



Certificate no.:
TAD00001T3

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Crossover**

with type designation(s)

Stress Joint Crossover w/ 8-5/8" Hydril 563 Thread Connection Top X MOD. 12" TECHLOK HUB Bottom

issued to

Worldwide Oilfield Machine, Inc.
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 **2026-01-14**

This Certificate is valid until **2031-01-13**.

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

Stress Joint Crossover, w/ 8-5/8" Hydril 563 Thread Connection Top X MOD. 12" TECHLOK Hub Bottom,
P/N: DRJ-1107310-0001

Application/Limitation

- API 6A, *Specification for Wellhead and Tree Equipment*, 21st edition
- API 5CT, *Specification for Casing and Tubing*, 10th edition
- API 17G, *Design and Manufacture of Subsea Well Intervention Equipment*, 3rd edition
- NACE MR0175/ISO 15156, *Petroleum and Natural Gas Industries – Materials for Use in H₂S – Containing Environments in Oil and Gas Production*, 3rd edition

Application/Limitation

- Max. Working Pressure: 10,000 psi
- Test Pressure: 10,000 psi
- Min. Design Temperature: -20 °F
- Max. Design Temperature: 250 °F
- Service: H₂S
- PSL: 3G

Type Approval documentation

Tests carried out

Doc No.: FAT-SS016 Rev 1, Factory Acceptance Testing Single Equipment Units. Witnessed by DNV on Jan. 12th, 2024.

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

- End connection 8-5/8" Hydril 563 is proprietary design and has been excluded from this approval. The claimed rating of it has not been evaluated by DNV for conformance to any applicable codes.
- Procedures related to testing, welding, NDT, and other quality control requirements are to be reviewed/approved by DNV's local surveyor.
- DNV ref.: A1851831.

Manufactured by:

Worldwide Oilfield Machine, Inc., Houston, TX

END OF CERTIFICATE