DNV·GL

Certificate No:
TAD00000KV

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
750 Ton Elevator/Spider 16” to 24 1/2" Varco Type Air/Hydraulic

Issued to
National Oilwell Varco - Varco BJ B.V.
Etten-Leur, Netherlands

is found to comply with
DNVGL-OS-E101 – Drilling plant, Edition July 2015

Application :

The elevator/spider tool is designed for lifting and suspending tubular goods, from light tubing to heavy wall pipe and drill collars.

Issued at **Høvik** on **2017-02-23**
This Certificate is valid until **2022-02-22**.
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.

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

Product description
750 Ton Elevator/Spider 16” to 24 1/2" Varco Type Air/Hydraulic.
The elevator/spider tool is designed for lifting and suspending tubular goods, from light tubing to heavy wall pipe and drill collars. The main body of these units can be dressed as a casing elevator or as a spider. The upper unit is dressed as an elevator, using a bottom guide and a bell guide. The lower unit is dressed as a spider, using a top guide to aid in centering the casing.

Application/Limitation
Maximum load rating: 6670 kN (750 short tons)
Minimum design temp: -20 °C (-4 ° F)
Minimum bore: 16”
Maximum bore: 24 1/2”
Lower link ears: 2 x 6 short tons

Type Approval documentation

Tests to be carried out

Test Procedures:
1. Proof load test in accordance with API Spec. 8C, Ch. 8.6, to be witnessed by DNV GL.
2. Charpy impact testing in accordance with DNVGL-OS-E101, Ch.2, Sec.2 & API Spec 8C, Ch. 6.3.

NDE Procedures:
3. Non-destructive examination methods, extent and acceptance criteria shall be in accordance with DNVGL-OS-E101, Ch.2, Sec.6.

Welding Procedures:
4. Qualification of welding procedures and qualification of welders shall be in accordance with DNVGL-OS-E101, Ch.2, Sec.6.

PSL 2:
5. 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.

Fabrication:
6. Each product is to be surveyed during fabrication in accordance with the requirements for equipment of Category I as defined in DNV GL's Offshore Standard DNVGL-OS-E101 Drilling Plant, followed by issuance of Product Certificate. If the intended installation is DNV GL Classed, then this automatically means DNV GL Product Certificate. Fabrication records are to be maintained in accordance with DNVGL-OS-E101 Ch.3, Sec.3, 2.1.2.

Marking of product

For tracability and compliance with API 8C, Sec. 10, each unit should as a minimum be marked with:
- Reference to type approval certificate
- API Spec 8C
- PSL number
- Load rating
- Component traceabiliy
- 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, DNV GL type approval scheme.

This certificate replaces previous type approval certificate no. D-4877.

END OF CERTIFICATE