 27 |
| | Annex A (informative) LNGC design and marine operations | 28 |
| | Annex B (informative) Additional considerations for measurement on board an LNGC | 36 |
| | Annex C (informative) Examples of tank capacity tables for a spherical tank | 40 |
| | Annex D (informative) Calculation examples | 46 |
| | Annex E (informative) Sampling | 55 |
| | Annex F (informative) Marine measurement witnessing checklists | 59 |
| | Bibliography | 62 |

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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.

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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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 28, *Petroleum products and lubricants*, Subcommittee SC 5, *Measurement of refrigerated hydrocarbon and non-petroleum based liquefied gaseous fuels*.

This second edition cancels and replaces the first edition (ISO 10976:2012), of which it constitutes a minor revision.

Introduction

This International Standard provides accepted methods for measuring quantities on liquefied natural gas (LNG) carriers for those involved in the LNG trade on ships and onshore. It includes recommended methods for measuring, reporting and documenting quantities on board these vessels.

This International Standard is intended to establish uniform practices for the measurement of the quantity of cargo on board LNG carriers from which the energy is computed. It details the commonly used current methods of cargo measurement, but is not intended to preclude the use or development of any other technologies or methods or the revision of the methods presented. It is intended that the reader review, in detail, the latest editions of the publications, standards and documents referenced in this International Standard in order to gain a better understanding of the methods described.

This International Standard is not intended to supersede any safety or operating practices recommended by organizations, such as the International Maritime Organization (IMO), the International Chamber of Shipping (ICS), the Oil Companies International Marine Forum (OCIMF), the International Group of LNG Importers (GIIGNL) and the Society of International Gas Tanker and Terminal Operators (SIGTTO), or individual operating companies. This International Standard is not intended to supersede any other safety or environmental considerations, local regulations or the specific provisions of any contract.

The International System of units (SI) is used throughout this International Standard as the primary units of measure since this system is commonly used in the industry for these types of cargoes. However, as some LNG carrier tanks are calibrated in US customary units and some sales and purchase agreements (SPA) are made in US customary units, both SI and US customary equivalents are shown. Proper unit conversion is intended to be applied, documented and agreed upon among all parties involved in the LNG custody transfer.