DNV·GL

Certificate No:
TAD000012F

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
4-Way Lifting Sling assembly (PN 10112862)

Issued to
Varco BJ B.V.
Etten-Leur, Noord-Brabant, Netherlands

is found to comply with
DNVGL-OS-E101 – Drilling facilities, Edition January 2018

Application :

Lifting sling assembly, with spreader bar approved for lifting of drilling equipment.

Issued at **Høvik** on **2019-03-08**
This Certificate is valid until **2024-03-07**.
DNV GL local station: **Rotterdam, Product Certification /Verification**

Approval Engineer: **Hallvard Thune Uglane**

for **DNV GL**

Per Esvall
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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Reference Standards
DNVGL-ST-0378, Standard for offshore and platform lifting appliances, May 2016

Product description
Lifting sling assembly, with spreader bar approved for lifting of drilling equipment, e.g. master bushings, casing spiders, bowls and rotary table adapter bushings. Not approved for lifting of loads with COG significantly far from center of tool.

Application/Limitation
Safe Working Load (SWL) 4-way sling: 6 short tons
Minimum design temperature: -20°C (-4°F)

Type Approval documentation

Tests to be carried out

Test procedures:
1. Each product is to be tested according to DNV GL's Offshore Standard DNVGL-OS-E101 "Drilling Facilities", January 2018, Ch.2, Sec.8, 4.1, including load test according to DNVGL-ST-0378 Table 14-2.
2. Charpy impact testing shall be performed in accordance with DNVGL-OS-E101 "Drilling Facilities" Ch.2, Sec.2, 2.6

Comments

- All loose gear as wires, chains, schackles and couplers are to be delivered with pertinent ILO-certificates.
- Tolerance of length of multilegged sling assemblies are to be carried out in compliance with a recognized standard, e.g. ISO 7531 : 1987.
- All end terminations of wire is to be performed in accordance with a recognized standard and by qualified personnel.
- The notes on drawing 200982-1 must be followed.

Marking of product
For tracability and compliance with DNVGL-ST-0378, Sec. 14.5.5, each sling set should as a minimum be marked with:
- SWL
- Component traceabiliy
- Manufacturer's Name or Mark

Periodical assessment
For retention of the Type Approval, DNV GL Surveyor shall perform a survey – every second year and before the expiry date of this certificate. This is in order to verify that the conditions for the type approval are complied with, ref. DNVGL-CP-0338, DNVGL Type approval scheme.

This certificate replaces Type Approval Certificate No. D-5693.

END OF CERTIFICATE