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Ship and marine technology - Technical requirements for dry-disconnect/connect couplings for bunkering liquefied natural gas (ISO 21593:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Navires et technologie maritime - Exigences techniques relatives au couplage de connexion et de déconnexion à sec pour le soutage de gaz naturel liquéfié (ISO 21593:2019)

Schiff- und Meerestechnik- Trockene Anschluss- und Trennkupplung(en) für das Bunkern flüssigerdgasbetriebener Schiffe (ISO 21593:2019)

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EN ISO 21593:2019 (E)

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European foreword

This document (EN ISO 21593:2019) has been prepared by Technical Committee ISO/TC 8 "Ships and marine technology" in collaboration with Technical Committee CEN/TC 282 "Installation and equipment for LNG" the secretariat of which is held by AFNOR.

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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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This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*.

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Ships and marine technology — Technical requirements for dry-disconnect/connect couplings for bunkering liquefied natural gas

1 Scope

This document specifies the design, minimum safety, functional and marking requirements, as well as the interface types and dimensions and testing procedures for dry-disconnect/connect couplings for LNG hose bunkering systems intended for use on LNG bunkering ships, tank trucks and shore-based facilities and other bunkering infrastructures. It is not applicable to hydraulically operated quick connect/disconnect couplers (QCDC) used for hard loading arms, which is covered in ISO 16904.

Based on the technology used in industrial manufacturing at the time of development of this document, it is applicable to sizes of couplings ranging from DN 25 to DN 200.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

ISO 3834 (all parts), *Quality requirements for fusion welding of metallic materials*

ISO 5208:2015, *Industrial valves — Pressure testing of metallic valves*

EN 1092-1, *Flanges and their joints*

EN 12266-1:2012, *Industrial valves — Testing of metallic valves — Part 1: Pressure tests, test procedures and acceptance criteria — Mandatory requirements*

ASME B16.5-2009, *Pipe flanges and flanged fittings*

ASME B31.3-2018, *Process piping*

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