



ASME- API SERIES COMPACT FLANGE



ISO 9001:2008
ISO 29001-2007
API 6A-1059
API 6A QMS
API 6A Q1



FlangeTec® ASME Series - Design based on **ASME VIII Div. 1 Code Rules** and suitable for Pressure Vessel, Pig Launchers, Heat Exchangers, Separators, Sand Scrubbers, Closures and a multitude of Process Piping applications.

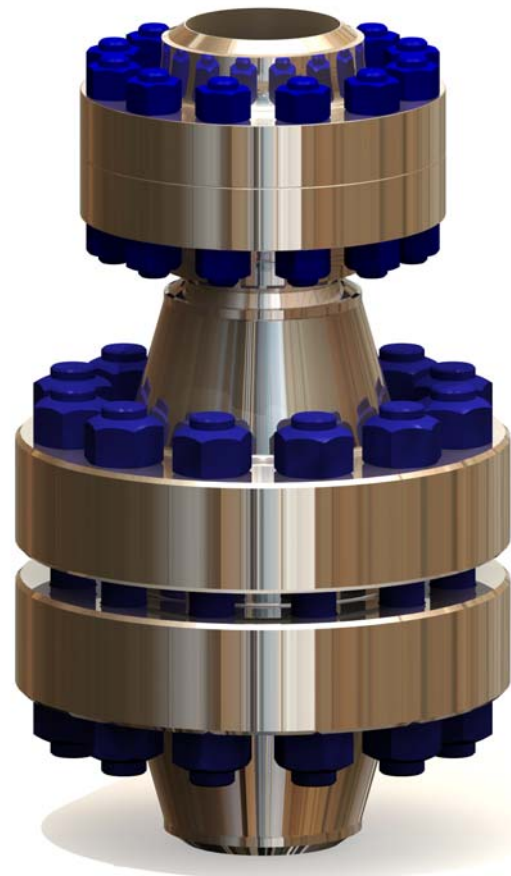
Advantages - FlangeTec® Compact Flanges offer over **70% Weight Savings** as well as significant Space savings over standard ASME B16.5 flanges. FlangeTec® is offered in sizes thru 200" (5,080mm) which fall outside of ASME B16.47 and MSS-SP44 Standards, and are manufactured in a multitude of materials.

Size Range - ½" (12mm) thru 200" (5,080mm). Larger available on request.

Pressure Classes - ASME 150lbs thru 4,500lbs, API 5M thru 20M, and -423°F (-269°C) / 1600°F (871°C).

Materials - SA105, SA350-LF2, A694-F52-F70, AISI 4130, SA182-F316 (L,H), SA-182-F321(L,H), SA182-F347 (L,H), A182-F51, A182-F55, Safurex, Alloy 625, Alloy 825, Titanium and Hastaloy.

Gasket - The FlangeTec® CF Series Compact Flange uses an **all metal** Seal Ring with **over 50 years** of service history. Seal materials are selected based on application and service conditions. The **pressure energized** bore Seals are elastic by design, and therefore, **Reusable**



8" 2500# FlangeTec® ASME CF Assembly (Sch. 160)
Total Weight: **363LBS (165KGS)**
vs;
8" ASME 2500lbs Flange Assembly (Sch. 160)
Total Weight: **1359LBS (618KGS)**
FLANGETEC® ASME CF FLANGE 73% LESS
(actual scale, weights accurate to +/-2%)

**NOW AVAILABLE WITH API 6A
MONOGRAM**



Design & Engineering Support - LTS provides both ASME analytical calculation methods in accordance with **Section VIII Division 1, 2 and 3 methods**, as well as **ANSYS FEA** analysis supporting dynamic load, combination loads and thermal load applications. LTS specializes in **High Pressure and High Temperature** solutions and offers integrated design analysis for skid and piping systems using in-house **CEASAR II** software.

