



Marine & Offshore

Certificate number: 62650/A0 BV

File number: .

Product code: 2104I

This certificate is not valid when presented without the full attached schedule
composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

GUMIS d.o.o.
SOLIN - CROATIA

for the type of product

NON-METALLIC HOSES (FLEXIBLE PIPES) ASSEMBLIES

GumVac flexible hose assembly

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 10 Nov 2025

For Bureau Veritas Marine & Offshore,

At BV SPLIT, on 10 Nov 2020,

Vladislav BORIC



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

GumVac flexible hose assembly

1.1 Ratings

Model	GumVac
DN (mm)	50
Max. Working Pressure (bar)	0.72
Vaccum Pressure (bar)	- 0.85
Temperature range (°C)	5 / 65

The maximum working pressure is not to exceed one quarter of the burst pressure at the service temperature.

1.2 Materials

Part	Material
Tube	PVC
Fittings	Rubber

When other choices of materials are used per manufacturer's recommendations, the BV agreement is to be obtained.

2. DOCUMENTS AND DRAWINGS

- Technical Data Sheet dated 13/10/2020
- Assembly Procedure dated 13/10/2020

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS

3.1 - Type tests witnessed by a BV Surveyor including burst test at 4 times the design pressure, visual inspection & dimensional check, change in length and a cover adhesion test.

- Test report dated 28/09/2020

3.2 - Vacuum test report dated 28/09/2020 performed according to ISO 7233:2016

4. APPLICATION / LIMITATION

4.1 - May be used for vacuum operated sewage systems and gravity sewage drain systems.

4.2 - End fittings as per manufacturer's catalogue. The hoses are to be entirely assembled in the manufacturer's workshop.

4.3 - The hoses are to be limited to a length necessary to provide for relative movement between fixed and flexibly mounted items of machine/equipment or systems and are only to be used in length up to 2.5 m. The hoses are to be installed in clearly visible and readily accessible locations at all times.

4.4 - The hoses assemblies are to be installed according to manufacturer's instructions and Bureau Veritas Rules

4.5 - Tapered threaded end fittings are not to be used in engine rooms, nor in any place containing an ignition source unless otherwise suitably screened at the Society's Surveyor satisfaction.

4.6 - Not to be used in case of high level of vibrations where fitted to engines, pumps, compressors and other sources of high vibrations

4.7 - Not to be used when approved fire resistant type is required by the Bureau Veritas Rules except in cases where such hoses are installed on open decks.

4.8 - Not to be used where pressure impulses may occur.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 - The products are to be supplied by **GUMIS d.o.o.** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product certificate is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

5.4 - Each hose assembly is to be hydraulically pressure tested to 1.5 times the maximum working pressure and provided with the manufacturer's pressure test report and conformity of production.

5.5 - For information, **GUMIS d.o.o.** has declared to Bureau Veritas the following production site:

- **GUMIS d.o.o.: ZORANICEVA 38, 21210 SOLIN, CROATIA**

6. MARKING OF PRODUCT

Each flexible hose shall at least clearly and indelibly marked with:

- Manufacturer name or logo
- Date of manufacture (month/year)
- Type designation
- Nominal Diameter
- Pressure rating
- Temperature rating
- Society's brand as relevant

7. OTHERS

It is **GUMIS d.o.o.**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

***** END OF CERTIFICATE *****