



**CLOSED AND
OPEN DIE**

**HOT
FORGING**



Who We Are?

With years of experience as forged parts manufacturer, we have established Nectar Incorporation in 2017 to increase our presence and growth in this sector.

Nectar Incorporation is one of the leading manufacturers of forging components producing the finest quality of automobile parts, agricultural products, petrochemical parts, machine tools & power transmission parts.

Nectar has been investing in establishing state of art facilities and our forging and machining parts are comparable to the best in the industry. Nectar is one of the innovative and fascinating company to emerge and we are proud to claim that all our products meets highest international standards since they are constructed with expertise. Each of our products manufactured is as per the customer's specification and a result of our dedication.

Our Mission

Our core objective is to undertake manufacturing of forged products and to offer technical consultancy for forging Industry. Our main aim is customer satisfaction.

Company Vision

To become excellent engineering component supplier globally for our quality and commitment.

Our Strength

- Assured timely delivery.
- Accepting complex jobs and delivering to perfection.
- Extensive feasibility study before production for new jobs.



Technical Details

- **Product Range** : 1 Kg. to 35 kg. a piece
- **Size** : 350 mm OD & 450 mm Length
- **Installed Capacity** : 7800 MTPA

Various Registrations

- **Company CIN No.:** U27100GJ2013PTC076882
- **SSI Registration No.:** EM1 24 009 13 007387
- **ISO 9001:2008 Registration No.:** 9910002181

Our Adequate Facilities

- Forgeshop is equipped with 2.5 Ton and 1.5 Ton Hammer.
- Temperature controlled billet Heating furnaces for maximum temperature 1350 Deg. Cent for 2.5 Ton Hammer.
- 300KWA Induction billet heater for 1.5 Ton Hammer.
- Dieshop is equipped with VMC, Shaping, milling and Heavy latch machines.
- Cutting shop is equipped with Shearing and Automatic bandsaw machine.
- Shot blasting Facility.
- Heat treatment shop is equipped with electrically heated Boogie hearth 2nos furnaces with temperature upto 1100 Deg. Optimize microstructure, machinability and mechanical properties. These furnaces are utilized in Normalizing, ISO annealing & tempering.
- Metallurgical Microscope for Grain Analysis.
- Spectrometer for Chemical analysis of steel grades.
- JominyTest Apparatus.
- MPI Crack detector.
- Mechanical Testing Laboratory for Hardness Testing.
- Machining Shop is equipped with Latest CNC and VMC machines.

Product Range

1 kg. to
35 kg. a piece

Size

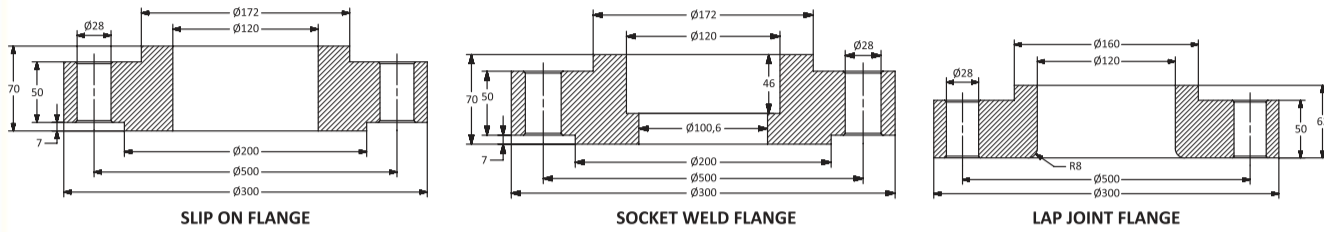
350 mm OD
450 mm Length

Installed Capacity

7800
MTPA

INDUSTRIAL CAPACITY

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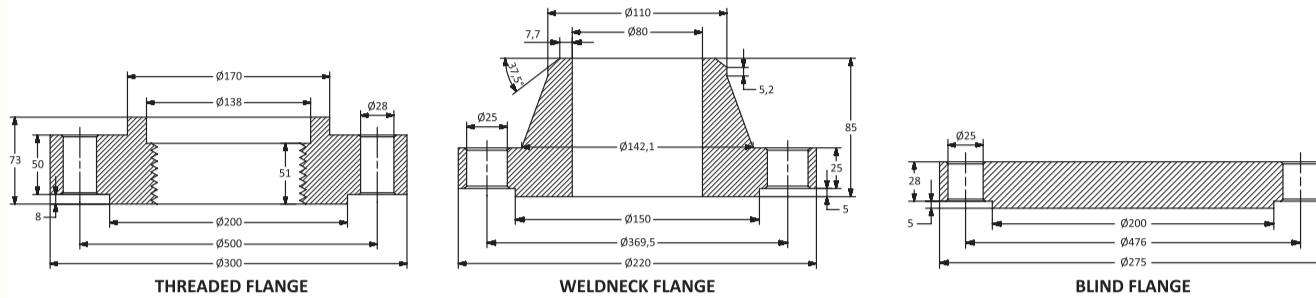
ASME B 16.5 - 2009 - Class 150 Flanges