Design Verification - Building on our extensive **HP/HT** experience, LTS offers Project specific **Prototype Testing**, as well as **Third Party design review** through DNV, Lloyds, ABS and Bureau Veritas, as required.

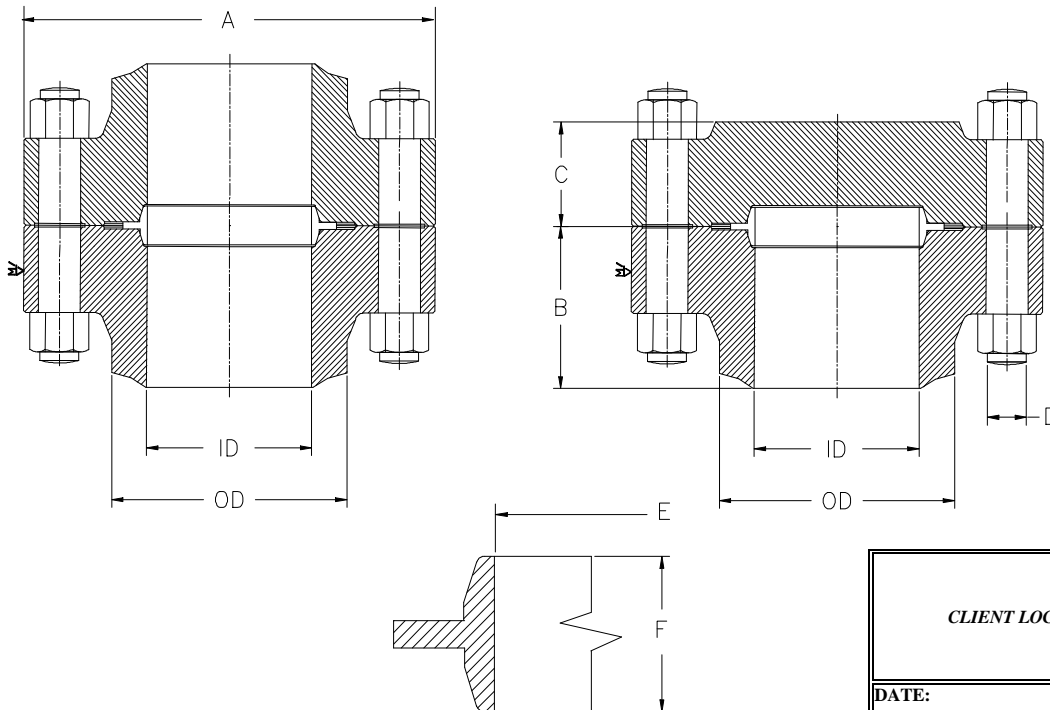
D PIPE SPEC - ANSI 600LBS

1480 @-20F/+100°F

FlangeTec® Size	Pipe Data					Flange DIA A	Flange LTH B	Blind THK C	Bolt Dia. D	No of Bolts	Seal ID E	Seal Width F
	ASME SIZE	Pipe Size	Max Seal Size	Pipe OD	Pipe ID							
1" 600	1"	1" NPS, SCH.	11	1.315	*	3.88	1.75	1.00	0.500"	4	1.10	0.37
2" 600	2"	2" NPS, SCH.	20	2.375	*	5.75	2.25	1.63	0.625"	8	2.06	0.63
3" 600	3"	3" NPS, SCH.	31	3.500	*	6.88	2.63	1.63	0.625"	8	3.25	0.75
4" 600	4"	4" NPS, SCH.	42	4.500	*	8.75	2.88	1.63	0.750"	8	4.25	1.00
6" 600	6"	6" NPS, SCH.	64	6.625	*	11.38	3.38	1.63	0.88"	12	6.50	1.38
8" 600	8"	8" NPS, SCH.	82	8.625	*	13.38	3.88	2.00	0.88"	16	8.25	1.38
10" 600	10"	10" NPS, SCH.	102	10.750	*	16.00	4.38	2.25	1.000"	16	10.25	1.38
12" 600	12"	12" NPS, SCH.	124	12.750	*	18.13	4.25	2.38	1.000"	16	12.50	1.38
14" 800	14"	14" NPS, SCH.	140	14.000	*	20.13	4.75	2.50	1.125"	16	14.00	1.50
16" 600	16"	16" NPS, SCH.	160	16.000	*	22.38	5.25	2.75	1.125"	20	16.00	1.50
18" 600	18"	18" NPS, SCH.	180	18.000	*	24.88	5.75	3.00	1.250"	20	18.00	1.75
20" 600	20"	20" NPS, SCH.	200	20.000	*	27.38	6.00	3.25	1.375"	20	20.00	1.75
24" 600	24"	24" NPS, SCH.	232	24.000	*	32.25	7.00	3.88	1.500"	24	23.25	2.00

