DNV·GL

Certificate No:
TAD00000ZN

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Accumulators

with type designation(s)
187A75-640-A252, 187A75-800-A252, 187A75-880-A252, 187A75-960-A252, 187A75-1200-A252, 187A75-1280-A252

Issued to
Tobul Accumulator Incorporated
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 - Ch.2 Sec.7 DRILL(N), July 2015

Application :

See page 2

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

This Type Approval Certificate is three pages long and replaces D-4711, as issued on 2012-09-11.

Issued at **Houston** on **2018-08-30**
This Certificate is valid until **2023-08-29**.
DNV GL local station: **Certification & Inspection Services**

for **DNV GL**

Approval Engineer: **M. Kevin Mandeville Jr.**

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.

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Job Id: **262.1-014151-2**
Certificate No: **TAD00000ZN**

Product description

80 Gallon Stainless Steel Piston Type Accumulator, Model No. 187A75-640-A252
100 Gallon Stainless Steel Piston Type Accumulator, Model No. 187A75-800-A252
110 Gallon Stainless Steel Piston Type Accumulator, Model No. 187A75-880-A252
120 Gallon Stainless Steel Piston Type Accumulator, Model No. 187A75-960-A252
150 Gallon Stainless Steel Piston Type Accumulator, Model No. 187A75-1200-A252
160 Gallon Stainless Steel Piston Type Accumulator, Model No. 187A75-1280-A252

Application/Limitation

Design Parameter	Value	Equivalent
Max. Allowable Internal Working Pressure	7,500 psi	517.1 bar
Max Differential to External Pressure	3,876 psi	267 bar
Max Internal Test Pressure	11,250 psi	775.7 bar
Min Design Temperature	-20 °F	-29 °C
Max Design Temperature	200 °F	93 °C
Corrosion Allowance	0in.	0mm

Type Approval documentation

Type Tests

Type Testing is not required for this renewal.

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

For retention of the Type Approval, DNV GL's surveyor shall perfrom a survey after two and three-and-a-half-years, in accordance with DNV GL's Type Approval Class Program, DNVGL-CP-0338.

Other conditions/comments

- Procedures related to testing, welding, NDE, and other quality control requirements are to be reviewed/approved by DNV GL's local surveyor
- Examination of castings to be in accordance with the requirements of ASME 2017 BPVC Sec. VIII Div.1, Mandatory Appendix 7 & 8
- DNV GL Ref. Project No. A0563676

END OF CERTIFICATE