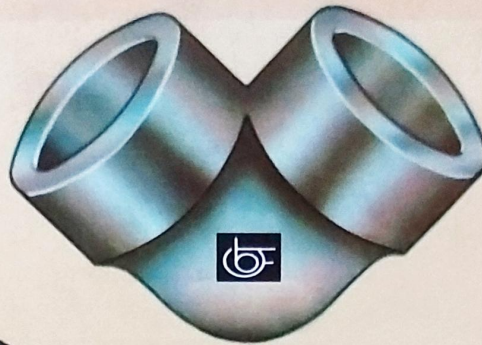




BHAVANI STEEL FORGING INDUSTRIES

: REGD. OFFICE :

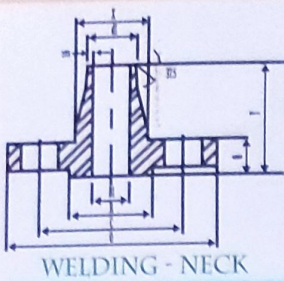
46/1, VAVDI IND. ESTATE, B/H KRISHNA PARK HOTEL, OFF. GONDAL ROAD,
NEAR MURLIDHAR WEIGH BRIDGE, OPP. SANT KRUPA MARBLE, RAJKOT - 360 004.

Mo. : 98242 88018, 94287 89914, 98248 65201

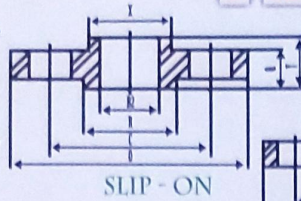
E-mail : bhavanisteels@yahoo.com

FLANGES

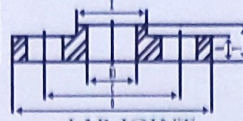
ANSI B. 16.5
(DIMENSIONS IN mm)