Nominal Pipe Size	Flange Diameter	Flange Thickness		Hub Dia		Bore			Length Through Hub			Radius - LJ	Thread Length THRD	Counter Bore THRD	Depth of Socket SW	Raised Face		Drilling			
		SO, SW, WN, BL, THRD	LJ	SO, SW, LJ, WN, THRD	Bewel end Dia-WN	SO	LJ	WN LJ	SO, SW, THRD	LJ	WN					Dia	Thickness	PCD	Hole Dia	No. of Hole	
NPS	O	Tf	Tf	X	Ah	B	B	B1	Y	Y	Y	r	T	Q	D	R	Tr	W	d	n	
1/2"	15	90	9.6	11.2	30	21.3	22.2	22.9	15.8	16	16	48	3	16	---	10	34.9	2	60.3	15.9	4
3/4"	20	100	11.2	12.7	38	26.7	27.7	28.2	20.9	16	16	53	3	16	---	11	42.9	2	69.9	15.9	4
1"	25	110	12.7	14.3	49	33.4	34.5	34.9	26.6	18	17	56	3	18	---	13	50.8	2	79.4	15.9	4
1 1/4"	30	115	14.3	15.9	59	42.2	43.2	43.7	35.1	21	21	58	5	21	---	14	63.5	2	88.9	15.9	4
1 1/2"	40	125	15.9	17.5	65	48.3	49.5	50	40.9	23	22	62	6	23	---	16	73	2	98.4	15.9	4
2"	50	150	17.5	19.1	78	60.3	61.9	62.5	52.5	26	25	64	8	26	---	17	92.1	2	120.7	19	4
2 1/2"	60	180	20.7	22.3	90	73	74.6	75.4	62.7	29	29	70	8	29	---	19	104.8	2	139.7	19	4
3"	80	190	22.3	23.9	108	88.9	90.7	91.4	77.9	31	30	70	10	31	---	21	127	2	152.4	19	4
3 1/2"	90	215	22.3	23.9	122	101.6	103.4	104.1	90.1	32	32	72	10	32	---	22	139.7	2	177.8	19	8
4"	100	230	22.3	23.9	135	114.3	116.1	116.8	102.3	34	33	77	11	34	---	24	157.2	2	190.5	19	8
5"	125	255	22.3	23.9	164	141.3	143.8	144.4	128.2	37	36	89	11	37	---	24	185.7	2	215.9	22.2	8
6"	150	280	23.9	25.4	192	168.3	170.7	171.4	154.1	40	40	89	13	40	---	27	215.9	2	241.3	22.2	8
8"	200	345	27	28.6	246	219.1	221.5	222.2	202.7	45	44	102	13	45	---	32	269.9	2	298.5	22.2	8
10"	250	405	28.6	30.2	305	273	276.2	277.4	254.6	50	49	102	13	50	---	33	323.8	2	362	25.4	12
12"	300	485	30.2	31.8	365	323.8	327	328.2	304.8	56	56	115	13	56	---	40	381	2	431.8	25.4	12
14"	350	535	33.4	35	400	355.6	359.2	360.2	336.5	58	79	127	13	58	---	41	412.8	2	476.3	28.6	12
16"	400	595	35	36.6	457	406.4	410.5	411.2	387.3	64	87	127	13	64	---	44	469.9	2	539.8	28.6	16
18"	450	635	38.1	39.7	505	457	461.8	462.3	438.1	69	97	140	13	69	---	49	533.4	2	577.9	31.7	16
20"	500	700	41.3	42.9	559	508	513.1	514.4	488.9	73	103	145	13	73	---	54	584.2	2	635	31.7	20
24	600	815	46.1	47.7	663	610	616	616	590.5	83	111	153	13	83	---	64	692.2	2	749.3	34.9	20

ASME B 16.5 - 2009 - Class 300 Flanges

NPS	O	Tf	Tf	X	Ah	B	B	B1	Y	Y	Y	r	T	Q	D	R	Tr	W	d	n	
1/2"	15	95	12.7	14.3	38	21.3	22.2	22.9	15.8	23	22	53	3	16	23.6	10	34.9	2	66.7	15.9	4
3/4"	20	115	14.3	15.9	48	26.7	27.7	28.2	20.9	26	25	58	3	16	29	11	42.9	2	82.6	19	4
1"	25	125	15.9	17.5	54	33.4	34.5	34.9	26.6	27	27	62	3	18	35.8	13	50.8	2	88.9	19	4
1 1/4"	30	135	17.5	19.1	64	42.2	43.2	43.7	35.1	27	27	66	5	21	44.4	14	63.5	2	98.4	19	4
1 1/2"	40	155	19.1	20.7	70	48.3	49.5	50	40.9	31	30	69	6	23	50.3	16	73	2	114.3	22.2	4
2"	50	165	20.7	22.3	84	60.3	61.9	62.5	52.5	34	33	70	8	29	63.5	17	92.1	2	127	19	8
2 1/2"	60	190	23.9	25.4	100	73	74.6	75.4	62.7	39	38	77	8	32	76.2	19	104.8	2	149.2	22.2	8
3"	80	210	27	28.6	117	88.9	90.7	91.4	77.9	43	43	80	10	32	92.2	21	127	2	168.3	22.2	8
3 1/2"	90	230	28.6	30.2	133	101.6	103.4	104.1	90.1	45	44	81	10	37	104.9	22	139.7	2	184.2	22.2	8
4"	100	255	30.2	31.8	146	114.3	116.1	116.8	102.3	48	48	86	11	37	117.6	24	157.2	2	200	22.2	8
5"	125	280	33.4	35	178	141.3	143.8	144.4	128.2	51	51	99	11	43	144.4	24	185.7	2	235	22.2	8
6"	150	320	35	36.6	206	168.3	170.7	171.4	154.1	53	52	99	13	47	171.4	27	215.9	2	269.9	22.2	12
8"	200	380	39.7	41.3	260	219.1	221.5	222.2	202.7	62	62	112	13	51	222.2	32	269.9	2	330.2	25.4	12
10"	250	445	46.1	47.7	321	273	276.2	277.4	254.6	67	95	118	13	56	276.2	33	323.8	2	387.4	28.6	16
12"	300	520	49.3	50.8	375	323.8	327	328.2	304.8	73	102	131	13	61	328.6	40	381	2	450.8	31.7	16
14"	350	585	52.4	54	425	355.6	359.2	360.2	336.5	77	111	143	13	64	360.4	41	412.8	2	514.4	31.7	20
16"	400	650	55.6	57.2	483	406.4	410.5	411.2	387.3	83	121	146	13	69	411.2	44	469.9	2	571.5	34.9	20
18"	450	710	58.8	60.4	533	457	461.8	462.3	438.1	89	130	159	13	70	462	49	533.4	2	628.6	34.9	24
20"	500	775	62	63.5	587	508	513.1	514.4	488.9	96	140	162	13	74	512.8	54	584.2	2	685.8	34.9	24
24	600	915	68.3	69.9	702	610	616	616	590.5	107	152	169	13	83	614.4	64	692.2	2	812.8	41.3	24

• Dimensions are in m.m.



