

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMT00000K0****This is to certify:****That the Manufacturer****SAIP SRL****Via Lambro, 23 / 25 / 27  
20090 OPERA MI, Italy**

is approved for the

**Manufacturing of Seamless Gas Bottles and Pressure Equipment Class I and II**

The approval is granted on condition that

**DNV GL class programme DNVGL-CP-0261 – Manufacture of pressure equipment**

are complied with in all respect

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.

Issued at **Hamburg** on **2021-01-20**This Certificate is valid until **2024-01-19**.DNV GL local station: **Italy/Malta CMC**Approval Engineer: **Frank Juckel**for **DNV GL**

Digitally Signed By: Schmidt, Matthias



Location: DNV GL Hamburg, Germany

Signing Date: 2021-01-22 on behalf of .....

**Harald Pauli  
Head of Section**

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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 300,000 USD. This Certificate is subject to terms and conditions overleaf. Any significant change in production facilities and methods may render this Certificate invalid.



## Approval basis

### Product categories:

- unwelded pressure equipment of class I & II:
  - seamless pressure vessel: accumulators/pulsation dampers/piston

### Remark on Product categories:

Forming and/or hot forming of any seamless cylinders or semi-finished materials used within production of the pressure equipment class I & II is not covered. Such parts shall be supplied from sub-supplier(s) holding the relevant DNVGL AOM-Certificate(s).

### Activity categories:

- production of pressure equipment (DNV GL-CP-0261)
- non-destructive testing (NDT)
- machining

### Remark on NDT:

For non-destructive tests pertaining to pressure equipment class I & II, the procedure and requirements stipulated in specific class guidance DNVGL-CG-0051 & DNV GL Pt.4 Ch.7 Sec.7 [4] shall be applied.

### Remark on further activities:

The following facilities are not available in manufacturing place and if required according to DNVGL-RU-SHIP-Pt.4 Ch.7 then:

- Welding to be performed at an approved welding workshop as per DNVGL-CP-0352.
  - Heat treatment to be performed at an approved heat treatment workshop as per DNVGL-CP-0351.
  - Manufacturing of pressed parts shall be from an approved facility as per DNVGL-CP-0350.
- Surveyor may decide to visit the subcontractor as part of AOM survey.

## Approval documentation

Supporting documents from DNV GL surveyor and further accompanying documentation:

- checklist initial approval of manufacturers (CP-0346, form 20.101a), 2020-10-23
- manufacturers application (CP-0261, form PEM-901), 2020-10-23
- checklist for initial approval of pressure equipment manufacturers (CP-0261, PEM 601 Rev.1), 2020-10-23 submitted by email 2020-11-27
- email from station submitted 2020-11-27 (correspondence no.7)
- email from station submitted 2020-12-18 (correspondence no.16)

## Certificate Retention Survey

The AoM certificate is valid for three years with no intermediate assessment unless otherwise requested by the Society. Application for renewal should be made not later than three months before the expiry date of the certificate.

Manufacturer shall invite the Society's surveyor for renewal survey in order to revisit the critical manufacturing steps and to verify that the approved conditions are maintained.

During the survey the manufacturer shall provide evidence that the applicable versions of relevant rules, standards and approval programs are applied, and that all requirements given therein are implemented.

**CERTIFICATE**  
FOR PRESSURE VESSEL - OTHER

Certificate No:  
**N142EZH8**

**This is to certify**

that the product: **28 x Seamless Accumulator**  
Type designation: **LA4 acc. to dwg No. LA.1.4.1.X6.C5.B4PT17 Rev.1**  
Application/context: **Hydraulic system**  
Serial/tag no: **Please see below**

Has been found to comply with relevant requirements in:  
**DNV-OS-E201 (ed. 2021-07)**

The product is intended for

Yard: **Cosco (Shanghai) Shipyard Co. Ltd.**  
Yard No: **-**  
Name of vessel: **FPSO MARIA QUITÉRIA**  
DNV Id No: **D44411**

The product / material has been marked: **N142EZH8 - NV Class stamp on: Nameplate and Pressure vessel Body**

**Particulars of Vendor and Purchaser**

Vendor: **SAIP SRL**  
Vendor reference: **OC1 2202200**  
Purchaser: **EagleBurgmann Norway AS**  
Purchaser reference: **3500111681**

Issued at **Italy/Malta CMC** on **2022-12-16**

for DNV

This document has been digitally signed and will  
therefore not have handwritten signatures

**Boniotti, Paolo**  
**Surveyor**



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**Linked Plan Approvals:**

M-OA-PE/VEGHJE/D44411-J-1264, SAIP SRL, issued 2022-10-24

M-OA-PE/VEGHJE/D44411-J-1245, SAIP SRL, issued 2022-10-20

**Product parameters:**

Parameter name	Value	Unit
Pressure vessel class	I	
Pressure, design	145	bar
Temperature, design maximum	80	°C
Temperature, design minimum	-15	°C
Pressure, test	188.5	bar
Volume	0.0043	m <sup>3</sup>

**Serial/Tag no:**

222200/1 222200/2 222200/3 222200/4 222200/5 222200/6 222200/7 222200/8 222200/9 222200/10 222200/11  
222200/12 222200/13 222200/14 222200/15 222200/16 222200/17 222200/18 222200/19 222200/20 222200/21  
222200/22 222200/23 222200/24 222200/25 222200/26 222200/27 222200/28

SAMPLE