WN Fig WT LBS	Blind WT LBS	Seal Ring WT LBS	Bolting WT LBS
2.80	2.20	0.06	0.60
8.10	7.90	0.45	2.90
12.50	11.90	0.69	3.10
20.80	19.60	1.13	5.40
39.40	42.40	3.80	13.60
59.20	72.40	4.26	19.80
94.50	117.90	5.48	30.60
106.30	162.70	7.10	30.60
153.80	211.20	10.98	44.80
200.60	286.90	12.44	59.50
256.10	387.40	14.61	80.80
323.70	508.80	17.80	107.50
513.90	841.20	24.29	177.70

* CLIENT ADVISED



Notes:

1. All Dimensions in inches.
2. All Flanges are of streamline bore.
3. Corrosion allowance: 0.063".
4. Flanges are designed in accordance with ASME VIII Div 1 App 2 and Div 2 App 3 & 4.
5. All specified FlangeTec® flanges meet the 1480psi pressure rating @ 100F.
6. Piping Design Code ASME B31.3.

Material Data.

Flanges:
Sealring:
Bolting:

CLIENT LOGO		PROJECT DATA
		FLANGETEC® ASME CF FLANGE DIMENSIONAL AND MATERIAL DATA SHEET
DATE: 12/18/2006	REV: 0	

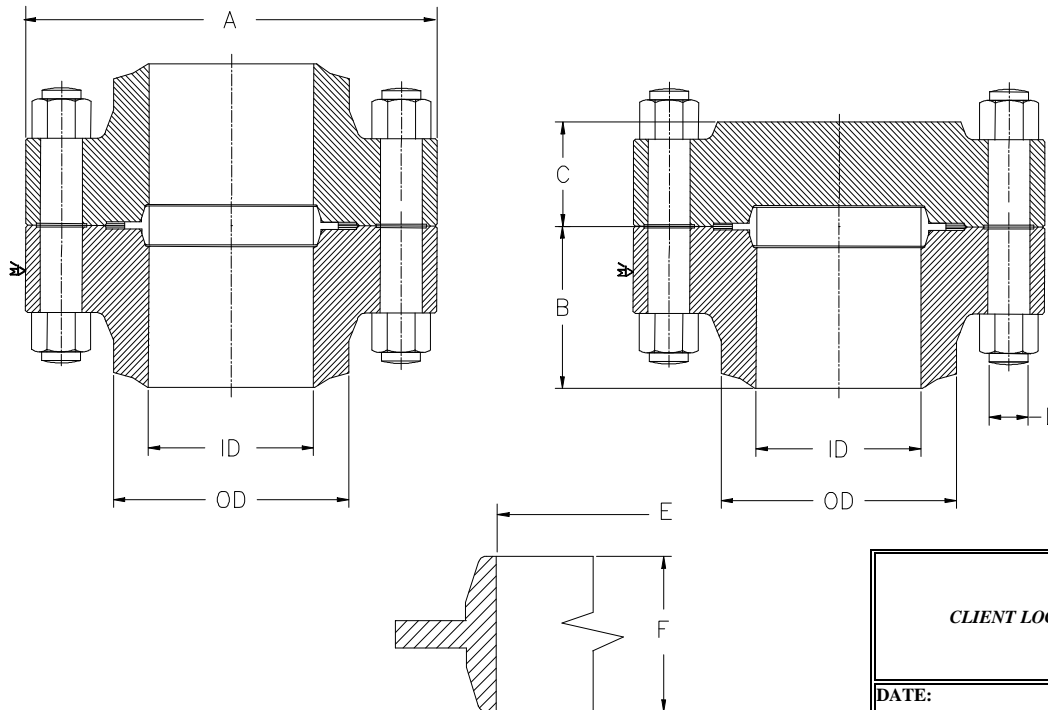
E PIPE SPEC - ANSI 900LBS

2220 @-20F/+100°F

FlangeTec® Size	Pipe Data					Flange DIA A	Flange LTH B	Blind THK C	Bolt Dia. D	No of Bolts	Seal ID E	Seal Width F
	ASME SIZE	Pipe Size	Max Seal Size	Pipe OD	Pipe ID							
1" 900	1"	1" NPS, SCH.	11	1.315	*	3.88	1.75	1.00	0.500"	4	1.10	0.37
2" 900	2"	2" NPS, SCH.	20	2.375	*	5.75	2.25	1.63	0.625"	8	2.06	0.63
3" 900	3"	3" NPS, SCH.	31	3.500	*	6.88	2.63	1.63	0.625"	8	3.25	0.75
4" 900	4"	4" NPS, SCH.	42	4.500	*	8.75	2.88	1.63	0.750"	8	4.25	1.00