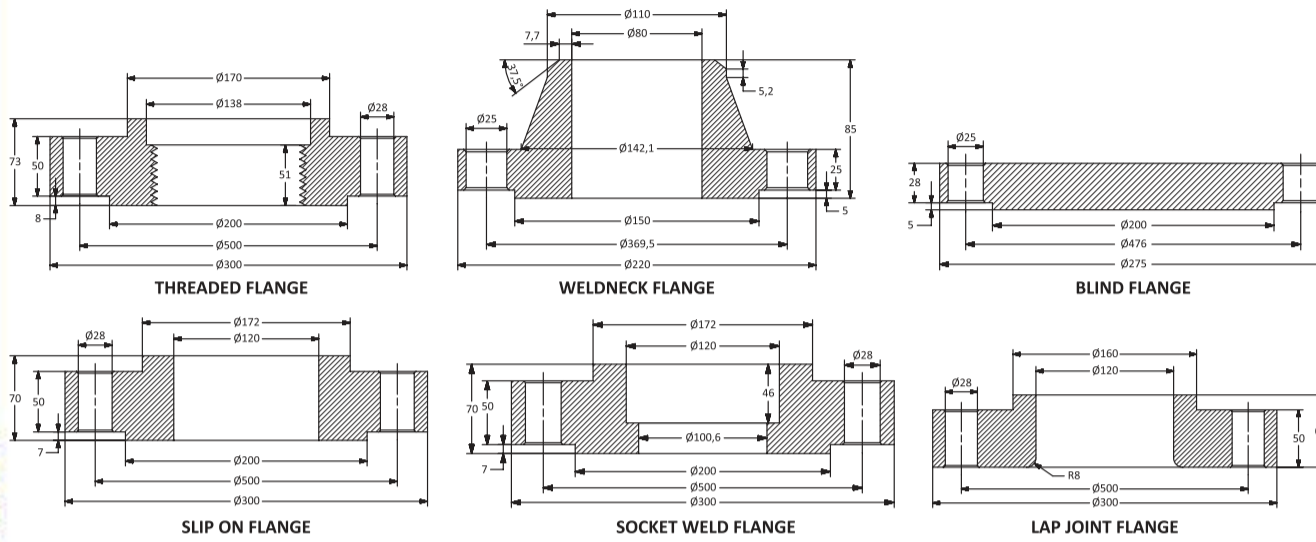
ASME B 16.5 - 2009 - Class 600 Flanges

Nominal Pipe Size	Flange Diameter	Flange Thickness		Hub Dia		Bore			Length Through Hub			Radius - LJ	Thread Length THRD	Counter Bore THRD	Depth of Socket SW	Raised Face		Drilling			
		SO, SW, WN, BL, THRD	LJ	SO, SW, LJ, WN, THRD	Bewel end Dia-WN	SO	LJ	WN LJ	SO, SW, THRD	LJ	WN					Dia	Thickness	PCD	Hole Dia	No. of Hole	
NPS	DN	O	Tf	Tf	X	Ah	B	B	B1	Y	Y	Y	r	T	Q	D	R	Tr	W	d	n
1/2"	15	95	14.3	14.3	38	21.3	22.2	22.9	15.8	29	22	59	3	16	23.6	10	34.9	7	66.7	15.9	4
3/4"	20	115	15.9	15.9	48	26.7	27.7	28.2	20.9	32	25	64	3	16	29	11	42.9	7	82.6	19	4
1"	25	125	17.5	17.5	54	33.4	34.5	34.9	26.6	34	27	69	3	18	35.8	13	50.8	7	88.9	19	4
1 1/4"	30	135	20.7	20.7	64	42.2	43.2	43.7	35.1	36	29	74	5	21	44.4	14	63.5	7	98.4	19	4
1 1/2"	40	155	22.3	22.3	70	48.3	49.5	50	40.9	39	32	77	6	23	50.6	16	73	7	114.3	22.2	4
2"	50	165	25.4	25.4	84	60.3	61.9	62.5	52.5	44	37	80	8	29	63.5	17	92.1	7	127	19	8
2 1/2"	60	190	28.6	28.6	100	73	74.6	75.4	62.7	48	41	86	8	32	76.2	19	104.8	7	149.2	22.2	8
3"	80	210	31.8	31.8	117	88.9	90.7	91.4	77.9	53	46	90	10	35	92.2	21	127	7	168.3	22.2	8
3 1/2"	90	230	35	35	133	101.6	103.4	104.1	90.1	56	49	93	10	40	104.9	22	139.7	7	184.2	25.4	8
4"	100	275	38.1	38.1	152	114.3	116.1	116.8	102.3	61	54	109	11	42	117.6	24	157.2	7	215.9	25.4	8
5"	125	330	44.5	44.5	189	141.3	143.8	144.4	128.2	67	60	121	11	48	144.4	24	185.7	7	266.7	28.6	8
6"	150	355	47.7	47.7	222	168.3	170.7	171.4	154.1	74	67	124	13	51	171.4	27	215.9	7	292.1	28.6	12
8"	200	420	55.6	55.6	273	219.1	221.5	222.2	202.7	83	76	140	13	58	222.2	32	269.9	7	349.2	31.7	12
10"	250	510	63.5	63.5	343	273	276.2	277.4	254.6	93	111	159	13	66	276.2	33	323.8	7	431.8	34.9	16
12"	300	560	66.7	66.7	400	323.8	327	328.2	304.8	99	117	163	13	70	328.6	40	381	7	489	34.9	20
14"	350	605	69.9	69.9	432	355.6	359.2	360.2	336.5	101	127	172	13	74	360.4	41	412.8	7	527	38.1	20
16"	400	685	76.2	76.2	495	406.4	410.5	411.2	387.3	113	140	185	13	78	411.2	44	469.9	7	603.2	41.3	20
18"	450	745	82.6	82.6	546	457	461.8	462.3	438.1	124	152	191	13	80	462	49	533.4	7	654	44.4	20
20"	500	815	88.9	88.9	610	508	513.1	514.4	488.9	134	165	197	13	83	512.8	54	584.2	7	723.9	44.4	24
24	600	940	101.6	101.6	718	610	616	616	590.5	147	184	210	13	93	614.4	64	692.2	7	838.2	50.8	24

