

Certificate No: TAS000018M

TYPE APPROVAL CERTIFICATE

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That the Chain, shackles, swivels, sockets

with type designation(s)

Green Pin Power Sling Shackles

Issued to

Van Beest B.V. SLIEDRECHT, Netherlands

is found to comply with

DNV GL standard DNVGL-ST-0378 – Standard for offshore and platform lifting appliances DNV GL standard DNVGL-ST-0377 – Standard for shipboard lifting appliances

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at Høvik on 2017-11-16

This Certificate is valid until 2022-11-15. for DNV GL

DNV GL local station: Rotterdam, Offshore &

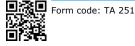
Newbuilding

Approval Engineer: Antonio Sendin Alvarez

Aldo Matteucci

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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Job Id: **262.1-026975-1** Certificate No: **TAS000018M**

Product description

Green Pin Power Sling Shackles with the following characterisctics:

- SWL's = 125, 150, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1000 & 1250 tonnes
- Maximum allowable dynamic amplification factor (DAF) = 1.3
- Design temperature: -20 °C

Application/Limitation

- 1. All materials are to be delivered with 3.1 certificates, documenting mechanical properties and chemical composition in accordance with the Type Approval documentation.
- It is the responsibility of the Holder of the Certificate to ensure that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this Type Approval Certificate.
- 3. The minimum safety factor with respect to material breaking strength is 5.

Type Approval documentation

Tests to be carried out

In order to obtain a CG3 certificate, each shackle shall be tested according to DNVGL-ST-0378, Table 14-2.

Marking of product

Each shackle shall be marked according to DNVGL-ST-0378 Sec.14.5

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform periodical surveys on dates agreed with the manufacture and before expiry date of this certificate in order to verify that the conditions of the type approval are complied with.

END OF CERTIFICATE

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