



Gore® GR

SHEET GASKETING

New & Improved

Technical bulletin – EN 13555 tests: Q_{Smax} (Maximum permissible gasket stress)

Product: GORE® GR sheet gasketing
Test dates: January – February 2006
Test institute: Fachhochschule Münster
Test procedures: Mechanical characteristics test according to EN 13555

TEST OVERVIEW:

Q_{Smax} is the maximum gasket stress during installation and in operation that may be applied to the seal without damage occurring. It depends on the temperature and the seal thickness.

During the test the gasket stress is increased cyclically and then reduced to 1/3 of the previous gasket stress; the seal thickness is then measured. The test is repeated at various temperatures. A sudden drop in seal thickness indicates failure. If no failure occurs, the maximum possible gasket stress of the flanged joint is specified in terms of Q_{Smax} (in this case: 240 MPa).

In addition, the Q_{Smax} values must be backed up by creep relaxation tests (P_{QR} tests).



TEST RESULTS:

Material	Thickness [mm]	Temperature [°C]	Q_{Smax} [MPa]
GORE® GR	1.6	20	240
GORE® GR	1.6	230	240
GORE® GR	3.2	20	240
GORE® GR	3.2	230	240
GORE® GR	6.4	20	200
GORE® GR	6.4	230	160

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