ASME B 16.5 - 2009 - Class 300 Flanges

NPS	DN	O	Tf	Tf	X	Ah	B	B	B1	Y	Y	Y	r	T	Q	D	R	Tr	W	d	n
1/2"	15	120	22.3	22.3	38	21.3	22.2	22.9	15.8	39	32	67	3	23	23.6	10	34.9	7	82.6	22.2	4
3/4"	20	130	25.4	25.4	44	26.7	27.7	28.2	20.9	42	35	77	3	26	29	11	42.9	7	88.9	22.2	4
1"	25	150	28.6	28.6	52	33.4	34.5	34.9	26.6	48	41	80	3	29	35.8	13	50.8	7	101.6	25.4	4
1 1/4"	30	160	28.6	28.6	64	42.2	43.2	43.7	35.1	48	41	80	5	31	44.4	14	63.5	7	111.1	25.4	4
1 1/2"	40	180	31.8	31.8	70	48.3	49.5	50	40.9	51	44	90	6	32	50.3	16	73	7	123.8	28.6	4
2"	50	215	38.1	38.1	105	60.3	61.9	62.5	52.5	64	57	109	8	39	63.5	17	92.1	7	165.1	25.4	8
2 1/2"	60	245	41.3	41.3	124	73	74.6	75.4	62.7	71	64	112	8	48	76.2	19	104.8	7	190.5	28.6	8
3"	80	240	38.1	38.1	127	88.9	90.7	91.4	77.9	61	54	109	10	42	92.2	21	127	7	190.5	25.4	8
4"	100	290	44.5	44.5	159	114.3	116.1	116.8	102.3	77	70	121	11	48	117.6	24	157.2	7	235	31.7	8
5"	125	350	50.8	50.8	190	141.3	143.8	144.4	128.2	86	79	134	11	54	144.4	24	185.7	7	279.4	34.9	8
6"	150	380	55.6	55.6	235	168.3	170.7	171.4	154.1	93	86	147	13	58	171.4	27	215.9	7	317.5	31.7	12
8"	200	470	63.5	63.5	298	219.1	221.5	222.2	202.7	109	114	169	13	64	222.2	32	269.9	7	393.7	38.1	12
10"	250	545	69.9	69.9	368	273	276.2	277.4	254.6	115	127	191	13	72	276.2	33	323.8	7	469.9	38.1	16
12"	300	610	79.4	79.4	419	323.8	327	328.2	304.8	124	143	207	13	77	328.6	40	381	7	533.4	38.1	20
14"	350	640	85.8	85.8	451	355.6	359.2	360.2	336.5	137	156	220	13	83	360.4	41	412.8	7	558.8	41.3	20
16"	400	705	88.9	88.9	508	406.4	410.5	411.2	387.3	140	165	223	13	86	411.2	44	469.9	7	616	44.4	20
18"	450	785	101.6	101.6	565	457	461.8	462.3	438.1	159	190	236	13	89	462	49	533.4	7	685.8	50.8	20
20"	500	855	108	108	622	508	513.1	514.4	488.9	166	210	255	13	93	512.8	54	584.2	7	749.3	54	20
24	600	1,040	139.7	139.7	749	610	616	616	590.5	210	267	299	13	102	614.4	64	692.2	7	901.7	66.7	20

• Dimensions are in m.m.



ASME B 16.5 - 2009 - Class 1500 Flanges

Nominal Pipe Size		Flange Diameter	Flange Thickness		Hub Dia		Bore			Length Through Hub			Radius - L	Thread Length THRD	Counter Bore THRD	Depth of Socket SW	Raised Face		Drilling		
			SO, SW, WN, BL, THRD	LJ	SO, SW, LJ, WN, THRD	Bewell end Dia-WN	SO	LJ	WN LJ	SO, SW, THRD	LJ	WN					Dia	Thickness	PCD	Hole Dia	No. of Hole
NPS	DN	O	Tf	Tf	X	Ah	B	B	B1	Y	Y	Y	r	T	Q	D	R	Tr	W	d	n
1/2"	15	120	22.3	22.3	38	21.3	22.2	22.9	15.8	39	32	67	3	23	23.6	10	34.9	7	82.6	22.2	4
3/4"	20	130	25.4	25.4	44	26.7	27.7	28.2	20.9	42	35	77	3	26	29	11	42.9	7	88.9	22.2	4
1"	25	150	28.6	28.6	52	33.4	34.5	34.9	26.6	48	41	80	3	29	35.8	13	50.8	7	101.6	25.4	4
1 1/4"	30	160	28.6	28.6	64	42.2	43.2	43.7	35.1	48	41	80	5	31	44.4	14	63.5	7	111.1	25.4	4
1 1/2"	40	180	31.8	31.8	70	48.3	49.5	50	40.9	51	44	90	6	32	50.6	16	73	7	123.8	28.6	4
2"	50	215	38.1	38.1	105	60.3	61.9	62.5	52.5	64	57	109	8	39	63.5	17	92.1	7	165.1	25.4	8
2 1/2"	60	245	41.3	41.3	124	73	74.6	75.4	62.7	71	64	112	8	48	76.2	19	104.8	7	190.5	28.6	8
3"	80	265	47.7	47.7	133	88.9	90.7	91.4	77.9	80	73	124	10	---	---	21	127	7	203.2	31.7	8
4"	100	310	54	54	162	114.3	116.1	116.8	102.3	97	90	131	11	---	---	24	157.2	7	241.3	34.9	8
5"	125	375	73.1	73.1	197	141.3	143.8	144.4	128.2	112	105	163	11	---	---	24	185.7	7	292.1	41.3	8
6"	150	395	82.6	82.6	229	168.3	170.7	171.4	154.1	126	119	178	13	---	---	27	215.9	7	317.5	38.1	12
8"	200	485	92.1	92.1	292	219.1	221.5	222.2	202.7	150	143	220	13	---	---	32	269.9	7	393.7	44.4	12
10"	250	585	108	108	368	273	276.2	277.4	254.6	185	178	261	13	---	---	33	323.8	7	482.6	50.8	12
12"	300	675	123.9	123.9	451	323.8	327	328.2	304.8	226	219	290	13	---	---	40	381	7	571.5	54	16
14"	350	750	133.4	133.4	495	355.6	359.2	360.2	336.5	248	241	305	13	---	---	41	412.8	7	635	60.3	16
16"	400	825	146.1	146.1	552	406.4	410.5	411.2	387.3	267	260	318	13	---	---	44	469.9	7	704.8	66.7	16
18"	450	915	162	162	597	457	461.8	462.3	438.1	283	276	334	13	---	---	49	533.4	7	774.7	73	16
20"	500	985	177.8	177.8	641	508	513.1	514.4	488.9	299	292	363	13	---	---	54	584.2	7	831.8	79.4	16
24	600	1170	203.2	203.2	762	610	616	616	590.5	337	330	413	13	---	---	64	692.2	7	990.6	92.1	16

