

CERTIFICATE

The fibre sheet gasket material **NAM 42GF** of

FEROLITE JOINTINGS LTD.
C-178, Site No. 1, B.S. Road Industrial Area
IND – 201001 Ghaziabad



was tested according to the European Standard EN 13555 (dated July 2014). Deviant from the standard only single tests have been performed.

The following gasket parameters were determined:

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar											
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]									
		$Q_A = 10$ MPa	$Q_A = 20$ MPa	$Q_A = 40$ MPa	$Q_A = 60$ MPa	$Q_A = 80$ MPa	$Q_A = 100$ MPa	$Q_A = 120$ MPa	$Q_A = 140$ MPa	$Q_A = 160$ MPa	
10^0	11		5	5	5	5	5			5	
10^1	24			7	5	5	5			5	
10^2	41				8	5	5			5	
10^3	52				21	9	7			5	
10^4	63					16	13			7	
10^5	78					53	50			23	
10^6											

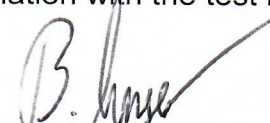
Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm												
Gasket stress	temperature 1 [25 °C]		temperature 2 [200 °C]									
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
Stress level 1 [30 MPa]	0.97	0.008	0.89	0.029								
Stress level 2 [50 MPa]	0.98	0.011	0.92	0.036								
Stress level 3 [90 MPa]	0.99	0.014	0.88	0.095								
Q_{Smax}	240 MPa		240 MPa									


Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]												
Gasket stress [MPa]	ambient temperature		temperature 1 [200 °C]									
	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]
0		1.560		1.550								
1		1.535		1.527								
20	953	1.431	1524	1.373								
30	1196	1.403	1634	1.355								
40	1445	1.377	1661	1.334								
50	1739	1.354	2111	1.316								
60	2051	1.334	2460	1.301								
80	2868	1.309	3270	1.278								
100	3913	1.292	4366	1.259								
120	4989	1.280	5603	1.236								
140	6002	1.269	5616	1.200								
160	7019	1.259	6752	1.161								
180	7793	1.249	7005	1.123								
200	8497	1.239	7012	1.091								
220	9037	1.230	7136	1.064								
240	8936	1.219	7047	1.037								

This certificate is only valid in combination with the test report 3031951/-.

amtec Services GmbH

Lauffen, July 11th, 2016


 Dipl.-Ing. B. Unser
 Test Engineer


 Dipl.-Ing. F. Herkert
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