



# TYPE APPROVAL CERTIFICATE

Certificate no.:  
**TAS00002US**  
Revision No:  
**1**

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## This is to certify:

**that the lifting set components for offshore containers and portable offshore units**

with type designation(s)  
**Masterlinks, Type XX.X.OF**  
**Quad Assemblies, Type MA XX OF**

issued to

**Nøsted & AS**  
**Sannidal, Norway**

is found to comply with

**DNV standard DNV-ST-E271 – 2.7-1 Offshore containers, March 2023 (Amended December 2024)**  
**DNV standard DNV-ST-E273 – 2.7-3 Portable offshore units, April 2016 (Amended May 2022)**  
**ISO 10855-2:2024 Offshore containers and associated lifting sets – Part 2: Design, manufacture and marking of lifting sets**  
**IMO/MSC Circular 860**  
**EN 1677-4 Components for slings – Safety – Part 4: Links, Grade 8**

## Application:

**Grade 8 links for offshore container and portable offshore unit lifting sets**

Issued at **Aberdeen** on **2026-01-13**

This Certificate is valid until **2031-01-12**.

for **DNV**

DNV local unit: **Sandefjord**

Approval Engineer: **Elisabeth Legg**

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

## Manufactured by

Manufacturing of the products is undertaken at the following locations for the relevant listed products:

Place of manufacture	Activities	Local DNV office
<b>16 6 OF, 20 6 OF, 22 6 OF, 22 8 OF, 45 6 OF, 50 6 OF, 60 6 OF, 70 6 OF</b>		
	<ul style="list-style-type: none"> <li>Cutting, pre-heating, bending, welding and deburring of links and quad assemblies</li> <li>Application of markings</li> </ul>	
	<ul style="list-style-type: none"> <li>QC activities: inspection, testing and issuance of product certificates</li> </ul>	
<b>25 6 OF, 25 7 OF, 28 6 OF, 28 7 OF, 32 6 OF, 38 6 OF</b>		
	<ul style="list-style-type: none"> <li>Cutting, pre-heating, bending, welding and deburring of links and quad assemblies</li> <li>Application of markings</li> <li>QC activities: inspection, testing and issuance of product certificates</li> </ul>	

## Responsibility

Nøsted & AS takes responsibility that both design and production at all places of manufacture are in compliance with the Rules, Standards and/or Regulations listed on page 1 of this type approval certificate.

## Product description

This type approval certificate replaces all previous revisions of TAS00002US.

This type approval covers links and link assemblies for use in lifting sets for units certified in accordance with DNV-ST-E271 or DNV-ST-E273.

Detailed product information of the range of certified products covered by this type approval are listed in Appendix 1 of this type approval certificate.

## Application/Limitation

Minimum design temperature: - 20°C

Selection of the correct dimensions of lifting sets and/or lifting set components shall be carried out in accordance with the requirements for lifting sets of offshore containers in DNV-ST-E271 section 8.

Tests to be carried out:

- Production testing: in accordance with DNV-ST-E271, Nøsted & AS procedure and EN 1677-4, in agreement with the DNV surveyor.
- Material to be impact tested by Charpy impact method in accordance with DNV-ST-E271 section 8.4.
- Material to be hardness tested in accordance with DNV-ST-E271 section 8.3.3.1.

The manufacturer shall issue product certificates in accordance with DNV-ST-E271 section 8.5, using the certificate Form no: 1. This certificate form shall only be used for links and link assemblies certified in accordance with this type approval.

### For links manufactured in accordance with DNV-ST-E271

The required Working Load Limit (WLL) for a given container rating should be determined in accordance with DNV-ST-E271 Table 8-1. In no case should an offshore container lifting set WLL be less than 7.0 tonnes.

### For links manufactured in accordance with DNV-ST-E273

Prior to selection of links, the minimum required working load limit (WLL) shall be determined in accordance with the strength requirements for links as given in DNV-ST-E273 section 7.3.5. Resultant sling force (RSF) can be found in the design verification report (DVR) issued by DNV for the portable offshore unit.



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## Type Approval documentation

### Tests carried out

Prototype testing shall be carried out in accordance with DNV-ST-E271 and EN 1677-4.

### Marking of product

Components shall be marked in accordance with EN 1677-4 clause 7 and DNV-ST-E271 section 8.

### Periodical assessment

In order to maintain the validity of the type approval certificate, periodical assessments should be carried out by a DNV surveyor every **12 months** in accordance with DNV-SE-0284. Periodical assessments will, where possible, be harmonised with other surveys and audits conducted by DNV.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

## Appendix 1

Product description and details:

### Masterlinks, type XX.X.OF

Type	Nominal size [mm]	Working Load Limit (WLL) [tonnes]	Manufacturing Proof Force (MPF) [kN]	Minimum Breaking Force (BF) [kN]
16 6 OF	16	4.1*	100.5	201.0
20 6 OF	20	6.7*	164.8	328.6
22 6 OF	22	8.2	201.1	402.2
22 8 OF	22	5.8*	142.2	284.4
25 6 OF	25	10.7	262.9	524.8
25 7 OF	25	8.8	216.5	431.6
28 6 OF	28	12.9	316.9	632.7
28 7 OF	28	11.8	289.4	578.8
32 6 OF	32	17.1	419.9	838.8
38 6 OF	38	28.1	689.6	1378.3
45 6 OF	45	38.3	936.9	1878.6
50 6 OF	50	45.0	1103.6	2207.3
60 6 OF	60	65.3	1602.0	3203.0
70 6 OF	70	84.4	2069.2	4138.4

\* This size is only suitable for portable offshore units.  
 Master links with WLL less than 7.0 tonnes shall not be used in lifting sets for offshore containers.

### Quad Assemblies, type MA XXOF

Type	Master link	Intermediate link	Working Load Limit WLL Assembly [tonnes]	Manufacturing Proof Force (MPF) [kN]	Minimum Breaking Force (BF) [kN]
MA 22 OF	22.6OF	20.6OF	8.2	201.1	402.2
MA 25 OF	25.6OF	20.6OF	10.7	262.9	524.8
MA 25 7 OF	25.7OF	22.6OF	8.8	216.5	431.6
MA 28 OF	28.6OF	25.6OF	12.9	316.9	632.7
MA 28 7 OF	28.7OF	22.6OF	11.8	289.4	578.8
MA 32 OF	32.6OF	25.6OF	17.1	419.9	838.8
MA 38 OF	38.6OF	32.6OF	28.1	689.6	1378.3
MA 45 OF	45.6OF	38.6OF	38.3	939.8	1878.6
MA 50 OF	50.6OF	45.6OF	45.0	1103.6	2207.3
MA 60 OF	60.6OF	50.6OF	65.3	1602.0	3203.0
MA 70 OF	70 6 OF	60 6 OF	84.4	2069.2	4138.4