



Certificate no.:
TAD00001R2

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
BX 9 Elevator 10776954-001

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

is found to comply with
DNV-OS-E101 – Drilling facilities, Edition July 2024

Application:

The elevator is designed for lifting and suspending tubular goods

Issued at **Høvik** on **2024-12-03**

This Certificate is valid until **2029-12-02**.

for **DNV**

DNV local unit: **Netherlands CMC**

Approval Engineer: **Ole Osuldsen**

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 USD 300 000.

Product description

Reference Standard

API Spec 8C, Specification for Drilling and Production Hoisting Equipment (PSL1 and PSL2), 5th Edition

Product description

BX 9 Hydraulic elevator p/n; 10776954-001

Application/Limitation

Maximum load rating: 1250 Sh Tons fitted w/18 degree Drill pipe bushing
1500 Sh Tons fitted w/square shoulder bushing.

Minimum design temperature: -20 °C

Bore sizes: 4" – 10 3/4"

API 8C PSL level 1/2

Type Approval documentation

Tests to be carried out

Test procedures:

1. Each product is to be tested according to DNV Offshore Standard DNV-OS-E101 "Drilling Facilities", January 2024, Ch.2, Sec.8, 3, including proof load test according to API Spec 8C, Ch 8.6.
2. Charpy impact testing shall be performed in accordance with DNV-OS-E101 "Drilling Facilities" Ch.2, Sec.2, 2.
3. Qualification of welders, welding- and heat treatment procedures shall be in accordance with DNV-OS-E101 "Drilling Facilities" Ch.2, Sec.8, 2.3 to 2.5.

PSL 2

4. PSL 2 units shall meet the stricter demands for materials, welding, quality control (NDE) and as described in Chapters 6, 7 and 8 respectively in API Spec 8C.

Marking of product

For traceability and compliance with API 8C, Sec. 10, each unit should as a minimum be marked with:

- API Spec 8C
- PSL number
- Load rating
- Component traceability
- Drillpipe size and style (if used for lifting drillpipes)

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338. 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>

END OF CERTIFICATE