



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

22-2284886-PDA-DUP
01-Sep-2022
31-Aug-2027
Houston ESD - Piping

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

VIEGA LLC

located at

2211 VIEGA AVE., , MCPHERSON, KS, United States, 67460

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Piping System and Couplings
Model: MegaPress, MegaPress G, MegaPress FKM (formerly known as MegaPress XL)
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 31/Aug/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Jingdong Sheng, Senior Managing Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

VIEGA GMBH & CO. KG

VIEGA PLATZ 1

D-57439 ATTENDORN

Germany

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Tier: 2 - PDA Issued

Product: Piping System and Couplings
Model: MegaPress, MegaPress G, MegaPress FKM (formerly known as MegaPress XL)
Endorsements:

Intended Service:

For use in Class III piping. –Flammable Fluids (flashpoint < 60° C)* : cargo oil lines (1), crude oil washing lines (2), vent lines (3), Inert Gas: water seal effluent lines (4), scrubber effluent lines (5), main lines (6), distribution lines (7), Flammable Fluids (flashpoint > 60° C)*: cargo oil lines (8), fuel oil lines (9), lubricating oil lines (10), hydraulic oil (11), thermal oil (12), Sea Water: bilge lines (13), water filled fire extinguishing systems (14), non-water filled extinguishing systems (15), fire main (not permanently filled)(16), ballast system (17), cooling water system (18), tank cleaning services (19), non-essential systems (20), Fresh Water: cooling water systems (21), condensate return (22), non-essential system (23), Sanitary/Drains/Scuppers: deck drains (internal)(24), sanitary drains (25), scuppers and discharge (overboard)(26), Sounding/Vent: water tanks/dry spaces (27), Oil Tanks (f.p.> 60°C)(28), Miscellaneous: starting/control air (29), service air (non-essential)(30), brine (31), CO² system (32), steam (33)
*Flammable fluid applications require a HNBR or FKM sealing element.

Description:

Carbon Steel Cold Press Compression Coupling fittings and pipe systems with SC-Contour for the US sizes 3/8" to 4" and also sizes as per DIN EN 10255:2007 / DIN EN 10216-1:2013 / DIN EN 10217-1:2019.
The SC feature enables quick identification of unpressed fittings. The fittings are offered with different sealing elements: EPDM, FKM and HNBR. The press connection is performed by a hydraulic press tool.
Integral with EPDM, FKM and HNBR sealing elements and SC - Feature. (*Flammable fluid applications require a HNBR or FKM sealing element.) The fittings are an approved fire resistant type. Applications per 4-6-2/Tables 9 & 10 of the MVR for compression couplings/IACS P2.7.4 Rev. 9, Mechanical Joints 4-6-2/Tables 6 & 7.
*Flammable fluid applications require a HNBR or FKM sealing element.

Rating:

M.A.W.P. 16 bar (232 psi), 1.6 MPa

Vacuum lines 170 mbar absolute (-12.04 psi/-24.5 in Hg/-0.083 MPa) acc. to the IACS test methods P2.11.5.5.7.

Maximum Operating Temperature

FKM: 23°F – 284°F (-5°C - 140°C)

EPDM: 14°F – 230°F (-10°C - 110°C)

HNBR: -40°F – 180°F (-40°C - 82°C)

The fittings are designed to be installed with ASTM A53, ASTM A106 either Grade A or B, ASTM A135, ASTM A795 pipe. The pipe wall thickness may be SCH 10 or SCH 40.

The fittings may also be used with SCH 80 pipe limited to the maximum pressure listed above.

-The fittings are an approved fire resistant type.

- Slip on joint requirements shall not apply to MegaPress, MegaPress G or MegaPress FKM fittings.

Service Restriction:

1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
2. The fittings are to be installed in accordance with the manufacturer's recommendation / limitations / requirements.
3. Only to be used in class III piping and not to be used in class I and class II piping per 4-6-2/Table 11 of the MVR.
4. Couplings with fittings on Schedule 10 pipes are not to be used on seawater systems.
5. EPDM should not be used in flammable fluid applications.
6. *Flammable fluid applications require a HNBR or FKM sealing element.

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Tier: 2 - PDA Issued

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. For temperatures below -18 °C (0 °F) Charpy Impact test is required as per 2-3-13/15 of the MVR.

Notes/Drawing/Documentation:

Drawing No. CERTIFICATE OF COMPLIANCE 2492156, MEGAPRESSG , Revision:-, Pages: 6
Drawing No. CERTIFICATE OF COMPLIANCE EX6157, CERTIFICATE FOR MEGAPRESS AND MEGAPRESS FKM , Revision:-, Pages: 7
Drawing No. Drawing 1, Drawing List, Revision: -, Pages: 10
Drawing No. Group 1 , Drawing Group 1, Revision: -, Pages: 266
Drawing No. Group 2 , Drawing Group 2, Revision: -, Pages: 232
Drawing No. Group 3, Drawing Group 3, Revision: -, Pages: 250
Drawing No. Group 4, Drawing Group 4, Revision: -, Pages: 269
Drawing No. Group 6, Drawing Group 6, Revision: -, Pages: 280
Drawing No. Group 7, Drawing Group 7, Revision: -, Pages: 280
Drawing No. Group 8, Drawing Group 8 , Revision: -, Pages: 249
Drawing No. Group 5 , Drawing Group 5, Revision: -, Pages: 199
Drawing No. IAPMO CERTIFICATE OF LISTING FILE NUMBER 5318 ,CERTIFICATE FOR MEGAPRESSG , Revision:-, Pages: 13
Drawing No. ICC-ES PMG PRODUCT CERTIFICATE PMG-1036, MEGAPRESSG SYSTEM HVAC FACILITY FUEL PIPING, Revision:-, Pages: 4
Drawing No. ICC-ES PMG PRODUCT CERTIFICATE PMG-1124, MEGAPRESS AND MEGAPRESS FKM SYSTEM HVAC HYDRONIC PIPING, Revision:-, Pages: 3
Drawing No. USCG MegaPress Acceptance Letter Oct 2018,USCG MegaPress Acceptance Letter Oct 2018, Revision:-, Pages: 2
Drawing No. MegaPress ABS Conformity 08-31-2022, MegaPress ABS Conformity 08-31-2022, Revision:-, Pages: 1

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 31/Aug/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

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STANDARDS**ABS Rules:**

2022 Rules for Conditions of Classification, Part 1 - 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
2022 Marine Vessel Rules: 4-6-1/5, 4-6-1/7, 4-6-2/3, 4-6-2/5.1, 4-6-2/5.9 and 4-6-2/Table 4/Table 10/Table 11/Table 12;

2022 Rules for Conditions of Classification, Part 1- 1-1-4/9.7,1-1-A2, 1-1-A3, which covers the following:
2022 Mobile Offshore Unit Rules: 4-2-1/5, 4-2-1/11.13, 4-2-2/5

National:

ASME B31.1: 2020

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ASME B31.3: 2020

UL 213: 2022

ASTM A53: 2022

UL 852: 2018

ASTM A106M-19A: 2019

ANSI-CSA LC-4: 2022

DIN EN 10255: 2007

DIN EN 10216-1: 2013

DIN EN 10217-1: 2019

International:

ISO 19921:2005

ISO 19922: 2005

Government:

USCG LTR 16714 / 46 CFR 56 2018-3613, Dated October 4, 2018

EUMED:

NA

OTHERS:

NA