



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMT0000020
Revision No:
2

This is to certify:

That the Manufacturer

Roth Mions
Mions, Rhone, France

is approved for the
Manufacturing of Seamless Gas Bottles and Pressure Vessels Class I and II

The approval is granted on condition that

DNV class programme DNV-CP-0261 – Manufacture of pressure equipment
DNV class programme DNV-CP-0350 – Manufacture of pressed parts and seamless gas cylinders

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 **Høvik** on **2023-12-06**

for **DNV**

This Certificate is valid until **2026-06-30**.

DNV local unit: **France CMC**

Approval Engineer: **Jane Lozanov**

Zeinab Sharifi
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 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 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:

- un-welded pressure equipment of class I & II:
 - seamless gas cylinders/ seamless accumulators according to DNV-RU-SHIP Pt.4 Ch.7 and EN 14359.

Activity categories:

- production of pressure equipment (DNV-CP-0261)
- manufacturing of pressed parts and seamless gas bottles (DNV-CP-0350)

The facilities for heat treatment and welding are not available in the manufacturing place and if required (according to DNV-RU-SHIP Pt.4 Ch.7), then:

- heat treatment deviant to below shall be performed at an approved heat treatment workshop (as per DNV-CP-0351)
- welding shall be performed at an approved welding workshop (as per DNV-CP-0352)

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

Scope of approval

Seamless gas cylinders and seamless accumulators

Steel type	Grade ³⁾	Manufacturing method ¹⁾	Delivery condition ²⁾	Min. wall thickness [mm]	Max. outer diameter [mm]
Alloy	34CrMo4	HF	QT	8.33	226.2

Remarks:

- 1) HF: Hot forming
- 2) QT: Quenched and tempered
- 3) Pre-material supplier: Manufacturers approved by DNV for the applicable grades of semi-finished products.

Approval documentation

- Checklists for renewal/extension of approved manufacturers signed by DNV Surveyor, dated 2023-09-04.

Certificate Retention Survey

The AoM certificate is valid for three years with no intermediate assessment unless otherwise requested by the Society.