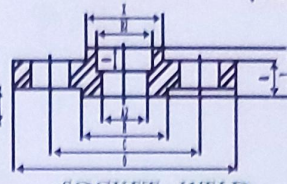
WELDING - NECK



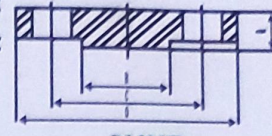
SLIP - ON



LAP-JOINT



SOCKET - WELD



BLIND

ASA 150 LBS

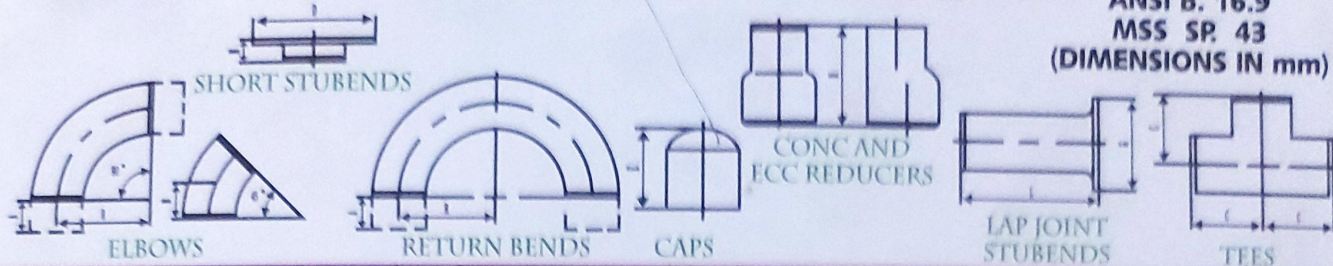
NOM. PIPE SIZE	OUTSIDE DIAMETER OF FLANGES O mm	THICKNESS OF FLANGES Q mm	DIAMETER OF RAISED FACE R mm	HUB	LENGTH THROUGH HUB - Y			DRILLING		BORE			
				DIAMETER X mm	WELDING NECK mm	SLIP ON SCREWED SOCKET-WELD mm	LAP JOINT mm	DIAMETER OF BOLT CIRCLE C mm	NUMBER AND SIZE OF HOLES NO. mm	WELD NECK B1 mm	SLIP ON & SOCKET WELD B2 mm	LAP JOINT B3 mm	DEPTH OF SOCKET D mm
1/2	90	11.1	34.9	30.2	47.6	15.9	15.9	60.3	4 15.9	15.7	22.4	22.9	10
3/4	100	12.7	42.9	38.1	52.4	15.9	15.9	69.8	4 15.9	20.9	27.7	28.2	11
1	110	14.3	50.8	49.2	55.6	17.5	17.5	79.4	4 15.9	26.7	34.5	35.1	13
1 1/4	115	15.9	63.5	58.7	57.1	20.5	20.5	88.9	4 15.9	35.0	43.2	43.7	14
1 1/2	125	17.5	73.0	65.1	61.9	22.2	22.2	98.4	4 15.9	40.9	49.5	50.0	16
2	150	19.0	92.1	77.8	63.5	25.4	25.4	120.6	4 19.0	52.5	62.0	62.5	17
2 1/2	180	22.2	104.8	90.5	69.8	28.6	28.6	139.7	4 19.0	62.7	74.7	75.4	19
3	190	23.8	127.0	105.0	69.8	30.2	30.2	152.4	4 19.0	77.9	90.7	91.5	21
3 1/2	215	23.8	139.7	122.0	71.4	31.7	31.7	177.8	8 19.0	90.6	103.4	104.2	22
4	230	23.8	157.2	135.0	76.2	33.3	33.3	190.5	8 19.0	102.3	116.1	116.9	24
5	255	23.8	185.7	164.0	88.9	36.5	36.5	215.9	8 22.2	128.2	143.8	144.5	24
6	280	25.4	215.9	192.0	88.9	39.7	39.7	241.3	8 22.2	154.2	170.7	171.5	27
8	345	28.6	269.9	246.0	101.6	44.4	44.4	293.4	8 22.2	202.7	221.5	222.3	32
10	405	30.2	323.8	305.0	101.6	49.2	49.2	361.9	12 25.4	254.5	276.4	277.4	34
12	485	31.8	381.0	365.0	114.3	55.6	55.6	431.8	12 25.4	304.8	327.2	328.2	40
14	535	34.9	412.7	400.0	127.0	57.1	79.4	476.2	12 28.6	336.5	359.2	360.2	
16	595	36.5	469.9	457.0	127.0	63.5	87.3	539.7	16 28.6	387.4	410.5	411.2	
18	635	39.7	533.4	505.0	139.7	68.3	96.8	577.8	16 31.7	438.2	461.8	462.3	
20	700	42.9	584.2	559.0	144.5	73.0	103.2	635.0	20 31.7	488.9	513.1	514.4	
22	750	46.0	641.3	610.0	149.2	79.4	107.9	692.1	20 34.9	539.7	564.4	565.0	
24	815	47.6	692.1	664.0	152.4	82.5	111.1	749.3	20 34.9	590.5	616.0	616.0	

ASA 300 LBS

1/2	95	14.3	34.9	38.1	52.4	22.2	22.2	66.7	4 15.9	15.7	22.4	22.9	10
3/4	115	15.9	42.9	47.6	57.1	25.4	25.4	82.5	4 19.0	20.9	27.7	28.2	11
1	125	17.5	50.8	54.0	61.9	26.9	26.9	88.9	4 19.0	26.7	34.5	35.1	13
1 1/4	135	19.0	63.5	63.5	65.1	26.9	26.9	98.4	4 19.0	35.0	43.2	43.7	14
1 1/2	155	20.6	73.0	69.8	68.3	30.2	30.2	114.3	4 22.2	40.9	49.5	50.0	16
2	165	22.2	92.1	84.1	69.8	33.3	33.3	127.0	8 19.0	52.5	62.0	62.5	17
2 1/2	190	25.4	104.8	100.0	76.2	38.1	38.1	149.2	8 22.2	62.7	74.7	75.4	19
3	210	28.6	127.0	117.0	79.4	42.9	42.9	168.3	8 22.2	77.9	90.7	91.5	21
3 1/2	230	30.2	139.7	133.0	81.4	44.4	44.4	184.1	8 22.2	90.2	103.4	104.2	22
4	255	31.8	157.2	146.0	85.7	47.6	47.6	200.0	8 22.2	102.3	116.4	116.9	24
5	280	34.9	185.7	178.0	98.4	50.8	50.8	234.9	8 22.2	128.2	143.8	144.5	24
6	320	36.5	215.9	205.0	98.4	52.4	52.4	269.9	12 22.2	154.2	170.7	171.5	27
8	380	41.3	269.9	260.0	111.1	61.9	61.9	330.2	12 25.4	202.7	221.5	222.3	32
10	445	47.6	323.8	321.0	117.5	96.0	96.0	387.5	16 28.6	254.5	276.4	277.4	34
12	520	50.8	381.0	375	130.2	73.0	101.6	450.8	16 31.7	304.8	327.2	328.2	40
14	585	54.0	412.7	425.0	142.9	76.2	111.1	514.3	20 31.7	336.5	359.2	360.2	
16	650	57.2	469.9	483.0	146.0	82.5	120.6	571.6	20 34.9	387.6	410.5	411.2	
18	710	60.3	533.4	533.0	158.7	88.9	130.2	628.6	24 34.9	438.2	461.8	462.3	
20	775	63.5	584.2	587.0	161.9	96.2	139.7	685.8	24 34.9	488.9	513.1	514.4	
22	838	66.7	641.3	640.0	165.1	101.6	146.0	742.9	24 41.3	539.7	565.0	565.0	
24	915	69.8	692.1	702.0	168.3	106.4	152.4	812.8	24 41.3	590.5	616.0	616.0	

