Certificate no.:
**TAD00001TF**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**that the Pipe Fitting**

with type designation(s)
**3 1/8" 5K Flanges**

issued to
## National Oilwell Varco, L.P. - Rig Technologies Division - WLY
**Houston, TX, USA**

is found to comply with
**DNV-OS-E101 – Drilling facilities, Edition July 2024**
**DNV statutory interpretations DNV-SI-0166 – Verification for compliance with Norwegian shelf regulations, Edition July 2021**

## Application:

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV when accompanied by a valid DNV Product Certificate.**

Issued at **Houston** on **2026-04-06**
This Certificate is valid until **2031-04-05**. for **DNV**
DNV local unit: **Certification & Inspection Services**

Approval Engineer: **Xiangwen Maggie Wang**

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

- 3 1/8" 5K Blind Flanges, P/N: 18552415-300
- 3 1/8" 5K Weldneck Flanges, P/N: 18297492-300

## Reference standards

- API 6A, *Specification for Wellhead and Tree Equipment*, 21st Edition
- NACE MR0175/ISO 15156, *Petroleum and Natural Gas Industries – Materials for Use in $H_2S$ – Containing Environments in Oil and Gas Production*, 3rd Edition

## Application/Limitation

- Max. Working Pressure: 5,000 psi
- Test Pressure: 7,500 psi
- Design Temperature: -20 °F to 250 °F
- Service: $H_2S$
- API 6A Material Class: DD
- API 6A Product Specification Level: 3

## Type Approval documentation

Note: See material specifications for additional material requirements.

## Tests carried out

N. A.

## Marking of product

For traceability the following marking is to be carried out on each product:

1. Serial No.
2. Manufacturer's name or trademark.
3. Additional Marking at manufacturer's discretion.

## Periodical assessment

For retention of the Type Approval, DNV's surveyor shall perform periodical assessment after 2 years (+/- 90 days) and after 3.5 years (+/- 90 days) in accordance with DNV's Class Programme DNV-CP-0338, Section 4.

## Other conditions/comments

1. Procedures related to testing, welding, NDT, and other quality control requirements are to be reviewed/approved by DNV's local surveyor.
2. DNV ref.: A1882991.

## Manufactured by:

1. **NOV MFG India Private Limited**, Plot No. 4, Gat No.51/1,51/2,51/3,52(P),53(P),54(P),55,56,57,58 and 59 (P)Village Bhamboli, Taluka Khed, Chakan Pune 410501 India
2. **National Oilwell Varco, L.P. - Rig Technologies Division** – Creekmont, Houston, TX USA

END OF CERTIFICATE