DNV·GL

Certificate No:
TAS00001UW

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Lifting set for Offshore containers and Portable Offshore Units

with type designation(s)
Offshore Chain type Offsh Ni and WIN

Issued to
PEWAG Austria GmbH
Graz, Steiermark, Austria

is found to comply with
DNV GL standard DNVGL-ST-E271 – 2.7-1 Offshore containers, August 2017
DNV GL standard DNVGL-ST-E273 – 2.7-3 Portable offshore units, December 2016
EN 818-2 Short link chain for lifting purposes – Safety – Part 2: Medium tolerance chain for chain for chain slings – Grade 8
ISO 10855-2:2018 Offshore containers and associated liftings sets – Part 2: Design, manufacture and testing of lifting sets
IMO/MSC Circular 860

Application :

Grade 8 Chain for Lifting Sets for Offshore Containers and Portable Offshore Units

Issued at **Høvik** on **2019-05-16**
This Certificate is valid until **2024-05-15**.
DNV GL local station: **Augsburg**

Approval Engineer: **Nina Thorvaldsen Moberg**

for **DNV GL**

Inger-Helene Hals
Head of Section

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.

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Product description

This Type Approval Certificate replaces certificate S-8253.

This Type Approval Certificate covers chain for use in Lifting Sets certified to standard DNVGL-ST-E271 - 2.7-1 Offshore Containers (DNV GL 2.7-1) or standard DNVGL-ST-E273 - 2.7-3 Portable Offshore Units (DNV GL 2.7-3) and EN 818-2 Short link chain for lifting purposes - Safety - Part 2: Medium tolerance chain for chain slings - Grade 8.

Detailed product information and range of certified products covered by this Type Approval are listed in Appendix 1 of this Type Approval Certificate.

Manufactured by

Pewag Austria GmbH takes responsibility that both design and production are in compliance with the Rules, Standards and/or Regulations listed on page 1 of this Type Approval Certificate.

Application/Limitation

Tests to be carried out:

- Production testing: According to DNV GL 2.7-1 and EN 818-2 in agreement with the DNV GL surveyor.
- Material to be impact tested by Charpy impact method according to DNV GL 2.7-1, Section 8.4 or DNV GL 2.7-3 Section 7.4.

For application of chains the minimum working load limit (WLL) shall be decided according to the strength requirements for lifting sets on offshore containers as given in DNV GL 2.7-1, Section 8 or DNV GL 2.7-3 Portable Offshore Units Section 7.

The manufacturer shall issue product certificates according to Section 8.5 in DNV GL 2.7-1, using the applicable certificate form of No. 01-2AD.07.02.04/I-F_components_E and 01-2AD.07.02.04/I-F_components_E/N. These certificate forms are the only one to be used for chains certified according to this Type approval Certificate.

For chains manufactured according to DNV GL 2.7-3
Prior to selection of chain the minimum required working load limit (WLL) shall be decided according to the strength requirements for lifting sets on portable offshore units as given in DNV GL 2.7-3, Section 7.3.2. Resulting sling force (RSF) can be found in the Design Verification Report (DVR) issued by DNV GL for the Portable Offshore Unit. The DVR shall be available for the chain manufacturer.

Type Approval documentation

Tests carried out

Prototype strength tested according to standards listed on the front page of this type approval certificate.

Marking of product

Marking should be according to DNV GL 2.7-1 Section 8 or DNV GL 2.7-3 Section 7, EN 818-2 and internal procedures.

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform a survey every 6 months and before the expiry date of this certificate to verify that the type approval is complied with.

END OF CERTIFICATE

Appendix 1

Product description and details

Chain Offsh Ni:

Type	Dia. [mm]	WLL [t]	MPF [kN]	Min. BF [kN]
Offsh Ni 10	10	3.15	78.5	126
Offsh Ni 13	13	5.3	133	212
Offsh Ni 16	16	8.0	201	322
Offsh Ni 19	19	11.2	284	454
Offsh Ni 22	22	15.0	380	608
Offsh Ni 26	26	21.2	531	849
Offsh Ni 32	32	31.5	804	1290

Chain WIN:

Type	Dia. [mm]	WLL [t]	MPF [kN]	Min. BF [kN]
WIN 10	10	3.15	78.5	126
WIN 13	13	5.3	133	212
WIN 16	16	8.0	201	322
WIN 19	19	11.2	284	454
WIN 22	22	15.0	380	608