



Marine & Offshore

Certificate number: 00661HBR25

The continuation sheet(s) form(s) part of the attestation.

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CERTIFICATE FOR HOSE (FLEXIBLE PIPE)

Applicant : BRUGG Rohrsysteme GmbH (Wunstorf - DEU)

Product description : METALLIC FLEXIBLE HOSES

Quantity : 15 pcs

Particulars of products as declared by the applicant :

Manufacturer	: BRUGG Rohrsysteme GmbH (Wunstorf - DEU)
Type	: Flexwell Cryo Pipe (FCP) and Flexwell All-in-One (AiO)
Sizes	: FCP 30/61, FCP 48/94, AiO VIP 39-64/115, type 3 hoses
Nominal diameter (ND)	: DN 25, DN 32, DN 40
Maximum working pressure	: 25 bar (DN 25), 30 bar (DN 32 & 40)
min operating temperature	: -200 °C
max operating temperature	: +50 °C
Design approval	: HBR/2022/024023
Material	: 1.4404 + LD-PE sheath
Test pressure	: 36 bar (FCP 30/61), 43 bar (FCP 48/94, AiO VIP 39-64/115)

Technical specifications : ISO 10380:2012

Scope of intervention : See continuation sheet(s)

Enclosures / Remarks : Further information may be found in attached test protocols.

This certificate attests that the products tests / checks described in the continuation sheet(s) were carried out under the attendance / by Bureau Veritas Marine & Offshore with no remark in view of the relevant part of the above referenced technical specifications as declared by the applicant.

Marking : Hose type, hose no.

Last attendance date : 05 Feb 2025

Surveyor : Tobias Wilmsmann

Issuance date : 05 Feb 2025

Office : BV HAMBURG

This certificate was created electronically and is valid without signature



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SCOPE OF INTERVENTION

The used pipes Flexwell Cryo Pipe (FCP) and Flexwell All-in-One (AiO) in the sizes were:

- FCP 30/61 (5 pcs.)
- FCP 48/94 (5 pcs.)
- AiO VIP 39-64/115 (5 pcs.)

Manufacturer: BRUGG Rohrsysteme GmbH, D-31515 Wunstorf / GERMANY

The following tests were carried out on 29+30 May and 12 June 2024 in accordance with international standard ISO 10380:2012 (Pipework - Corrugated metal hoses and hose assemblies), as a type 3 hose, witnessed by BV:

- Pliability
- Leaktightness test
- Pressure resistance test
- Elongation
- Electrical conductivity test
- Burst test

All tests were carried out successfully and passed.

The BV Rules NR467 (Jan. 2025), Pt. C, Ch 1, Sec. 10, Table 35 (Piping Systems), refers to the international standard ISO 10380:2021 and described type tests and procedures for metallic flexible hoses depending on the application.