



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **P-14862**

This is to certify that the  
**Pipe System with Couplings**

with type designation(s)  
**Megapress with SC-contour**

Issued to  
**Viega GmbH & Co. KG**  
**ATTENDORN WESTFALEN, Germany**

is found to comply with  
**Det Norske Veritas' Rules for Classification of Ships Pt.4, Ch.6 "Piping Systems"**  
**Offshore Standard DNV-OS-D101, Marine and Machinery Systems and Equipment**  
**Det Norske Veritas' Standards for Certification 2.9 No. 5-792.20**

Application

**Temperature range:** -20°C to +120°C  
**Max. pressure:** 16 bar  
**Design:** Pressfitting piping system

This Certificate is valid until **2018-06-30**.

Issued at **Høvik** on **2014-06-16**

DNV local station: **Essen Business Support**

Approval Engineer: **Tom Berg-Nielsen**

for **Det Norske Veritas AS**

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**Marianne Spæren Marveng**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.  
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

## Product description

### Design :

Pressfitting with o-ring seal. The fittings are crimped on the tubes with a special crimping tool. A SC-contour on the fittings provides a visual indication of a non-pressed fitting.

### Variations:

90° elbow, 45° elbow, 90° Equal bore Tee, 90° Reduced Tee, Straight reducer, Straight, Screwed

### Materials:

Tubes: Zinc plated , industrial painted, powder coated and black carbon steel pipes according to DIN EN 10220.

### Fittings:

Sealing: EPDM o-rings

Fitting types: Elbow 45° and 90°, Tee, Adapter (male and female), coupling, reducer ad flange adapter

## Application/Limitation

Size range: ½", ¾", 1", 1 ¼", 1 ½" and 2"

Only to be used in Class III piping systems.

The couplings may be used for the following systems:

- Potable water
- Domestic heating
- Wet sprinkler
- Fire main and water spray
- Foam and sprinkler system
- Fresh – and sea water cooling
- Compressed air (not for starting air or control systems for essential functions)
- Non-essential systems
- Service Air
- Inert gas
- Foam systems and water mist

Pipe penetrations through watertight bulkheads or fire bulkheads or decks shall be approved in each separate case.

The components are to be mounted according to manufacturer's instructions.

The approval is only valid when the couplings are assembled with tubing of correct temper and tolerances as recommended by the manufacturer.

The piping system is subject to a hydraulic pressure test to 1.5 times maximum allowable working pressure after assembly on board.

## Type Approval documentation

- Manufacturers catalogue « Rohrleitungssysteme/Rohrverbindungstchnik Megapress mit SC-Contur »
- Manufacturers catalogue « Viega Megapress Verpresst dickwandigen Stahl : kalt, sicher und sekundenschnell »
- Test report from MPA NRW dated 30.07.2012 covering Leakage test, combined vibration and pressure pulsation test, Burst test, Pull-out test, Vacuum test.
- Fire test reports from Internationale Hydraulik Akademi GmbH dated 09.07.2012

## Tests carried out

Burst-, pressure pulsation-, vibration-, vacuum-, static torque-, dynamic torque-, temperature fluctuation-, static bending-, leakage-, pull-out- and fire test.

### **Marking of product**

For identification to this type approval the products are to be marked with:

- Manufacturer's name or trade mark.
- Type designation
- Size

### **Periodical assessment**

For retention of the Type Approval, DNV Surveyor shall perform a survey every second year – and before the expiry date of this certificate – to verify that the conditions for the type approval are complied with and to witness burst testing on a selection of samples of couplings selected at random from stock or from the running production.

END OF CERTIFICATE