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Offshore containers and associated lifting sets - Part 3:
Periodic inspection, examination and testing (ISO
10855-3:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 10855-3:2018 sisaldab Euroopa standardi EN ISO 10855-3:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 10855-3:2018 consists of the English text of the European standard EN ISO 10855-3:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.07.2018.	Date of Availability of the European standard is 11.07.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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EUROPEAN STANDARD

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English Version

**Offshore containers and associated lifting sets - Part 3:
Periodic inspection, examination and testing (ISO 10855-
3:2018)**

Containeurs offshore et dispositifs de levage associés -
Partie 3: Inspection périodique, examen et test (ISO
10855-3:2018)

Offshore-Container und dazugehörige
Anschlaggarnituren - Teil 3: Wiederkehrende
Kontrolle, Inspektion und Prüfung (ISO 10855-3:2018)

This European Standard was approved by CEN on 30 April 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN ISO 10855-3:2018) 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 12 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" the secretariat of which is held by NEN.

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 January 2019, and conflicting national standards shall be withdrawn at the latest by January 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12079-3:2006.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10855-3:2018 has been approved by CEN as EN ISO 10855-3:2018 without any modification.

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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, 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](#).

A list of all the parts of ISO 10855 can be found on the ISO website.

Introduction

ISO 10855 (all parts) meets the requirements of IMO MSC/Circular 860^[1] for the design, construction, inspection, testing and in-service examination of offshore containers and associated lifting sets which are handled in open seas.

This document does not specify certification requirements for offshore containers which are covered by the IMO Circular 860 and SOLAS. IMO MSC/Circ.860 requires certification of offshore containers “by national administrations or organizations duly authorized by the Administration”, which should take account of both the calculations and the testing, “taking into account the dynamic lifting and impact forces that can occur when handling such equipment in open seas”. Further information about certification can be found in informative [Annex A](#) of this document.

ISO 10855 (all parts) does not cover operational use or maintenance, for which there are a number of industry guidelines which can be referred to. Some are listed in the Bibliography.

Under conditions in which offshore containers are often transported and handled, the 'normal' rate of wear and tear is high, and damage necessitating repair will occur. However, containers designed and manufactured according to ISO 10855 (all parts) will have sufficient strength to withstand the normal forces encountered in offshore operations, and will not suffer complete failure even if subject to more extreme loads.

Offshore containers and associated lifting sets —

Part 3: Periodic inspection, examination and testing

1 Scope

This document specifies requirements for the periodic inspection, examination and testing of offshore freight and service containers, built in accordance with ISO 10855-1, with maximum a gross mass not exceeding 25 000 kg and their associated lifting sets, intended for repeated use to, from and between offshore installations and ships. Inspection requirements following damage and repair of offshore containers are also included.

Recommended knowledge and experience of staff responsible for inspection of offshore containers is given in [Annex B](#).

Recommended knowledge and experience of staff responsible for inspection of lifting sets intended for use with offshore containers is given in [Annex C](#).

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 amendments) applies.

ISO 3834-2, *Quality requirements for fusion welding of metallic materials — Part 2: Comprehensive quality requirements*

ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

ISO 9712, *Non-destructive testing — Qualification and certification of NDT personnel*

ISO 17637, *Non-destructive testing of welds — Visual testing of fusion-welded joints*

ISO 3452-1, *Non-destructive testing — Penetrant testing — Part 1: General principles*

ISO 10855-1:2018, *Offshore containers and associated lifting sets -- Part 1: Design, manufacture and marking of offshore containers*

ISO 10855-2:2018, *Offshore containers and associated lifting sets — Part 2: Design, manufacture and marking of lifting sets*

ISO 23277, *Non-destructive testing of welds — Penetrant testing — Acceptance levels*

ISO 17638, *Non-destructive testing of welds — Magnetic particle testing*

ISO 23278, *Non-destructive testing of welds — Magnetic particle testing — Acceptance levels*

ISO 17636-1, *Non-destructive testing of welds — Radiographic testing — Part 1: X- and gamma-ray techniques with film*

ISO 17636-2, *Non-destructive testing of welds — Radiographic testing — Part 2: X- and gamma-ray techniques with digital detectors*

ISO 11666, *Non-destructive testing of welds – Ultrasonic testing – Acceptance levels*

ISO 17640, *Non-destructive testing of welds — Ultrasonic testing — Techniques, testing levels, and assessment*

ISO 10675-1, *Non-destructive testing of welds — Acceptance levels for radiographic testing — Part 1: Steel, nickel, titanium and their alloys*

ISO 10675-2, *Non-destructive testing of welds — Acceptance levels for radiographic testing — Part 2: Aluminium and its alloys*

ISO/IEC 17020, *Conformity assessment — Requirements for the operation of various types of bodies performing inspection*

EN 818-4, *Short link chain for lifting purposes — Safety — Part 4: Chain slings – Grade 8*

EN 818-6, *Short link chain for lifting purposes — Safety — Part 6: Chain slings — Specification for information for use and maintenance to be provided by the manufacturer*

EN 13414-2, *Steel wire rope slings — Safety — Part 2: Specification for information for use and maintenance to be provided by the manufacturer*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10855-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

owner

legal owner of the offshore container or the delegated nominee of that body

3.2

visual examination

examination in accordance with ISO 17637

4 Symbols

WLL_s	minimum working load limit of each shackle
WLL_{off}	maximum rating of an offshore container to which any given sling set may be attached
R	rating, i.e. the maximum gross mass, MGM, of the container including permanent equipment and its cargo, but excluding the lifting set, in kg
T	tare mass, i.e. the mass of an empty container including any permanent equipment excluding cargo and lifting set, in kg
P	payload, i.e. the maximum permissible mass of cargo which may be safely transported by the container, in kg

NOTE 1 $P = R - T$

NOTE 2 R , T and P are by definition, in units of mass, kilograms (kg). Where design requirements are based on the gravitational forces derived from these values, those forces are indicated thus: Rg , Tg and Pg the units of which are in Newtons or multiples thereof. Container inspection plate.