

DIN EN 1591-1 Beiblatt 1:2001-10 (E)

Flanges and their joints - Design rules for gasketed circular flange connections - Background information

Contents

	Page
1 Introduction	4
2 Forces in gasketed joints	6
3 Gasket characteristics	7
4 Calculations for gaskets	9
5 Calculations for bolts	16
6 Elasticity of shells	17
7 Elasticity of complete flange	26
8 Limit loads of shells	32
9 Limit loads for complete flange	43
10 Validity limits	45
Annex A: Conical and spherical shells (uniform wall thickness): verification of eqs (6.28) to (6.30)	51
Annex B: Experimental verification	56
Annex C: Limit load equations	81
Annex D: Bibliography	85