6" 900	6"	6" NPS, SCH.	64	6.625	*	11.38	3.38	1.63	0.88"	12	6.50	1.38
8" 900	8"	8" NPS, SCH.	82	8.625	*	13.38	3.88	2.00	0.88"	16	8.25	1.38
10" 900	10"	10" NPS, SCH.	102	10.750	*	16.00	4.38	2.25	1.000"	16	10.25	1.38
12" 900	12"	12" NPS, SCH.	124	12.750	*	19.00	5.00	2.69	1.125"	16	12.50	1.38
14" 900	14"	14" NPS, SCH.	130	14.000	*	20.25	5.38	3.00	1.125"	20	13.00	1.50
16" 900	16"	16" NPS, SCH.	152	16.000	*	22.75	5.75	3.25	1.250"	20	15.25	1.50
18" 900	18"	18" NPS, SCH.	170	18.000	*	25.25	6.25	3.63	1.375"	20	17.00	1.75
20" 900	20"	20" NPS, SCH.	192	20.000	*	27.75	6.75	4.00	1.500"	20	19.25	1.75
24" 900	24"	24" NPS, SCH.	232	24.000	*	32.88	7.75	4.75	1.625"	24	23.25	2.00

WN Flg WT LBS	Blind WT LBS	Seal Ring WT LBS	Bolting WT LBS
2.80	2.20	0.06	0.60
8.10	7.90	0.45	2.90
12.50	11.90	0.69	3.10
20.80	19.60	1.13	5.40
39.40	42.40	3.80	13.60
59.20	72.40	4.26	19.80
94.50	117.90	5.48	30.60
153.90	200.70	7.10	44.80
176.70	252.60	8.47	57.20
242.60	346.60	11.89	80.80
323.20	477.40	13.84	109.30
421.00	637.70	17.16	143.80
696.00	1063.40	24.29	234.20

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Notes:

1. All Dimensions in inches.
2. All Flanges are of streamline bore.
3. Corrosion allowance: 0.063".
4. Flanges are designed in accordance with ASME VIII Div 1 App 2 and Div 2 App 3 & 4.
5. All specified FlangeTec® flanges meet the 2220psi pressure rating @ 100F.
6. Piping Design Code ASME B31.3.

Material Data.