FITTINGS BUTT WELDED

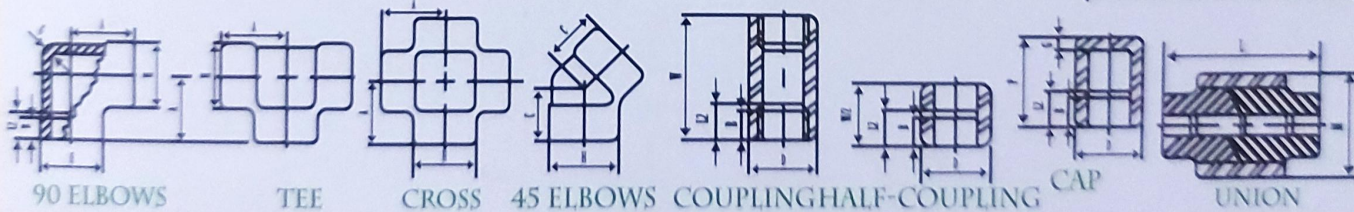
ANSI B. 16.9
MSS SP. 43
(DIMENSIONS IN mm)



NOM BORE	PIPE O.D.	WALL THICKNESS				RADIUS R				A	B	C	E	G	L		H	D	h
		5S	10S	40.S	80.S	1D	1.5D	2D	3D						SHORT	LONG			
1/2	21.34	1.65	2.11	2.77	3.73	-	19.1	25.4	38.1	12.7	15.9	25.4	25.4	34.9	50.8	76.2	38.1	42	8
3/4	26.67	1.65	2.11	2.87	3.91	19.0	28.6	38.1	57.2	19.1	11.1	28.6	25.4	42.8	50.8	76.2	38.1	50	8
1	33.40	1.65	2.77	3.38	4.55	25.4	38.1	50.8	76.2	25.4	22.2	38.1	38.1	50.8	50.8	101.6	50.8	60	10
1 1/4	42.16	1.65	2.77	3.56	4.85	31.7	47.6	63.5	95.2	31.7	25.0	47.6	38.1	63.5	50.8	101.5	50.8	70	12
1 1/2	48.26	1.65	2.77	3.68	5.08	38.1	57.2	76.2	114.3	38.1	28.6	57.2	38.1	73.0	50.8	101.6	63.5	80	12
2	60.32	1.65	2.77	3.91	5.54	50.8	76.2	101.6	152.4	50.8	34.0	63.5	38.1	92.0	63.5	152.4	76.2	94	16
2 1/2	73.02	2.11	3.05	5.16	7.01	63.5	95.3	127.0	190.5	63.5	44.0	76.2	38.1	104.8	63.5	152.4	88.9	110	16
3	88.90	2.11	3.05	5.49	7.62	76.2	114.3	152.4	228.6	76.2	50.8	85.7	50.8	127.0	63.5	152.4	88.9	130	18
3 1/2	101.60	2.11	3.05	5.74	8.08	88.9	133.4	177.8	266.7	88.9	57.2	95.3	63.5	139.7	76.2	152.4	101.6	140	18
4	114.30	2.11	3.05	6.02	8.56	101.6	152.4	203.2	304.8	101.6	63.5	104.8	63.5	157.2	76.2	152.4	101.6	158	20
5	141.30	2.77	3.40	6.55	9.52	127.0	190.5	254.0	381.0	127.0	82.6	123.8	76.2	185.7	76.2	203.5	127.0	188	25
6	168.27	2.77	3.40	7.11	10.97	152.4	228.6	304.8	457.2	152.4	95.3	143.0	88.9	215.9	88.9	203.2	139.7	215	25
8	219.07	2.77	3.76	8.18	12.70	203.2	304.8	406.4	609.6	203.0	127.0	178.0	101.6	270.0	101.6	203.2	152.4	270	30
10	273.05	3.40	4.19	9.27	12.70	254.0	381.0	508.0	762.0	254.0	158.7	215.9	127.0	324.0	127.0	254.0	177.8	330	35
12	323.85	3.96	4.57	9.52	12.70	304.8	457.2	609.6	914.4	304.8	190.5	254.0	152.4	381.0	152.4	254.0	203.2	400	40
14	355.60	3.96	4.76	9.52	12.70	355.6	533.4	711.2	1066.0	355.6	222.2	280.0	165.1	412.8	152.4	305.0	330.2	-	-
16	406.40	4.19	4.76	9.52	12.70	408.4	509.6	812.6	1219.0	405.4	254.0	304.8	177.8	470.0	152.4	305.0	355.5	-	-
18	457.20	4.19	4.76	9.52	12.70	457.2	685.8	914.4	1372.0	457.2	285.7	343.0	203.2	533.4	152.4	305.0	381.0	-	-
20	508.00	4.76	5.54	9.52	12.70	508.0	762.0	1016.0	1524.0	508.0	317.6	381.0	228.6	584.2	152.4	305.0	508.0	-	-
24	609.60	5.54	6.35	9.52	12.70	609.6	914.4	1219.0	1829.0	609.0	381.0	431.8	266.7	698.5	152.4	305.0	508.0	-	-