ASME B 16.5 - 2009 - Class 2500 Flanges

NPS	DN	O	Tf	Tf	X	Ah	B	B	B1	Y	Y	Y	r	T	Q	D	R	Tr	W	d	n
1/2"	15	135	30.2	30.2	43	21.3	22.2	22.9	15.8	47	40	80	3	29	23.6	10	34.9	7	88.9	22.2	4
3/4"	20	140	31.8	31.8	51	26.7	27.7	28.2	20.9	50	43	86	3	32	29	11	42.9	7	95.2	22.2	4
1"	25	160	35	35	57	33.4	34.5	34.9	26.6	55	48	96	3	35	35.8	13	50.8	7	108	25.4	4
1 1/4"	30	185	38.1	38.1	73	42.2	43.2	43.7	35.1	59	52	102	5	39	44.4	14	63.5	7	130.2	28.6	4
1 1/2"	40	205	44.5	44.5	79	48.3	49.5	50	40.9	67	60	118	6	45	50.6	16	73	7	146	31.7	4
2"	50	235	50.9	50.9	95	60.3	61.9	62.5	52.5	77	70	134	8	51	63.5	17	92.1	7	171.4	28.6	8
2 1/2"	60	265	57.2	57.2	114	73	74.6	75.4	62.7	86	79	150	8	58	76.2	19	104.8	7	196.8	31.7	8
3"	80	305	66.7	66.7	133	88.9	90.7	91.4	77.9	99	92	175	10	---	---	21	127	7	228.6	34.9	8
4"	100	355	76.2	76.2	165	114.3	116.1	116.8	102.3	115	108	197	11	---	---	24	157.2	7	273	41.3	8
5"	125	420	92.1	92.1	203	141.3	143.8	144.4	128.2	137	130	236	11	---	---	24	185.7	7	323.8	47.6	8
6"	150	485	108	108	235	168.3	170.7	171.4	154.1	159	152	280	13	---	---	27	215.9	7	368.3	54	8
8"	200	550	127	127	305	219.1	221.5	222.2	202.7	185	178	325	13	---	---	32	269.9	7	438.2	54	12
10"	250	675	165.1	165.1	375	273	276.2	277.4	254.6	236	229	426	13	---	---	33	323.8	7	539.8	66.7	12
12"	300	760	184.2	184.2	441	323.8	327	328.2	304.8	261	254	471	13	---	---	40	381	7	619.1	73	12

• Dimensions are in m.m.

Nominal Bore For Weld Neck Flanges

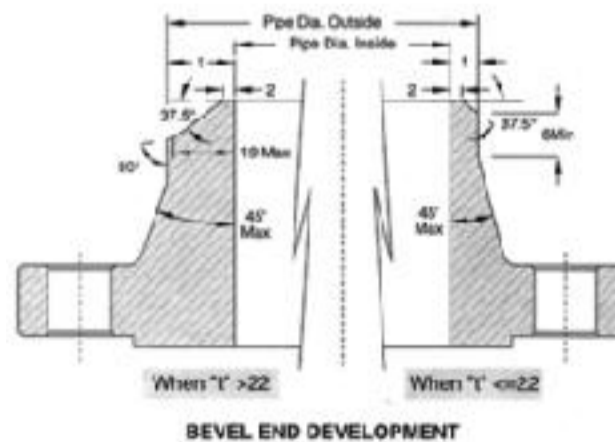
NPS	OD	STD Wall	Sch 40	Sch 60	EXT Hvy	Sch 80	Sch 100	Sch 120	Sch 140	Sch 160	XX Hvy	
1/2"	15	21.3	15.8	15.8	---	13.9	13.9	---	---	11.8	6.4	
3/4"	20	26.7	20.9	20.9	---	18.8	18.8	---	---	15.5	11.0	
1"	25	33.4	26.6	26.6	---	24.3	24.3	---	---	20.7	15.2	
1 1/4"	30	42.2	35.1	35.1	---	32.5	32.5	---	---	29.5	22.8	
1 1/2"	40	48.3	40.9	40.9	---	38.1	38.1	---	---	34	27.9	
2"	50	60.3	52.5	52.5	---	49.3	49.3	---	---	42.8	38.2	
2 1/2"	60	73	62.7	62.7	---	59.0	59.0	---	---	54.0	45.0	
3"	80	88.9	77.9	77.9	---	73.7	73.7	---	---	66.6	58.4	
3 1/2"	90	101.6	90.1	90.1	---	85.4	85.4	---	---	---	69.3	
4"	100	114.3	102.3	102.3	---	97.2	97.2	---	92.0	---	80.1	
5"	125	141.3	128.2	128.2	---	122.3	122.3	---	115.9	---	103.2	
6"	150	168.3	154.1	154.1	---	146.3	146.3	---	139.7	---	124.4	
8"	200	219.1	202.7	202.7	198.5	193.7	193.7	188.9	182.5	177.8	173.1	174.6
10"	250	273.1	254.5	254.5	247.7	247.7	242.9	236.5	230.2	222.3	215.9	222.3
12"	300	323.9	304.8	303.2	295.3	298.5	288.9	281.0	273.1	266.7	257.2	273.1
14"	350	355.6	336.6	333.3	325.4	330.2	317.5	307.9	300.0	292.1	284.2	---
16"	400	406.4	387.4	381.0	373.1	381.0	363.5	354.0	344.5	333.3	325.4	---
18"	450	457.2	438.2	428.7	419.1	431.8	409.5	398.5	387.4	377.9	366.7	---
20"	500	508	489.0	477.8	466.8	482.6	455.6	442.9	431.8	419.1	408.0	---