Flanges:
Sealing:
Bolting:

CLIENT LOGO		PROJECT DATA
		FLANGETEC® ASME CF FLANGE DIMENSIONAL AND MATERIAL DATA SHEET
DATE: 12/18/2006	REV: 0	

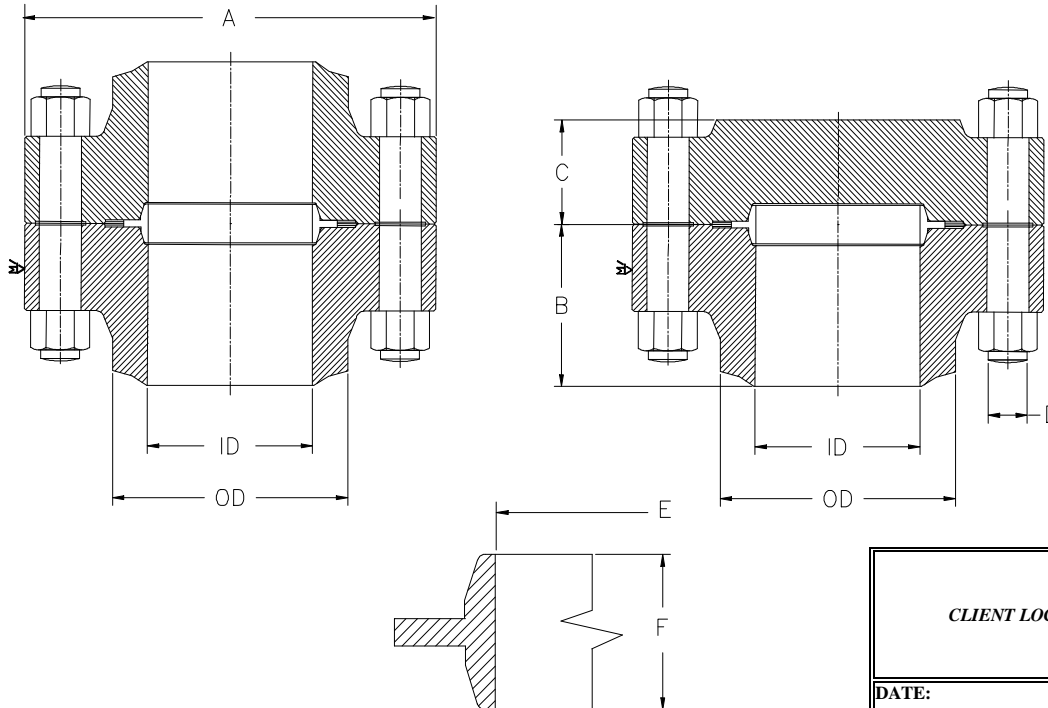
F PIPE SPEC - ANSI 1500LBS

3705 @-20F/+100°F

FlangeTec® Size	Pipe Data					Flange DIA A	Flange LTH B	Blind THK C	Bolt Dia. D	No of Bolts	Seal ID E	Seal Width F
	ASME SIZE	Pipe Size	Max Seal Size	Pipe OD	Pipe ID							
1" 1500	1"	1" NPS, SCH.	11	1.315	*	3.88	1.75	1.00	0.500"	4	1.10	0.37
2" 1500	2"	2" NPS, SCH.	20	2.375	*	5.75	2.25	1.63	0.625"	8	2.06	0.75
3" 1500	3"	3" NPS, SCH.	27	3.500	*	6.88	2.63	1.63	0.625"	8	3.06	0.75
4" 1500	4"	4" NPS, SCH.	40	4.500	*	8.75	3.00	2.00	0.750"	12	4.06	1.00
6" 1500	6"	6" NPS, SCH.	62	6.625	*	11.75	3.88	2.25	1.000"	12	6.06	1.38
8" 1500	8"	8" NPS, SCH.	82	8.625	*	14.25	4.50	2.63	1.125"	16	8.25	1.38
10" 1500	10"	10" NPS, SCH.	102	10.750	*	17.25	5.00	3.13	1.250"	16	10.25	1.38
12" 1500	12"	12" NPS, SCH.	116	12.750	*	19.88	5.63	3.63	1.375"	16	11.75	1.38
14" 1500	14"	14" NPS, SCH.	130	14.000	*	22.00	6.00	4.00	1.500"	16	13.00	1.50
16" 1500	16"	16" NPS, SCH.	144	16.000	*	24.13	6.75	4.38	1.500"	20	14.50	1.50
18" 1500	18"	18" NPS, SCH.	170	18.000	*	27.25	7.25	5.00	1.750"	20	17.00	1.75
20" 1500	20"	20" NPS, SCH.	185	20.000	*	29.88	8.00	5.50	1.875"	20	18.50	1.75
24" 1500	24"	24" NPS, SCH.	220	24.000	*	35.88	9.25	6.50	2.250"	20	22.00	2.00

