

Certificate



FH Münster

Center of Sealing **Technologies**

Bürgerkamp 3 D-48565 Steinfurt

Z12112901-16

The flat gasket type **GYLON® 3501-E** of the manufacturer

GARLOCK GmbH Falkenweg 1 41430 Neuss Germany

with TA Luft accordance has tested in compliance in VDI-guideline 2200 (2007-06) by the Department of Gasketing Research of the University of Applied Sciences Münster. The test was verified in a first time test with following test conditions:

Initial gasket thickness:

3.2 mm

Test flange: DN40/PN40, EN1092-1, type B, welding-neck, 1.4571

Initial gasket stress: 30 MPa Thermal storage temperature: 200 °C Thermal storage duration: 48 h Test conditions: 20 °C

The leak rate, measured at 20 °C, with a helium mass spectrometer and a differential pressure of 1 bar resulted in a leak rate of:

 $5.9 \cdot 10^{-5} \frac{mbar \cdot l}{}$

Residual gasket stress (QR): 6.5 MPa

The maximum acceptable leak rate of $1.0 \cdot 10^{-4} \frac{mbar \cdot l}{s \cdot m}$ according to VDI-guideline 2440 (2000-11) has not been exceeded. The above mentioned gasket is in accordance with TA Luft.

The blowout safety test in accordance to VDI-guideline 2200 resulted for

Test step 1 at QR: 60 bar, no blowout Test step 2 at 5 MPa (Q_{Smin}): 60 bar, no blowout

This test certificate is only valid in combination with the test report 12112901-16.

Prof. Dr. A. Riedl