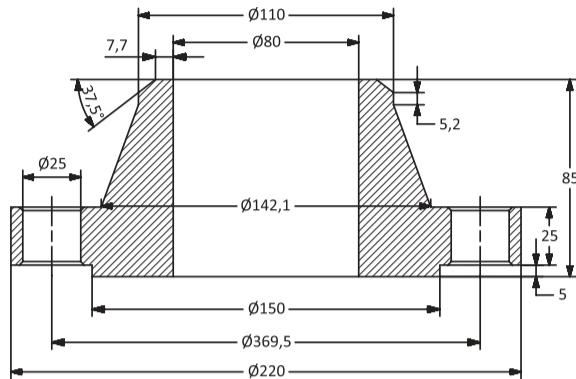
Most Common Material for Steel Flanges

Designation	Tensile Strength		Yield Point		C	Si	Mn	P max.	S max.	Cr	Ni	Mo
	lb/sq. in min.	N/mm ² min.	lb/sq. in min.	N/mm ² min.								
For High Temperature - Service												
A/SA 105	70000	483	36000	248	Max.0,35	Max.0,35	0,60-1,05	0,040	0,050	---	---	---
Austenitic Steels for High Temperature - Service												
Grade F304	75000	517	30000	207	Max.0,08	Max. 1,00	Max. 2,00	0,040	0,030	18,0-20,0	---	---
Grade F304 H	75000	517	30000	207	0,04-0,10	Max. 1,00	Max. 2,00	0,040	0,030	18,0-20,0	8,0-11,0	---
Grade F304 L	70000	483	25000	172	Max.0,035	Max. 1,00	Max. 2,00	0,040	0,030	18,0-20,0	8,0-11,0	---
Grade F 316	75000	517	30000	207	Max.0,08	Max. 1,00	Max. 2,00	0,040	0,030	16,0-18,0	8,0-13,0	2,0-3,0
Grade F316 H	75000	517	30000	207	0,04-0,10	Max. 1,00	Max. 2,00	0,040	0,030	16,0-18,0	10,0-14,0	2,0-3,0
Grade F316 L	70000	483	25000	172	Max.0,035	Max. 1,00	Max. 2,00	0,040	0,030	16,0-18,0	10,0-14,0	2,0-3,0
For Low-Temperature - Service												
Grade LF 1	60000	414	30000	207	Max.0,30	0,15-0,30	0,75-1,05	0,035	0,040	---	---	---
Grade LF 2	70000	483	36000	248	Max.0,30	0,15-0,30	Max. 1,35	0,035	0,040	---	---	---
Grade LF 3	70000	483	37500	259	Max.0,20	0,20-0,35	Max. 0,90	0,035	0,040	---	3,25-3,75	---

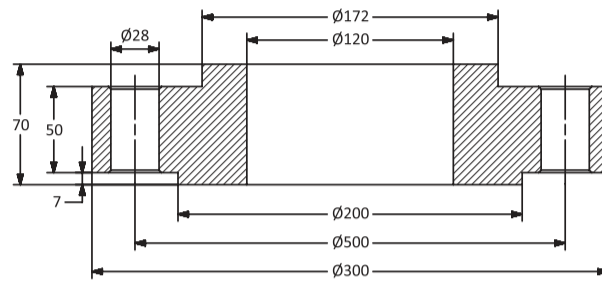
Important Tolerances B16.5 - 2009

OutSide Diameter	O	If O ≤ 610 mm	+1.6, -1.6
		If O > 610 mm	+3.1, -3.1
InSide Diameter	B	If NPS ≤ 10"	+0.8, -0.0
		If NPS ≥ 12"	+1.5, -0.0
Diameter Of Hub	X	If NPS ≤ 12"	+2.4, -1.5
		If NPS ≥ 14"	+3.1, -3.1
Hub Dia at Weld Point	Ah	If NPS ≤ 5"	+2, -1
		If NPS ≥ 6"	+4, -1
Raised Face Dia	R	If 150#, 300#	+0.8, -0.8
		If 400# ≥	+0.4, -0.4
Drilling	W	PCD	+0.8, -0.8
		Hole Spacing	+0.4, -0.5
Flange Thickness	tf	If NPS ≤ 18"	+3, -0
		If NPS ≥ 20"	+5, -0
Length Through Hub	Y	If NPS ≤ 4"	+1.5, -1.5
		If 5" ≤ NPS ≤ 10"	+1.5, -3
		If NPS ≥ 12"	+3, -5
Bore	B	WNRF 150#	+1, -1
		WNRF 300#	+0, -1
		SO LJ	+1, -0
		SW	+0.25, -0.25

