

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Hoisting, Rotation and Pipehandling Equipment**

with type designation(s)

5 Ton 'SJX' Single Joint Elevator, Part No. 50004929/31/33/35

Issued to

Varco BJ B.V.**Etten-Leur, Netherlands**

is found to comply with

DNVGL-OS-E101 – Drilling facilities, Edition January 2018**Application :****The elevator is designed for lifting and suspending tubular goods.**Issued at **Høvik** on **2018-10-03**This Certificate is valid until **2023-10-02**.for **DNV GL**DNV GL local station: **Rotterdam**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.



Job Id: **262.1-014703-4**
Certificate No: **Error! Reference source not found.**

Reference Standards

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

Product description

5 short ton 'SJX' Single Joint Elevators:

Part no. 50004929

Part no. 50004931

Part no. 50004933

Part no. 50004935

Application/Limitation

- Maximum load rating: 5 short tons / 4.54 metric tons
- Minimum design temperature: -20 °C
- Bore sizes, part no. 50004929: 2,34" – 4,6"
- Bore sizes, part no. 50004931: 4.375" – 7.125"
- Bore sizes, part no. 50004933: 7" – 10.156"
- Bore sizes, part no. 50004935: 10" – 14"

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 proof load test according to API Spec 8C, Ch. 8.6.
2. Charpy impact testing shall be performed in accordance with DNVGL-OS-E101 "Drilling Facilities" Ch.2, Sec.2, 2.6.
3. Qualification of welders, welding- and heat treatment procedures shall be in accordance with DNVGL-OS-E101 "Drilling Facilities" Ch.2, Sec.8, 2.3 to 2.5.
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 tracability 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, 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 is a renewal and replaces the earlier issued Type Approval Certificate No. D-4863.

END OF CERTIFICATE