

PRESSURE/TEMPERATURE RATINGS FOR FLANGES ASME/ANSI B16.5-2013
For Ref Only

FLANGE	°C	-29	38	50	100	150	200	250	300	350	400	450
MATERIAL	°F	-20	100	122	212	302	392	482	572	662	752	842
& CLASS		Metric Units - Working Pressures are in bar										
CLASS 150												
Gr 1.1		19.6	19.6	19.2	17.7	15.8	13.8	12.1	10.2	8.4	6.5	4.6
Gr 2.2		19	19	18.4	16.2	14.8	13.7	12.1	10.2	8.4	6.5	4.6
Gr 2.3		15.9	15.9	15.3	13.3	12	11.2	10.5	10	8.4	6.5	4.6
Gr 2.8		20	20	19.5	17.7	15.8	13.8	12.1	10.2	8.4	6.5	4.6
Gr 3.4		15.9	15.9	15.4	13.8	12.9	12.5	12.1	10.2	8.4	6.5	4.6
Gr 3.8		20	20	19.5	17.7	15.8	13.8	12.1	10.2	8.4	6.5	4.6
CLASS 300												
Gr 1.1		51.1	51.1	50.1	46.6	45.1	43.8	41.9	39.8	37.6	34.7	23
Gr 2.2		49.6	49.6	48.1	42.2	38.5	35.7	33.4	31.6	30.3	29.4	28.8
Gr 2.3		41.4	41.4	40	34.8	31.4	29.2	27.5	26.1	25.1	24.3	23.4
Gr 2.8		51.7	51.7	51.7	50.7	45.9	42.7	40.5	38.9	37.6	36.5	33.7
Gr 3.4		41.4	41.4	40.2	35.9	33.7	32.7	32.6	32.6	32.6	32.1	26.9
Gr 3.8		51.7	51.7	51.7	51.5	50.3	48.3	46.3	42.9	40.3	36.5	33.7
CLASS 600												
Gr 1.1		102.1	102.1	100.2	93.2	90.2	87.6	83.9	79.6	75.1	69.4	46
Gr 2.2		99.3	99.3	96.2	84.4	77	71.3	66.8	63.2	60.7	58.9	57.7
Gr 2.3		82.7	82.7	80	69.6	62.8	58.3	54.9	52.1	50.1	48.6	46.8
Gr 2.8		103.4	103.4	103.4	101.3	91.9	85.3	80.9	77.7	75.3	73.3	67.7
Gr 3.4		82.7	82.7	80.5	71.9	67.5	65.4	65.2	65.2	65.1	64.2	53.8
Gr 3.8		103.4	103.4	103.4	103	100.3	96.7	92.7	85.7	80.4	73.3	67.7
CLASS 900												
Gr 1.1		153.2	153.2	150.4	139.8	135.2	131.4	125.8	119.5	112.7	104.2	69
Gr 2.2		148.9	148.9	144.3	126.6	115.5	107	100.1	94.9	91	88.3	86.5
Gr 2.3		124.1	124.1	120.1	104.4	94.2	87.5	82.4	78.2	75.2	72.9	70.2
Gr 2.8		155.1	155.1	155.1	152	137.8	128	121.4	116.6	112.9	109.8	80.7
Gr 3.4		124.1	124.1	120.7	107.8	101.2	98.1	97.8	97.8	97.7	96.2	80.7
Gr 3.8		155.1	155.1	155.1	154.6	150.6	145	139	128.6	120.7	109.8	101.4
CLASS 1500												
Gr 1.1		255.3	255.3	250.6	233	225.4	219	209.7	199.1	187.8	173.6	115
Gr 2.2		248.2	248.2	240.6	211	192.5	178.3	166.9	158.1	151.6	147.2	144.2
Gr 2.3		206.8	206.8	200.1	173.9	157	145.8	137.3	130.3	125.4	121.5	117.1
Gr 2.8		258.6	258.6	258.6	253.3	229.6	213.3	202.3	194.3	188.2	183.1	134.5
Gr 3.4		206.8	206.8	201.2	179.7	168.7	163.5	163	163	162.8	160.4	169
Gr 3.8		258.6	258.6	258.6	257.6	250.8	241.7	231.8	214.4	201.1	183.1	169
CLASS 2500												
Gr 1.1		425.5	425.5	417.7	388.3	375.6	365	349.5	331.8	313	289.3	191.7
Gr 2.2		413.7	413.7	400.9	351.6	320.8	297.2	278.1	263.5	252.7	245.3	240.4
Gr 2.3		344.7	344.7	333.5	289.9	261.6	243	228.9	217.2	208.9	202.5	195.1
Gr 2.8		430.9	430.9	430.9	422.2	382.7	355.4	337.2	323.8	313.7	304.9	224.2
Gr 3.4		344.7	344.7	335.3	299.5	281.1	272.4	271.7	271.7	271.3	267.4	224.2
Gr 3.8		430.9	430.9	430.9	429.4	418.2	402.8	386.2	357.1	335.3	304.9	281.8
MATERIAL	MATERIAL DESCRIPTION											NOTES
Gr 1.1	CARBON STEEL (ASTM A105N & A350 LF2)											LIMITATIONS > 425°C
Gr 2.2	316 STAINLESS STEEL											LIMITATIONS > 538°C
Gr 2.3	316L STAINLESS STEEL											316L - LIMIT = 454°C
Gr 2.8	DUPLEX (S31803), SUPER DUPLEX (S32760), 6%Mo (S31254)											DU/SD - LIMIT = 315°C
Gr 3.4	MONEL 400											MUST BE ANNEALED
Gr 3.8	HASTELLOY C276 & C22											SOLUTION ANNEALED
	INCONEL 625, INCOLOY 825											MUST BE ANNEALED