



# SLOVENSKI STANDARD

SIST EN 12079-3:2007

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Offshore containers and associated lifting sets - Part 3: Periodic inspection, examination and testing

Offshore-Container und zugehörige Anschlaggarnituren - Teil 3: Wiederkehrende Kontrolle, Inspektion und Prüfung

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Conteneurs pour manutention en mer et dispositifs de levage associés - Partie 3: Contrôle périodique, inspection et essais

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Ta slovenski standard je istoveten z: EN 12079-3:2006

**ICS:**

55.180.10 X^ } æ ^} • \ ã [ ] c b ^ ! ã General purpose containers

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**en**

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English Version

## Offshore containers and associated lifting sets - Part 3: Periodic inspection, examination and testing

Conteneurs pour utilisation en mer et dispositifs de levage associés - Partie 3: Contrôle périodique, inspection et essais

Offshore-Container und zugehörige Anschlaggarnituren - Teil 3: Wiederkehrende Kontrolle, Inspektion und Prüfung

This European Standard was approved by CEN on 9 March 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 12079-3:2006) has been prepared by Technical Committee CEN/TC 280 "Offshore containers and associated lifting sets", the secretariat of which is held by BSI.

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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

This document, together with EN 12079-1:2006, supersedes EN 12079:1999.

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

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## 1 Scope

This part of EN 12079 specifies requirements for the periodic inspection, examination and testing of offshore freight and service containers, built in accordance with EN 12079-1, with maximum gross mass not exceeding 25000 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.

Other parts of the standard are:

EN 12079-1, *Offshore containers and associated lifting sets - Part 1: Offshore container – Design, manufacture and marking*

EN 12079-2, *Offshore containers and associated lifting sets - Part 2: Lifting sets – Design, manufacture and marking*

Guidance as to the knowledge and experience required by those responsible for carrying out periodic inspection and testing is given in Annex A 'Recommended knowledge and experience of staff responsible for inspection of offshore containers'.

Guidance on pre-trip inspections is given in Annex B 'Recommended knowledge and experience of staff responsible for inspection of lifting sets intended for use with offshore containers'.

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## 2 Normative references (standards.iteh.ai)

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12079-1:2006, *Offshore containers and associated lifting sets — Part 1: Offshore containers — Design, manufacture and marking*

EN 12079-2:2006, *Offshore containers and associated lifting sets — Part 2: Lifting sets — Design, manufacture and marking*

EN 473, *Non-destructive testing - Qualification and certification of NDT personnel - General principles*

EN 571-1, *Non-destructive testing - Penetrant testing - General principles*

EN 818-4:1996, *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 970, *Non-destructive examination of fusion welds - Visual examination*

EN 1289, *Non-destructive examination of welds - Penetrant testing of welds - Acceptance levels*

EN 1290, *Non-destructive examination of welds - Magnetic particle examination of welds*

EN 1291, *Non-destructive testing of welds - Magnetic particle testing of welds - Acceptance levels*

EN 1435, *Non-destructive examination of welds - Radiographic examination of welded joints*

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EN 1712, *Non-destructive examination of welds - Ultrasonic examination of welded joints - Acceptance levels*

EN 1714, *Non destructive examination of welds - Ultrasonic examination of welded joints*

EN 12517-1, *Non-destructive testing of welds - Part 1: Evaluation of welded joints in steel, nickel, titanium and their alloys by radiography - Acceptance levels*

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

EN 30042, *Arc-welded joints in aluminium and its weldable alloys - Guidance on quality levels for imperfections (ISO 10042:1992)*

EN ISO 3834-2, *Quality requirements for fusion welding of metallic materials - Part 2: Comprehensive quality requirements (ISO 3834-2:2005)*

EN ISO 5817, *Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections (ISO 5817:2003)*

EN ISO/IEC 17020, *General criteria for the operation of various types of bodies performing inspection (ISO/IEC 17020:1998)*

### 3 Terms and definitions

For the purposes of this standard, the terms and definitions given in EN 12079-1:2006 and the following apply.