WN Flg WT LBS	Blind WT LBS	Seal Ring WT LBS	Bolting WT LBS
2.80	2.20	0.06	0.60
8.10	7.90	0.45	2.90
12.50	11.90	0.62	3.10
21.50	24.30	1.13	8.00
47.40	61.50	3.13	20.30
83.80	103.90	4.26	42.00
138.90	185.70	5.48	59.40
206.30	289.30	7.21	81.70
274.60	392.70	8.47	106.30
366.30	514.60	11.35	143.80
497.40	747.10	13.84	220.90
658.90	993.30	16.37	280.10
1130.70	1696.40	22.32	490.60

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Notes:

1. All Dimensions in inches.
2. All Flanges are of streamline bore.
3. Corrosion allowance: 0.063".
4. Flanges are designed in accordance with ASME VIII Div 1 App 2 and Div 2 App 3 & 4.
5. All specified FlangeTec® flanges meet the 3705psi pressure rating @ 100F.
6. Piping Design Code ASME B31.3.

Material Data.

Flanges:
Sealring:
Bolting:

CLIENT LOGO		PROJECT DATA
		FLANGETEC® ASME CF FLANGE DIMENSIONAL AND MATERIAL DATA SHEET
DATE: 12/18/2006	REV: 0	

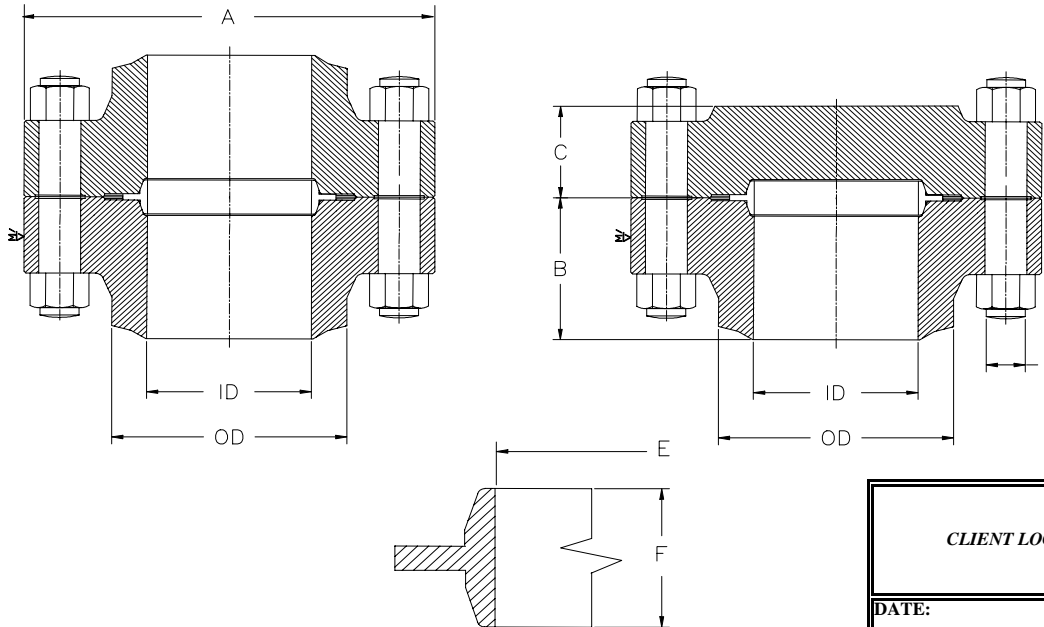
G PIPE SPEC - ANSI 2500LBS

6170PSI @-50F/+100F

FlangeTec® Size	Pipe Data					Flange DIA A	Flange LTH B	Blind THK C	Bolt Dia. D	No of Bolts	Seal ID E	Seal Width F
	ASME SIZE	Pipe Size	Max Seal Size	Pipe OD	Pipe ID							
1" 2500	1"	1" NPS, SCH.	11	1.315	*	3.88	1.75	1.00	0.500"	4	1.10	0.37
2" 2500	2"	2" NPS, SCH.	20	2.375	*	5.75	2.25	1.63	0.625"	8	2.06	0.63
3" 2500	3"	3" NPS, SCH.	27	3.500	*	6.88	2.88	1.88	0.625"	12	3.06	0.75
4" 2500	4"	4" NPS, SCH.	34	4.500	*	8.75	3.38	2.25	0.750"	12	3.69	0.75
6" 2500	6"	6" NPS, SCH.	56	6.625	*	12.25	4.38	2.75	1.125"	12	5.75	1.00