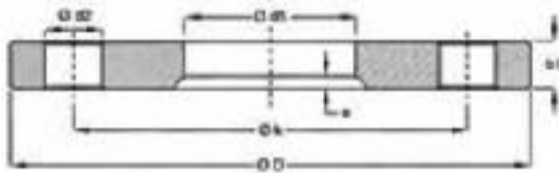




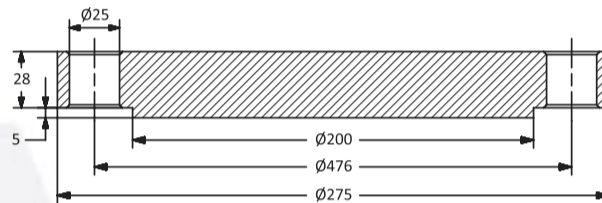
WELDNECK FLANGE - DIN 2632 / 2633



SLIP ON FLANGE - DIN 8029 / 8030



FLAT FLANGE - DIN 2576 / 2502



BLIND FLANGE - DIN 2527

Nominal Size	Flange		Hub										Raised Face		Drilling		Approx Weight										
	Diameter	Thickness	Weld end Diameter		Hub Diameter		Bore for Slipon		Wall Thickness	Radius		Length Through hub	Length	Dia	Thickness	PCD	Hole Dia	Thread	No. of Hole	Weldneck	Blind	SO	Flat Flange				
		WN, SO, BL	Flat	Srs-1	Srs-2	Srs-1	Srs-2	SO		Srs-1	Srs-2													Ch x 45'	WN	SO	Thrd
NOMINAL PRESSURE 10 BAR																											
WELDING NECK FLANGES : DIN 2632										FLAT FLANGE : DIN 2576				SLIP-ON FLANGE : DIN 8029				BLIND FLANGES : DIN 2527									
NPS	D	b1	b2	d1	d1	d3	d3	d6	d5	d5	e	s	r1	r2	h1	h2	h3	d4	f	k	d2	Thrd	Hole	Wt	Wt	Wt	Wt
10 to 150																											
Refer 16 BAR																											
200	340	24	24	219.1	---	---	235	247	221.8	---	7	5.9	10	6	62	44	16	268	3	298	22	M 20	8	11.3	16.9	10.0	9.3
250	395	26	26	273	267	292	285	300	276.2	270.2	7	6.3	12	6	68	46	16	320	3	350	22	M 20	12	14.7	24.7	12.7	12.5
300	445	26	26	323.9	---	---	344	352	327.6	---	7	7.1	12	6	68	46	16	370	4	400	22	M 20	12	17.4	31.9	14.4	13.8
350	505	26	28	355.6	368	---	385	398	372.2	539.7	7	7.1	12	10	68	53	16	430	4	460	22	M 20	16	23.6	41.9	22.4	20.6
400	565	26	32	406.4	419	---	440	448	423.7	411	7	7.1	12	10	72	57	16	482	4	515	26	M 24	16	28.6	51.2	26.9	27.9
500	670	28	38	508	---	---	542	552	513.6	---	7	7.1	12	10	75	67	16	585	4	620	26	M 24	20	38.1	77.8	37.8	41.1
NOMINAL PRESSURE 16 BAR																											
WELDING NECK FLANGES : DIN 2633										FLAT FLANGE : DIN 2502				SLIP-ON FLANGE : DIN 8030				BLIND FLANGES : DIN 2527									
NPS	D	b1	b2	d1	d1	d3	d3	d6	d5	d5	e	s	r1	r2	h1	h2	h3	d4	f	k	d2	Thrd	Hole	Wt	Wt	Wt	Wt
10	90	14	14	17.2	14	28	25	30	---	17.7	---	1.8	4	4	35	20	6	40	2	60	14	M 12	4	0.6	0.6	0.6	0.6
15	95	14	14	21.3	20	32	30	35	---	22	---	2	4	4	35	20	6	45	2	65	14	M 12	4	0.6	0.7	0.6	0.7
20	105	16	16	26.9	25	40	38	45	---	27.6	---	2.3	4	4	38	24	6	58	2	75	14	M 12	4	1.0	1.0	0.9	0.9
25	115	16	16	33.7	30	45	42	52	---	34.4	---	2.6	4	5	38	24	6	68	2	85	14	M 12	4	1.1	1.2	1.1	1.1
32	140	16	16	42.4	38	56	52	60	---	43.1	---	2.6	6	5	40	26	6	78	2	100	18	M 16	4	1.7	1.8	1.6	1.6
40	150	16	16	48.3	44.5	64	60	70	---	49	---	2.6	6	5	42	26	7	88	3	110	18	M 16	4	1.9	2.1	1.8	1.9
50	165	18	18	60.3	57	75	72	85	---	61.1	---	2.9	6	5	45	28	8	102	3	125	18	M 16	4	2.5	2.9	2.4	2.5
65	185	18	18	76.1	---	---	90	105	---	77.1	---	2.9	6	5	45	32	10	122	3	145	18	M 16	4	3.1	3.7	3.1	3.0
80	200	20	20	88.9	---	---	105	118	---	90.3	---	3.2	8	5	50	34	10	138	3	160	18	M 16	8	3.7	4.8	3.8	3.6
100	220	20	20	114.3	108	131	125	140	---	115.9	---	3.6	8	5	52	38	12	158	3	180	18	M 16	8	4.6	5.8	4.3	4.0
125	250	22	22	139.7	133	156	150	168	---	141.6	---	4	8	5	55	40	12	188	3	210	18	M 16	8	6.3	8.6	5.9	5.4
150	285	22	22	168.3	159	184	175	196	---	170.5	---	4.5	10	5	55	44	12	212	3	240	22	M 20	8	7.8	10.6	7.2	6.6
200	340	24	24	219.1	---	---	235	247	---	221.8	---	5.9	10	6	62	44	16	268	3	295	22	M 20	12	11.0	16.5	9.7	9.0
250	405	26	26	273	267	292	285	300	---	276.2	---	6.3	12	6	70	46	16	320	3	355	26	M 24	12	15.6	25.6	13.5	12.8
300	460	28	28	323.9	---	---	344	355	---	327.6	---	7.1	12	6	78	46	16	378	4	410	26	M 24	12	22.0	36.1	17.3	16.6
350	520	30	30	355.6	368	---	390	400	---	359.7	---	8	12	10	82	57	16	438	4	470	26	M 24	16	31.2	49.1	27.7	24.1
400	580	32	32	406.4	419	---	445	457	---	411	---	8	12	10	85	63	16	490	4	525	30	M 27	16	39.3	65.3	36.1	30.2
500	715	34	38	508	---	---	548	559	---	513.6	---	8	12	10	90	73	16	610	4	650	33	M 30	20	61.0	105.0	56.9	52.9

• Dimensions are in m.m. and Weight in Kgs.



