



Lloyd's  
Register

## Type Approval Certificate

*This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.*

This certificate supersedes certificate number 14/20020 (E1) issued on 12.01.2016 which is hereby cancelled.

This certificate is issued to:

|                    |   |
|--------------------|---|
| <b>PRODUCER</b>    | Viega Technology GmbH & Co. KG<br>Viega Platz 1<br>57439 Attendorn<br>Germany   |
| <b>DESCRIPTION</b> | Megapress is a black steel piping system with SC-feature. The SC feature enables to quickly identify unpressed fittings. The press connection is performed by a special press tool. The fittings are offered with EPDM or HNBR sealing element.   |
| <b>TYPE</b>        | Viega Megapress   |
| <b>APPLICATION</b> | As piping components in Class III - piping systems on ships classed or intended for Classification with Lloyd's Register.<br><u>Restrictions:</u> <ol style="list-style-type: none"> <li>1. Starting/control air and CO2 systems.</li> <li>2. Inside machinery spaces of category A or accommodation spaces for main lines of inert gas systems.</li> <li>3. Fire main, water spray or sprinkler systems which are not always filled with water.</li> <li>4. Bilge lines in high fire risk compartments</li> <li>5. Scupper pipes below freeboard deck over board</li> <li>6. EPDM sealing is not suitable for most of oily fluids</li> </ol> |

|                        |               |
|------------------------|---------------|
| <b>Certificate No.</b> | 14/20020 (E2) |
| <b>Issue Date</b>      | 26 April 2017 |
| <b>Expiry Date</b>     | 22 April 2019 |
| <b>Sheet</b>           | 1 of 2        |



LR0311.2016.06

Torsten Schröder  
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|                                |   |
|--------------------------------|---|
| <b>STANDARDS</b>               | IACS P 2.11 including wet fire endurance test,<br>LR Rules and Regulations for the Classification of Ships, 2016.   |
| <b>RATINGS</b>                 | Dimensions: DN 10 to DN 50 (incl. 44,5 and 57 mm)<br>MAWP: 16 bar, MAWT: 110° C   |
| <b>OTHER CONDITIONS</b>        | For deck and bulkhead penetrations see also the requirements of the<br>National Authorities.<br>Selection and installation to be in accordance with the producer's<br>instructions and recommendations. |
| <b>PLACE OF<br/>PRODUCTION</b> | Viega Supply Chain GmbH & Co. KG<br>Viegastrasse 1<br>99851 Großheringen<br>Germany   |

*The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.*

*The Design Appraisal Document No. HTS/ENS 30687-14, Issue No.2, dated 26.04.2017 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

|                        |                      |
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| <b>Sheet</b>           | 2 of 2               |

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LR031-1-2016-06

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# Design Appraisal Document

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Date  
26 April 2017

Please quote this reference number on all future communications  
HPC1561113/35991-17/TS

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2014  
ISSUED TO: VIEGA TECHNOLOGY GMBH & CO. KG  
FOR: VIEGA MEGAPRESS  
TYPE APPROVAL CERTIFICATE NO. 14/20020 (E2)**

*Please note that DAD Issue Number 1 is superseded hereby*

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System Procedure TA14 and this Design Appraisal Document forms part of the Certificate.

## COMMENTS

1. The manufacturer's list of the chemical resistance of piping components is to be observed.
2. Materials for Class III piping systems are to be manufactured and tested in accordance with the requirements of acceptable national specifications. The manufacturer's test certificate (3.1) will be acceptable and is to be provided for each consignment of material.

## APPROVAL DOCUMENTATION

|           |  |            |
|-----------|--|------------|
| Form 2571 | Application form for Type Approval   | 18.11.2013 |
| 566320    | Data sheet Megapress (22 pages)  | -          |
|           | Set of dimension drawings for Megapress (enclosure to test report 120003993) | 30.07.2012 |
| -         | Catalogue Piping system F2 Megapress with SC-Contur (8 pages)                | -          |

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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## TEST REPORTS

|   |  |   |
|---|--|---|
| HPC 1310270,<br>HPC1661005<br>120004876 | LR-Visit Report - Inspection and surveillance of production facilities ,<br>PQA (Großheringen)<br>Test Report by MPA NRW Dortmund for "Megapress with SC-Contur" press<br>fittings made of carbon steel sizes 44.5 mm and 57 mm in combination with<br>carbon steel pipes acc. IACS P 2.11: tightness, burst pressure, pull-out and<br>vacuum test incl. appendix of sectional drawings) | 04.02.2014,<br>08.06.2016<br>25.10.2016 |
| -                                       | Viega test report for Megapress carbon steel system size 3/8" acc. IACS P<br>2.11: tightness, burst pressure, pull-out and vacuum test   | 06.10.2015                              |
| 001-13 to<br>003-13                     | Fire endurance test according ISO 19921 under wet conditions at IHA<br>International Hydraulic Academy Dresden for Megapress piping components<br>with HNBR sealing sizes DN 15, DN 25 and DN 50   | 03.01.2013                              |
| 120003993                               | Test Report by MPA NRW for Megapress carbon steel pressfitting-system<br>1/2 – 2" acc. IACS P 2.11: tightness, vibration and pressure pulsation in<br>combination, burst pressure, pull-out and vacuum test ( incl. enclosure of<br>sectional drawings )   | 30.07.2012                              |
| 006-12 to<br>008-12                     | Fire endurance test according ISO 19921 under wet conditions at IHA<br>International Hydraulic Academy Dresden for Megapress piping components<br>with EPDM sealing sizes DN 15, DN 25 and DN 50   | 09.07.2012                              |



LR031 1 2016 06  
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### Supplementary Type Approval Terms and Conditions

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.*

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Part 1  
 Subject: Pipe Fittings  
 Product: Compression Fittings

| Producer/Licence No.  |  | Description of Product  |                        |               | Cert. No. |
|---|--|---|------------------------|---------------|-----------|
| Type  | Details of Approval  | Application   | Remarks                |               |           |
| Viega Technology GmbH & Co.<br>KG<br>Viega Platz 1<br>57439 Attendorn,<br>Germany | Megapress is a black steel piping system with SC-feature. The SC feature enables to quickly identify unpressed fittings. The press connection is performed by a special press tool. The fittings are offered with EPDM or HNBR sealing element.<br><br><u>Ratings:</u><br>Dimensions: DN 10 to DN 50 (incl. 44,5 and 57 mm)<br>MAWP: 16 bar, MAWT: 110° C<br><br><u>Other Conditions:</u><br>For deck and bulkhead penetrations see also the requirements of the National Authorities.<br>Selection and installation to be in accordance with the producer's instructions and recommendations. | As piping components in Class III piping systems on ships classed or intended for Classification with Lloyd's Register.<br><br><u>Restrictions:</u> <ol style="list-style-type: none"> <li>1. Starting/control air and CO2 systems.</li> <li>2. Inside machinery spaces of category A or accommodation spaces for main lines of inert gas systems.</li> <li>3. Fire main, water spray or sprinkler systems which are not always filled with water.</li> <li>4. Bilge lines in high fire risk compartments</li> <li>5. Scupper pipes below freeboard deck over board</li> <li>6. EPDM sealing is not suitable for most of oily fluids</li> </ol> | Expires:<br>22.04.2019 | 14/20020 (E2) |           |