8" 2500	8"	8" NPS, SCH.	76	8.625	*	15.75	5.38	3.50	1.375"	12	7.75	1.38
10" 2500	10"	10" NPS, SCH.	92	10.750	*	18.75	6.13	4.13	1.625"	12	9.25	1.38
12" 2500	12"	12" NPS, SCH.	112	12.750	*	22.63	6.75	4.88	2.000"	12	11.25	1.38
14" 2500	14"	14" NPS, SCH.	120	14.000	*	23.25	7.00	5.13	1.750"	16	12.00	1.38
16" 2500	16"	16" NPS, SCH.	137	16.000	*	26.50	7.50	5.88	2.000"	16	13.75	1.63
18" 2500	18"	18" NPS, SCH.	160	18.000	*	29.50	8.25	6.63	2.250"	16	16.00	1.50
20" 2500	20"	20" NPS, SCH.	180	20.000	*	32.63	9.25	7.25	2.500"	16	18.00	1.75
24" 2500	24"	24" NPS, SCH.	192	24.000	*	38.25	10.50	8.50	2.750"	18	19.25	1.75

WN Flg WT LBS	Blind WT LBS	Seal Ring WT LBS	Bolting WT LBS
2.80	2.20	0.06	0.60
8.10	7.90	0.45	2.90
13.80	13.50	0.62	4.70
26.00	28.10	0.80	8.60
67.80	80.30	1.82	31.20
135.80	172.00	4.67	59.10
220.30	288.60	5.78	98.50
353.20	495.90	12.33	179.30
382.70	551.70	6.04	173.10
537.10	822.70	13.70	255.20
729.90	1148.60	12.44	365.80
1010.80	1537.50	14.61	512.10
1557.20	2483.00	17.61	783.20

* CLIENT ADVISED



- Notes:
1. All Dimensions in inches.
 2. All Flanges are of streamline bore.
 3. Corrosion allowance: 0.063".
 4. Flanges are designed in accordance with ASME VIII Div 1 App 2 and Div 2 App 3 & 4.
 5. All specified FlangeTec® flanges meet the 6170psi pressure rating @ 100F.
 6. Piping Design Code ASME B31.3.

Material Data.
 Flanges:
 Sealing:
 Bolting:

CLIENT LOGO		PROJECT DATA
		FLANGETEC® ASME CF FLANGE DIMENSIONAL AND MATERIAL DATA SHEET
DATE: 12/18/2006	REV: 0	