

# SVENSK STANDARD

## SS-EN ISO 10855-3:2018

Fastställt/Approved: 2018-07-16  
Utgåva/Edition: 1  
Språk/Language: engelska/English  
ICS: 75.180.10



---

**Containrar – Containrar för anläggningar till havs samt  
tillhörande lyftanordningar –  
Del 3: Återkommande kontroll, besiktning och provning  
(ISO 10855-3:2018)**

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



# Standarder får världen att fungera

*SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.*

## Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

## Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

## Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

**Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på [www.sis.se](http://www.sis.se) eller ta kontakt med oss på tel 08-555 523 00.**



# Standards make the world go round

*SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.*

## Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

## Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

## Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

**If you want to know more about SIS, or how standards can streamline your organisation, please visit [www.sis.se](http://www.sis.se) or contact us on phone +46 (0)8-555 523 00**



Europastandarden EN ISO 10855-3:2018 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 10855-3:2018.

Denna standard ersätter SS-EN 12079-3:2006, utgåva 1

The European Standard EN ISO 10855-3:2018 has the status of a Swedish Standard. This document contains the official version of EN ISO 10855-3:2018.

This standard supersedes the SS-EN 12079-3:2006, edition 1

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

*Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.*

*Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS, who can also provide general information about Swedish and foreign standards.*

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på [www.sis.se](http://www.sis.se) - där hittar du mer information.



EUROPEAN STANDARD

EN ISO 10855-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2018

ICS 75.180.10

Supersedes EN 12079-3:2006

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

# Contents

Page

<b>European foreword</b> .....	<b>vii</b>
<b>Introduction</b> .....	<b>viii</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Symbols</b> .....	<b>2</b>
<b>5 Container inspection plate</b> .....	<b>3</b>
5.1 General .....	3
5.2 Contents of inspection plate .....	3
<b>6 Schedule of periodic inspection/examination and test — Containers</b> .....	<b>4</b>
<b>7 Container lifting test</b> .....	<b>4</b>
7.1 General .....	4
7.2 Test equipment and calibration.....	5
<b>8 Non-destructive examination (NDE) of welds</b> .....	<b>5</b>
8.1 General .....	5
8.2 NDE methods.....	5
8.3 Use of Eddy Current Testing at periodic inspections .....	5
8.4 NDE operators.....	6
<b>9 Visual inspection</b> .....	<b>6</b>
9.1 General .....	6
9.2 Markings.....	6
9.3 Welds.....	6
9.4 Pad eyes and lashing points .....	6
9.5 Structure.....	6
9.6 Door closures.....	7
9.7 Floor .....	7
<b>10 Marking of the inspection plate</b> .....	<b>7</b>
<b>11 Inspection report</b> .....	<b>7</b>
<b>12 Record keeping</b> .....	<b>8</b>
<b>13 Damage and repair procedures</b> .....	<b>8</b>
<b>14 Schedule of inspection/examination and test — Lifting sets</b> .....	<b>8</b>
<b>15 Inspection of attachment of lifting set to an offshore container</b> .....	<b>11</b>
15.1 Attachment.....	11
15.2 Inspection report.....	11
15.3 Record keeping .....	11
<b>16 Pre-trip inspections</b> .....	<b>12</b>
<b>Annex A (informative) Regulations for offshore containers</b> .....	<b>13</b>
<b>Annex B (informative) Recommended knowledge and experience of staff responsible for inspection of offshore containers</b> .....	<b>15</b>
<b>Annex C (informative) Recommended knowledge and experience of staff responsible for inspection of lifting sets intended for use with offshore containers</b> .....	<b>16</b>
<b>Bibliography</b> .....	<b>17</b>

## 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.

## Introduction

ISO 10855 (all parts) meets the requirements of IMO MSC/Circular 860<sup>[1]</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 [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*

## SS-EN ISO 10855-3:2018 (E)

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.

## 5 Container inspection plate

### 5.1 General

Containers shall be fitted with a plate carrying the information specified in 5.2.

The plate shall be made of corrosion-resistant material securely attached externally in a manner designed to avoid unauthorized or accidental removal. The plates shall be fitted to a door, or on containers with no doors, in a prominent position.

Aluminium rivets have been found to be unsuitable as a fixing method in the offshore environment and shall not be used. The information on the plate shall be in the English language.

NOTE Provision for an additional language can be made.

The text shall be permanently and legibly marked on the plates in characters not less than 4 mm high.

### 5.2 Contents of inspection plate

The plate shall be headed 'OFFSHORE CONTAINER INSPECTION PLATE - ISO 10855-3'.

The plate shall contain the following information:

- a) owner's container number;
- b) owner's name;
- c) date of last inspection.

The date of last inspection shall be the date on which the most recent inspection was carried out to the satisfaction of the competent person.

To avoid confusion, the plate shall not carry the date of the next inspection. Provision shall be made on the plate to facilitate permanent marking to record a minimum of nine inspections.

NOTE 1 For marking of the inspection plate, see [Clause 10](#).

NOTE 2 In some markets it is common practice to mark an initial inspection date on the inspection plate before the container is taken into use.

A recommended format for the plate is shown in [Figure 1](#).

OFFSHORE CONTAINER INSPECTION DATA		
Container no.:		
Owner:		
Inspections:		
1		
2		
3		
4		
10		

Figure 1 — Example of inspection plate