

## **CSA ISO 10855-3:20** (ISO 10855-3:2018, IDT) National Standard of Canada



## CSA ISO 10855-3:20 Offshore containers and associated lifting sets — Part 3: Periodic inspection, examination and testing (ISO 10855-3:2018, IDT)







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# National Standard of Canada

## CSA ISO 10855-3:20 Offshore containers and associated lifting sets — Part 3: Periodic inspection, examination and testing (ISO 10855-3:2018, IDT)

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# CSA ISO 10855-3:20 Offshore containers and associated lifting sets — Part 3: Periodic inspection, examination and testing (ISO 10855-3:2018, IDT)

# CSA Preface

This is the first edition of CSA ISO 10855-3, *Offshore containers and associated lifting sets* — *Part 3: Periodic inspection, examination and testing*, which is an adoption without modification of the identically titled ISO (International Organization for Standardization) Standard 10855-3 (first edition, 2018-05).

For brevity, this Standard will be referred to as "CSA ISO 10855-3" throughout.

This Standard is intended to be used in conjunction with CSA ISO 10855-1:20, *Offshore containers and associated lifting sets* — *Part 1: Design, manufacture and marking of offshore containers* (adopted ISO 10855-1:2018).

Standards development within the Canadian Offshore Structures sector is harmonized with international standards development.

This Standard was reviewed for Canadian adoption by the harmonized Canadian Advisory Committee and CSA Technical Committee to ISO TC 67/SC 7, Offshore Structures. This Standard has been formally approved by the CSA Technical Committee on Design, Construction, and Installation of Offshore Structures, under the jurisdiction of the CSA Strategic Steering Committee on Offshore Structures and Arctic Operations.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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- c) wording of the proposed change; and
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# INTERNATIONAL STANDARD



First edition 2018-05

# Offshore containers and associated lifting sets —

Part 3: Periodic inspection, examination and testing

Containeurs offshore et dispositifs de levage associés — Partie 3: Inspection périodique, examen et test



Reference number ISO 10855-3:2018(E)



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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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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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: <u>Foreword - Supplementary information</u>.

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<sup>[11]</sup> 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 <u>Annex A</u> 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 <u>Annex B</u>.

Recommended knowledge and experience of staff responsible for inspection of lifting sets intended for use with offshore containers is given in <u>Annex C</u>.

#### 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