



Certificate no.:
TAD00001S8

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Kill and Choke Equipment

with type designation(s)
ADJUSTABLE CHOKE, CH2M 1" BODY (P/N: 19188258-092)

issued to

NOV Process & Flow Technologies US, Inc - Houma
Houma, LA, 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 **2025-08-29**

This Certificate is valid until **2030-08-28**.

for **DNV**

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

Approval Engineer: **Parna Deljo**

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.

Reference Standard

- API 6A, *Specification for Wellhead and Tree Equipment*, 21st edition.

Product description

CH2M ADJUSTABLE CHOKE, 1" MAX ORIFICE (P/N: 19188258-092)

Application/Limitation

<u>Design Parameter</u>	<u>Value</u>	<u>Equivalent</u>
Maximum Working Pressure	: 15,000 psi	(103.5 MPa)
Hydrostatic Test Pressure	: 22,500 psi	(155.1 MPa)
Design Temperature Range (API 6A Temperature Class P+U)	: -20°F to 250°F	(-29°C to 121°C)
Material Class	: BB	
Product Specification Level	: PSL 2	
Performance Rating	: PR 1	
Service	: Standard	
System/Equipment	: Choke & Kill Systems	

Type Approval documentation

Tests carried out

<u>Doc No.</u>	<u>Rev.</u>	<u>Title</u>
CPSP060909-PRO	10.02	ENGINEERING TEST REQUIREMENTS PER API 6A ANSI B16.5 AND ANSI/FCI 70-2 FOR PRODUCTION CHOKES

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 the manufacturer's discretion

Periodical assessment

Periodical assessments for type approvals will be required after two years (+/- 90 days) and after three-and-a-half years (+/- 90 days) in accordance with 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. Actuator design review is excluded from this TAC. When equipment is certified to DNV-OS-E101, actuators are also subject to Category I equipment requirements and the specified requirements of the applicable normative reference for the system and/or equipment (See API 6A Sections 14.11.2 & 14.16.2).
3. Actuator torque limitations specified by the equipment manufacturer shall be complied.
4. Hammer Union End Connection Components shall be supplied with design and survey documentation conforming to DNV-OS-E101 for Category I Equipment with design limitations greater than or equal to those specified in this report.
5. DNV ref.: A1706041

END OF CERTIFICATE