DNV·GL

Certificate No:
TAD0000145

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Accumulators

with type designation(s)
3000 PSI WP Piston Type Accumulator, 5 Gallon Capacity (Non-Subsea Application)

Issued to
Kocsis Technologies Inc.
Alsip, IL, 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 **2019-05-07**

This Certificate is valid until **2024-05-06**.

DNV GL local station: **Certification & Inspection Services**

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

for **DNV GL**

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: **262.1-031166-1**
Certificate No: **TAD0000145**

The following design codes/standards were used as references:

ASME *Boiler and Pressure Vessel Code*, Section VIII, Div. 1, 2017 Ed.
ASME B1.1 *Unified Inch Screw Threads (UN and UNR Thread Form)*, 1989 Ed.

Product description

3000 PSI WP Piston Type Accumulator (non-subsea applications), 5 Gallon Capacity

Application/Limitation

Parameter	Value	Equivalent
Max Allowable Working Pressure	3000 psi	207 bar
Hydrostatic Test Pressure	4500 psi	310 bar
Design Temperature	200°F	93°C
Minimum Design Metal Temperature	20°F	-6.7°C
Corrosion Allowance	0in	0mm
Type of service	Standard	

Type Approval documentation

Drawings

Tests carried out

Test Procedure TS-41-28, Rev. R.1, carried out on 2019-04-16 on serial number 19041928 & 19041929.

Marking of product

For traceability to this Type Approval Certificate, the products are at a minimum to be marked as follows:

1. Manufacturer's Name and Trademark
2. Serial Number and/or National Board Number
3. Additional marking at the Manufacturer's discretion
4. As required in ASME BPVC Section VIII, Div. 1, 2017 Ed.

Periodical assessment

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

Other Comments and Conditions

1. DNV GL Project Reference: A0661129

END OF CERTIFICATE