DNV·GL

Certificate No:
TAD00001A3

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hoisting, Rotation and Pipehandling Equipment

with type designation(s)
250 Ton MGG 18 degr. Center Latch Elevator; PNs 35005, 36056, 200057, 200058

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 :

The elevator is designed for lifting and suspending tubular goods.

Issued at **Høvik** on **2020-05-13**
This Certificate is valid until **2025-05-12**.
DNV GL local station: **Netherlands CMC**

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.

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.

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Job Id: **262.1-009677-12**
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Reference Standards
API Spec 8C, Specification for Drilling and Production Hoisting Equipment (PSL1 and PSL2), 5th Edition

Product description
250 Ton MGG 18 degree Center Latch Elevator:
3-1/2" – 5-1/2" 250 Ton MGG Elevator
3-1/2" – 5-1/2" 250 Ton Air Operated MGG Elevator
3-1/2" – 5-1/2" 250 Ton Air Operated MGG Elevator w/wear bushing
3-1/2" – 5-1/2" 250 Ton MGG Elevator w/wear bushing

Application/Limitation
Maximum load rating: 2250 kN (250 short ton)
Minimum design temp: - 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 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.

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 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 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, DNVGL Type approval scheme.

This certificate is a renewal and replaces the earlier issued Type Approval Certificate No. D-5935.

END OF CERTIFICATE