Approximate Weight of Flange in Kgs.

ASME B 16.5 - Class 150						
NPS		SO/LJ	THRD	SW	BL	Wn
1/2"	15	0.4	0.4	0.4	0.4	0.5
3/4"	20	0.7	0.7	0.7	0.7	0.7
1"	25	0.8	0.9	0.9	0.9	1.1
1 1/4"	30	1.1	1.2	1.2	1.3	1.5
1 1/2"	40	1.4	1.5	1.5	1.6	1.8
2"	50	2.2	2.3	2.3	2.6	2.7
2 1/2"	60	3.6	3.7	3.7	4.1	4.4
3"	80	4.1	4.2	4.2	5.0	5.2
3 1/2"	90	5.2	5.3	5.4	6.4	6.4
4"	100	5.6	5.9	5.8	7.1	7.5
5"	125	6.3	7.0	6.5	9.0	9.2
6"	150	7.5	8.4	7.8	11.8	11
8"	200	12.6	13.0	---	21.0	18.3
10"	250	18.5	17.8	---	30.0	25
12"	300	28.0	29.5	---	45.0	39
14"	350	35.0	---	---	59.0	51
16"	400	45.0	47.0	---	79.0	60
18"	450	50.0	54.0	---	97.0	71
20"	500	64.0	68.0	---	124.0	88
24"	600	89.0	93.0	---	188.0	119

ASME B 16.5 - Class 300						
NPS		SO/LJ	THRD	SW	BL	Wn
1/2"	15	0.7	0.7	0.7	0.7	0.8
3/4"	20	1.1	1.2	1.2	1.2	1.3
1"	25	1.4	1.4	1.4	1.5	1.7
1 1/4"	30	1.8	1.9	1.9	2.0	2.2
1 1/2"	40	2.6	2.8	2.8	2.9	3.2
2"	50	3.4	3.3	3.3	3.4	3.6
2 1/2"	60	4.4	4.6	4.6	5.1	5.4
3"	80	6.1	6.3	6.3	7.0	7.4
3 1/2"	90	7.5	7.8	---	8.9	8.9
4"	100	10.1	10.2	---	11.8	11.9
5"	125	12.5	12.9	---	15.5	16
6"	150	14.1	15.0	---	21.3	20.2
8"	200	24.8	26.0	---	35.2	31
10"	250	37.1	37.5	---	57.0	44.3
12"	300	50.0	52.0	---	82.0	64
14"	350	70.0	72.0	---	106.0	88
16"	400	97.0	100.0	---	140.0	113
18"	450	123.0	126.0	---	178.0	134
20"	500	133.0	138.0	---	223.0	171
24"	600	203.0	213.0	---	345.0	238

FLANGE



ASME B 16.5 - Class 600						
NPS		SO/LJ	THRD	SW	BL	Wn
1/2"	15	0.8	1.0	1	0.7	0.9
3/4"	20	1.4	1.6	1.6	1.2	1.5
1"	25	1.6	1.8	1.8	1.5	1.9
1 1/4"	30	2.1	2.6	2.6	2.0	2.6
1 1/2"	40	3.1	3.3	3.3	3.2	3.3
2"	50	3.7	3.9	3.9	4.3	4.7
2 1/2"	60	5.4	6.0	6	6.0	6.5
3"	80	7.3	7.4	---	8.0	8.7
4"	100	15.8	17.0	---	18.0	18.1
5"	125	24.5	26.5	---	28.5	30.5
6"	150	29.5	32.0	---	35.5	36.2
8"	200	43.0	46.0	---	58.0	49.5
10"	250	70.0	74.0	---	98.0	89
12"	300	86.0	90.0	---	125.0	110
14"	350	100	108.0	---	151.0	150
16"	400	142	150.0	---	215.0	190
18"	450	175	188.0	---	275.0	240
20"	500	221	230.0	---	350.0	295
24"	600	315	325.0	---	532.0	363

ASME B 16.5 - Class 900						
NPS		SO/LJ	THRD	SW	BL	Wn
1/2"	15	1.7	1.7	---	1.8	1.9
3/4"	20	2.3	2.4	---	2.4	2.6
1"	25	3.4	3.5	---	3.6	3.8
1 1/4"	30	3.9	4.0	---	4.1	4.4
1 1/2"	40	5.4	5.5	---	5.8	6.1
2"	50	9.8	10.0	---	10.1	11.1
2 1/2"	60	13.7	13.9	---	14.0	15.5
3"	80	11.6	11.9	---	13.1	14
4"	100	19.8	20.0	---	22.1	23.2
5"	125	32.0	32.5	---	36.5	37.1
6"	150	41.2	41.7	---	47.4	49.3
8"	200	71.0	71.0	---	82.5	84
10"	250	100	101	---	123	123
12"	300	133	134	---	174	163
14"	350	152	154	---	206	186
16"	400	184	186	---	259	224
18"	450	258	260	---	367	300
20"	500	317	320	---	463	373
24"	600	608	611	---	875	---

HEAT TREATMENT & SHOT BLASTING



MACHINE SHOP



QUALITY CONTROL



HEAT TREATMENT & SHOT BLASTING



MACHINE SHOP



QUALITY CONTROL





nectar incorporation



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