FITTINGS SCREWED

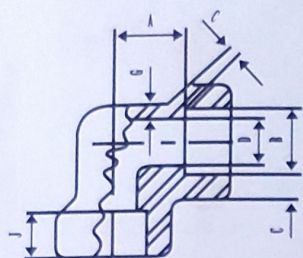
ANSI B. 16.11
(DIMENSIONS IN mm)



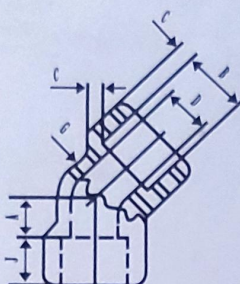
NOMINAL PIPE SIZE	CENTER TO END ELBOWS, TEES, CROSS		CENTER TO END 45 ELBOWS		OUTSIDE DIAMETER OF BEND		MINIMUM WALL THICKNESS		END TO END COUPLINGS	END TO END CAPS		OUTSIDE DIAMETER		LENGTH OF THREAD		UNION	
	A		C		H		G		W	P		D		B	L 2	L	M
	3000	6000	3000	6000	3000	6000	3000	6000	3000 & 6000	3000	6000	3000	6000	B	L 2	L	M
1/8	21	25	17	19	22	25	3.0	6.5	32	19	-	16	22	6.5	6.5	40	32
1/4	25	29	19	22	25	33	3.5	6.5	35	25	27	19	25	8.0	10.0	43	32
3/8	29	33	22	25	33	38	3.5	7.0	38	25	27	22	32	9.0	10.5	48	36
1/2	33	38	25	29	38	46	4.0	8.0	48	32	33	29	38	11.0	13.5	51	43
3/4	38	44	29	33	46	56	4.5	8.5	51	37	38	35	44	12.5	14.0	57	50
1	44	51	33	35	56	62	5.0	10.0	60	41	43	44	57	14.5	17.5	64	60
1 1/8	21	88	37	49	82	25	5.0	18.5	62	44	46	57	64	17.0	18.8	70	70
1 1/2	60	64	43	44	75	84	5.5	11.0	79	44	48	64	76	18.0	18.5	79	78
2	64	83	45	52	84	102	7.0	12.0	86	48	51	76	92	19.0	19.0	89	95
2 1/2	83	95	52	64	102	121	7.5	16.5	92	60	64	92	108	23.5	29.0	118	125
3	95	106	64	79	121	146	9.0	16.5	108	65	68	108	127	26.0	30.5	121	140
4	114	114	79	79	152	152	11.0	18.5	121	68	75	140	159	27.5	33.0	121	140

FITTINGS SOCKET WELDED

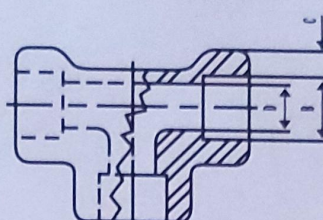
ANSI B. 16.11
(DIMENSIONS IN mm)