#### 3.1

##### owner

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

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#### 3.2

##### visual inspection

inspection of the characteristics of a product and determination of its conformity with specified requirements where applicable, and based on professional judgement where general requirements apply

#### 3.3

##### visual examination

examination in accordance with EN 970

### 4 Symbols

*R* The rating i.e. the maximum gross mass of the container including permanent equipment and cargo but excluding the lifting set, in kg;

*T* The tare mass, i.e. the mass of an empty container including any permanent equipment excluding cargo and lifting set, in kg;

*P* The 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.

## 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 (see Note).

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

NOTE Provision for an additional language may be made.

### 5.2 Contents of inspection plate

The plate shall be headed "OFFSHORE CONTAINER INSPECTION PLATE - EN 12079-3: 2006"

The plate shall contain the following information:

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- a) owner's container number;
  - b) owner's name; [SIST EN 12079-3:2007](https://standards.iteh.ai/catalog/standards/sist/366a7aef-155a-4123-a0bb-79233b78f2d2/sist-en-12079-3-2007)
  - c) date of last inspection. [79233b78f2d2/sist-en-12079-3-2007](https://standards.iteh.ai/catalog/standards/sist/366a7aef-155a-4123-a0bb-79233b78f2d2/sist-en-12079-3-2007)

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 A recommended format for the plate is shown in Figure 1.

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

NOTE The information required for the inspection plate may be combined with the Offshore Container Data Plate (see EN 12079 - 1).

Figure 1 — Example of Inspection Plate

## 6 Schedule of periodic inspection/ examination and test — containers

Containers and lifting sets shall be periodically inspected, examined and if necessary tested in accordance with the schedule listed in Table 1, by an inspection body meeting the requirements of EN ISO/IEC 17020.

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NOTE 1 Guidance as to the recommended knowledge and experience of staff responsible for inspections for the purposes of EN ISO/IEC 17020 is given in Annex A.

When the schedule includes a lifting test, the non-destructive examination and visual inspection shall both be carried out after the lifting test.

NOTE 2 The inspection body may require other or additional inspections, examinations and or tests.

Table 1 — Schedule of periodic inspection, examination and testing of containers

Time or interval	Inspection/ examination/ test			
	Lifting test	Non-destructive examination (NDE)	Visual inspection	Suffix to be marked on plate See Clause 10
Initial certification	As required by EN 12079-1			
At intervals not exceeding 12 months	Not applicable <sup>b</sup>	Not applicable <sup>b</sup>	Yes	V
At intervals not exceeding 48 months	Not applicable <sup>b</sup>	Yes	Yes	VN
After substantial repair or alteration <sup>a</sup>	Yes	Yes	Yes	T
<p><sup>a</sup> A substantial repair or alteration means any repair and/or alteration carried out, which may, in the opinion of an inspection body, affect the primary elements of the offshore container, or elements which contribute directly to its structural integrity.</p> <p><sup>b</sup> The inspection body may require other or additional inspections, examinations and or tests.</p>				

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## 7 Container lifting test

### 7.1 General

The container shall be loaded to give a total mass of  $2,5 R$  and lifted using all the pad eyes.

NOTE This total mass may be obtained by putting in an internal test mass of  $2,5 R-T$ .

The test masses/test load shall normally be evenly distributed inside the container. If it is not possible to place the entire test mass inside the container, some of it may be placed outside or under the container, provided that this gives a loading on the structure similar to the distribution of the container loading in operating condition.

If the container has an additional cargo deck, the test mass/ test load shall be evenly divided between the floor and the additional deck. If the additional deck is removable, it will be necessary to carry out the test with the test mass/ test load divided between the additional deck and the floor, as well as with the whole test mass/ test load on the floor.

The container shall be lifted by a lifting set with an angle to the vertical equal to the design angle and shall be held, clear of the ground, throughout the test.

Where the lifting set, intended for use with the container, is used for the lifting test, care should be taken to ensure that no overloading, deformation or distortion is induced in the lifting set. Should the lifting set normally fitted to the container be used for the lifting test it shall be visually inspected after the load test by an inspection body as per the requirements of this standard.