

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Valve**

with type designation(s)
5-1/8"-10K Magnum Hydraulic

Issued to

Worldwide Oilfield Machine, Inc.
Houston, TX, USA

is found to comply with

DNVGL-OS-E101 – Drilling facilities, Edition January 2018

DNVGL-SI-0166 – Verification for compliance with Norwegian shelf regulations, Edition July 2018

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Houston** on **2020-01-09**

This Certificate is valid until **2025-01-08**.

DNV GL local station: **Houston, Approval CMC**

for **DNV GL**

Approval Engineer: **Xiangwen Maggie Wang**

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Meindert van Mierlo
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.



Product description

- Valve Assembly, 5-1/8"-10K Model MAGNUM Hydraulic

Reference standards

- API 6A, Wellhead and Christmas Tree Equipment, 21st 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: 15,000 psi
- Max. Working Pressure (Actuator): 3,000 psi
- Test Pressure (Actuator): 4,500 psi
- Design Temperature: -20 °F to 350 °F
- Design Temperature (Actuator): -20 °F to 150 °F
- Service: H₂S
- Material Class: DD, EE
- Product Specification Level: 3
- Performance Requirement: 2

Type Approval documentation

Tests carried out

PR-2 Test Report No. ENG.TEST.MAG.012 Rev. 0, 6-3/8"-15K 'MAGNUM' hyd. Gate valve.

Additional manufacturing locations

- Worldwide Oilfield Machine Pvt. Ltd.
Gat No. 778, at Post Velu
Pune Satara Road
Tal. Bhor, Dist. Pune 412 205, India
- Worldwide Oilfield Machine ME
Jebel Ali Free Zone (JAFZA) South
Plot# S61302,
Dubai, UAE

Marking of product

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

- Serial No.
- Manufacturer's name or trademark.
- Additional Marking at manufacturer's discretion.

Periodical assessment

For retention of the Type Approval, DNV GL's surveyor shall perform periodical assessment after 2 years and after 3.5 years in accordance with DNV GL's Class Programme DNVGL-CP-0338, Section 4.

Other conditions/comments

- Procedures related to testing, welding, NDT, and other quality control requirements are to be reviewed/approved by DNV GL's local surveyor.
- Non-metallic materials shall be suitable for the intended service and shall be capable of sustaining the design pressures and temperatures. Non-metallic materials in wetted components shall be tested in order to ensure compatibility with all fluids that they will be exposed to during service, as specified.
- DNV GL ref.: A0775153.



Job Id: **262.1-032777-1**
Certificate No: **TAD000017Z**

END OF CERTIFICATE