



Marine & Offshore

Certificate number: 08683/E0 BV

File number: ACM 135/2210/2

Product code: 2170H

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

Viega Technology GmbH & Co. KG

Attendorn - GERMANY

for the type of product

MECHANICAL JOINTS - COMPRESSION COUPLINGS - PRESS TYPE

VIEGA SANPRESS SYSTEM and VIEGA SANPRESS INOX SYSTEM

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships

BUREAU VERITAS Rules for the Classification of Offshore Units

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 is a renewal of certificate N° 08683/D0 BV expiring on 17/02/2019

This certificate will expire on: 17 Feb 2024

For Bureau Veritas Marine & Offshore,

At BV HAMBURG, on 13 Nov 2018,

Adama Diene



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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

VIEGA Sanpress system and VIEGA Sanpress-INOX system

1.1 Design:

- Compression couplings, press type
- Thin walled pipes made of stainless steel pipes and copper pipes
- Fittings made of stainless steel (up to O.D. 54 mm) and tinned gun metal with a synthetic sealing element
- SC-Contur (safety connection) for visible testing security
- The crimping is achieved with a special crimping tool

1.2 Range:

Type	Sanpress Inox	Sanpress
Pipe O.D. x wall thickness [mm]	15x1.0; 18x1.0; 22x1.2; 28x1.2; 35x1.5; 42x1.5; 54x1.5; 64x2.0; 76.1x2.0; 88.9x2.0; 108x2.0	12 to 108
Max. working pressure [bar]	16	16
Max. working temperature [°C]	95	95

1.3 Raw material:

Tubes	Stainless steel acc. to DIN EN 10312, AISI 316L (1.4401) Copper acc. to DIN EN 1057, NF A 51.120 or equivalent
Fittings	Stainless steel acc. to DIN EN 10312, AISI 316L (1.4401) CuSn5Zn5Pb2-C (C499K) / CuSi4Zn9MnP-C (CC246E), CuSi4Zn9MnP acc. to DIN EN 1982
O-ring	EPDM / FPM/FKM / HNBR

2. DOCUMENTS AND DRAWINGS

According to the following document:

Document no.	Rev.	Designation
DE 1/18	Katalog 2018	Manufacturer's catalogue: Sanpress Inox Rohrleitungstechnik

3. TEST REPORTS

- 3.1 Qualification tests performed in MPA's laboratory: assembly test, static pressure test, impulse test, vibration test, flame resistance test, burst test, torque test, bending test and vacuum test
- 3.2 Test reports N° 12 0587 5 97 and No 12001070-2. Test specimen DN 65, DN 80 and DN 100.

4. APPLICATION / LIMITATION

- 4.1 May be used on board for services of class III piping systems:
- Domestic fresh water
 - Domestic warm water heating
 - Fresh water cooling
 - Service air (non-essential)
 - Wet sprinkler
 - Non essential systems
- 4.2 The sealing material must be compatible with the fluid to be conveyed and the maximum working temperature.
- 4.3 Assembly instructions given by the manufacturer are to be complied with.
- 4.4 In all cases, the associated pipes are to be suitably supported and anchored. The joints are to be at any time accessible, excepting inside tanks where permitted by the BUREAU VERITAS Rules.
- 4.5 The use of sanpress pipe fittings for combustible media is to be restricted on case by case ship basis.

5. PRODUCTION SURVEY REQUIREMENTS

- 5.1 The pipe couplings are to be supplied by the manufacturer 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.
- 5.3 **Viega Technology 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:
Viega Supply Chain GmbH & Co. KG, Großheringen / GERMANY

6. MARKING OF PRODUCT

Pipe coupling is to be clearly marked with at least:

- Manufacturer's name or logo
- Type designation
- Size
- Batch information

7. OTHERS

- 7.1 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **Viega Technology GmbH & Co. KG, Attendorn / GERMANY** will accept full responsibility for informing shipbuilders, ship owners or their subcontractors of the proper methods of use and general maintenance of the units and of the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate N° 08683/D0 BV issued on 17 Feb 2014 by the Society.

*** END OF CERTIFICATE ***