



Marine & Offshore

Certificate number: 33955/C0 BV

File number: ACM 135/1947/3

Product code: 2140H

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

Van Leeuwen Deutschland GmbH & Co. KG

Falkensee - GERMANY

for the type of product

MECHANICAL JOINTS - COMPRESSION COUPLINGS - SWAGE TYPE

STAINLESS STEEL PIPE CONNECTIONS PreFiS

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: 20 Apr 2027

For Bureau Veritas Marine & Offshore,

At BV HAMBURG, on 20 Apr 2022,

Adama Diene

This certificate was created electronically and is valid without signature



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:

Stainless steel pipe connections PreFiS

1.1 Design (swage type):

The connection system for carbon and stainless steel pipes consists of:

- A cylindrical sleeve which encloses both ones to combining ends of tube
- Two pressing units on the left and right part of the sleeve, each of them comprising three pressing rings

1.2 Range:

Outside pipe diameter [mm]	10	26.9	33.7	48.3	60.3	76.1
Pipe thickness [mm]	1.5	2.6	3.6	3.6	4.0	4.0
Max. working pressure [bar]	260	180	160	140	140	100

Temperature range: -55°C to +300°C

1.3 Material specification:

Body	Stainless steel 1.4571 / 1.4404 (316Ti and 316L)
Outer/ inner press-rings	Carbon steel 1.7227 or equivalent

2. DOCUMENTS AND DRAWINGS:

Drawings:

- . 201.00.03/010.0:02.0-010.0:02.0
- . 201.00.03/026.9:02.9-026.9:02.9
- . 201.00.01/033.7:04.0-033.7:04.0
- . 201.00.03/048.3:04.0-048.3:04.0
- . 201.00.03/060.3:04.0-060.3:04.0
- . 201.00.03/076.1:04.5-076.1:04.5

3. TEST REPORTS:

- 3.1 Assembling test, pressure impulse and vibration test, vacuum test, burst test, static gas pressure test, pull-out test performed on 08/11/2000 at IMA Materialforschung und Anwendungstechnik in Dresden/GERMANY. Test report no. C37/0E.
- 3.2 Fire endurance test performed on 27/10/2009 at WDT 71 in Kiel/GERMANY. Test report n° WTA 91317.

4. APPLICATION / LIMITATION:

- 4.1 The pipe connections may be used on board for the following systems:
- Sea water and fresh water
 - Compressed air
 - Lubricating oil, fuel oil and hydraulic systems
 - Fire extinguishing systems
- 4.2 The wall thickness and material of the tubes are to be in accordance with the BUREAU VERITAS Rules.
- 4.3 Manufacturer's requirements regarding the pipes to be connected:
- Welded stainless steel pipes acc. DIN 17457, section 5.5, Pipes are to be heat treated tinner-free with metallic-naked surface condition;
 - Seamless stainless steel pipes acc. DIN 17458, table 6, symbol "h" - cold formed and heat treated tinner-free with symbol "c2"
 - Metallic-naked annealed and smoother surface condition;
 - Stainless steel pipes acc. EN ISO 1127: Section 4.1 limiting measurements for the outer diameter, table 1 tolerance class D3 and section 4.2 limiting measurements for the wall.
- 4.4 Installation and maintenance in accordance with manufacturer's "Assembly instructions".

- 4.5 Minimum distances from pipe to pipe, from pipe to wall and in corners area according to the manufacturer's recommendations.
- 4.6 The maximum misalignment between the two connected pipes must not exceed the manufacturer's recommendations values.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The pipe connections are to be supplied by **Van Leeuwen Deutschland GmbH & Co. KG** in compliance with the type described in this certificate.
- 5.2 This type of product is within the category HBV of BUREAU VERITAS Rule Note NR320 and as such does not require a BUREAU VERITAS product certificate.
- 5.3 **Van Leeuwen Deutschland GmbH & Co. KG** has to make the necessary arrangements to have its works recognised by BUREAU VERITAS in compliance with the requirements of NR320 for HBV products.
- 5.4 For information, **Van Leeuwen Deutschland GmbH & Co. KG** has declared to BUREAU VERITAS the following production site:
Bohn GmbH, Berlin / GERMANY

6. MARKING OF PRODUCT:

Each pipe connection is to be clearly identified to avoid any wrong utilization as manufacturer's instructions:

- Manufacturer's name or logo
- Model
- Pipe size
- Nominal pressure

7. OTHERS:

- 7.1 It is **Van Leeuwen Deutschland GmbH & Co. KG**'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.
- 7.2 This certificate supersedes the Type Approval Certificate N° 33955/B2 BV issued on 08 Sep 2020 by the Society.

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