

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Hoisting, Rotation and Pipehandling Equipment**with type designation(s)  
**Swivel Suspension Assembly**

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 :****Maximum load rating: 5 short tons (44,5 kN)**  
**Minimum design temperature: -20°C (-4°F)**Issued at **Høvik** on **2020-05-19**This Certificate is valid until **2025-05-18**.DNV GL local station: **Netherlands CMC**for **DNV GL**Approval Engineer: **Hallvard Thune Uglane**.....  
**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



## Reference Standards

DNVGL-ST-0378 "Offshore and platform lifting appliances", July 2019.

## Product description

Swivel Suspension Assembly, 5 short tons.

## Application/Limitation

Maximum load rating: 5 short tons (44,5 kN)

Minimum design temperature: -20°C (-4°F)

## Type Approval documentation

### Tests carried out

Test procedures:

1. Each product is to be tested according to DNVGL-OS-E101 "Drilling Facilities", January 2018, Ch.2, Sec.8, 4.1.
2. Charpy impact testing shall be performed in accordance with DNVGL-OS-E101 "Drilling Facilities" Ch.2, Sec.2, 2.6.

## Marking of product

For traceability and compliance with DNVGL-ST-0378, 14.5 "Marking and Signboards", each unit shall as a minimum be marked with:

- Safe Working Load
- Identification mark
- Certifying authorities' stamp

## Comments

Wireslings, shackles and swivels are to be delivered with pertinent ILO-certificates.

## 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 the previously issued certificate D-5923.

END OF CERTIFICATE