



Certificate no.:
TAD00001T1

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Blow out Preventer

with type designation(s)
5K WBSR-X, WIRELINE BLIND SHEAR RAM ASSEMBLY (SET), 18-15 RBOP

issued to
Hydril USA Distribution, LLC
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:

Products covered by this Type Approval Certificate are permitted for installation on vessels classed by DNV, provided each product is accompanied by a valid DNV Product Certificate (PC) issued in accordance with applicable DNV rules and standards.

Issued at **Houston** on **2025-12-08**

This Certificate is valid until **2030-12-07**.

for **DNV**

DNV local unit: **Certification & Inspection Services**

Approval Engineer: **Pari Natarajan**

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.

Design codes/standards used as references

- API 16A, Specification for Drill-through Equipment, 4th Edition

Application/Limitation

Design Parameter	Value
Family Type	Compact Ram BOPs
API 16A Performance Requirement Level	PR1 & PR2
Nominal Bore Size	18 3/4"
Rated Working Pressure	15,000 psia
API 16A Metallic Temperature Rating	T-20/250 (-20°F to 250°F)
API 16A Non-metallic Temperature Rating	CCF (PR1), DCF (PR2)
- Low Temperature Limit	10°F (PR1), 20°F (PR2)
- Continuous Elevated Temperature Limit	210°F
- Extreme Temperature Limit	350°F
Designation of Systems; Equipment Service	BOP Systems; BOP Equipment, Ram blocks Sour (H2S)

Type Approval documentation

Tests carried out

Marking of product

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

1. Serial No.
2. Marking as specified in API references.
3. Additional marking at the manufacturer's discretion

Periodical assessment

For retention of the Type Approval, DNV surveyor shall perform a retention survey every second year in accordance with DNV Type Approval Scheme DNV-CP-0338.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com/>

Other conditions/ comments

- Procedures related to testing, welding, NDE, and other quality control requirements are to be reviewed/approved by DNV local surveyor.
- When DNV Product Certification is required, each product is to be surveyed during fabrication in accordance with the requirements for Category I equipment as defined in DNV Offshore Standard DNV-OS-E101.

End of Certificate