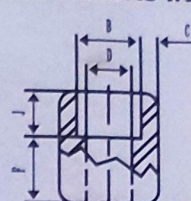
90° ELBOWS



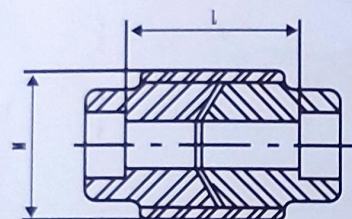
45° ELBOWS



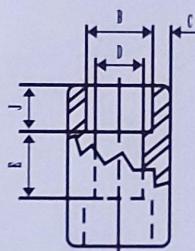
TEE



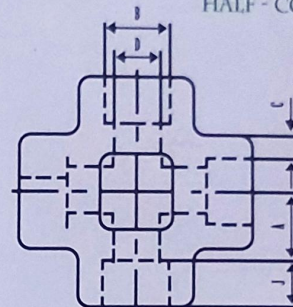
HALF - COUPLING



UNION



COUPLING



CROSS

NOMINAL PIPE SIZE	SOCKET BORE DIA ² DIA	BORE DIAMETER OF FITTING (1) D		SOCKET WALL THICKNESS - C (1)				BODY WALL THICKNESS - G		DEPTH OF SOCKET MIN - J	CENTER TO BOTTOM OF SOCKET - A				LAYING LENGTHS		END TO END L M	
				3000		6000		3000	6000		90° ELBOWS TEES & CROSSES		45° ELBOWS		COUPLING E	HALF COUPLING F		
				3000	6000	AVE.	MIN.	AVE.	MIN.		MIN.	MIN.	3000	6000				
		3000	6000	AVE.	MIN.	AVE.	MIN.	MIN.	MIN.		3000	6000	3000	6000				
1/8	10.90	7.6	4.8	3.20	3.20	3.95	3.45	2.20	3.15	10	12	12	9	9	8	17	37	32
	10.65	6.1	3.2								10	10	7	7	5	15		
1/4	14.35	10.0	7.1	3.80	3.30	4.60	4.00	3.00	3.70	10	12	17	9	9	8	17	37	32
	14.10	8.5	5.6								10	13	7	7	5	15		
3/8	17.80	13.3	9.9	4.00	3.50	5.05	4.35	3.20	4.00	10	15	17	9	13	9	19	37	36
	17.55	11.8	8.4								12	14	6	10	3	16		
1/2	21.95	16.6	12.5	4.65	4.10	5.95	5.20	3.75	4.80	10	17	21	13	14	13	24	38	43
	21.70	15.0	11.0								14	18	10	11	6	21		
3/4	27.30	21.7	16.3	4.90	4.25	6.95	6.50	3.90	5.55	13	21	24	14	16	13	25	46	50
	27.05	20.2	14.8								18	21	11	13	6	22		
1	34.05	27.4	21.5	5.70	5.00	7.90	5.95	4.55	6.35	13	24	29	16	19	17	31	52	60
	33.80	25.9	19.9								20	25	12	15	9	27		
1 1/4	42.80	35.8	30.2	6.05	5.30	7.90	6.95	4.85	6.35	13	29	34	19	23	17	32	54	
	42.55	34.3	28.7								25	30	15	19	9	28		
1 1/2	48.90	41.7	34.7	5.35	5.55	8.90	7.80	5.10	7.15	13	34	40	23	27	17	34	56	78
	48.65	40.1	33.2								30	36	19	23	9	30		
2	51.35	53.5	43.6	5.95	6.05	10.90	9.50	5.55	8.75	16	40	43	27	31	23	43	68	95
	51.10	51.7	42.1								36	39	23	27	15	39		
2 1/2	74.20	64.2		8.75	7.65			7.00		16	44		31		24	45	99	125
	73.80	61.2									39		27		14	40		
3	90.15	79.5		9.50	8.30			7.60		16	60		34		24	47	102	140
	89.90	76.4									55		29		14	42		
4	115.80	103.8		10.70	9.35			8.55		16	69		44		24	50		
	115.45	100.7									64		39		14	45		



BHAVANI STEEL FORGING INDUSTRIES



BHAVANI STEEL FORGING INDUSTRIES

AN OVERVIEW

- AN ISO 9001 : 2015 CERTIFIED COMPANY
- WELL ESTABLISHED AND EXPERIENCE IN MANUFACTURE OF FORGED FLANGES & PIPE FITTINGS IN CARBON, STAINLESS AND ALLOY STEEL CONFORMING TO ANSI B16.5, B16.11 & B16.9 STANDARDS AND SPECIFICATIONS FOR APPLICATION IN PETROCHEMICALS, FERTILIZERS, REFINERIES, CHEMICAL & PROCESS PLANTS, PRESSURE VESSELS, INDUSTRIAL VALVES ETC. ALL PRODUCTS AND MANUFACTURING FACILITIES ARE APPROVED FOR QUALITY INSPECTION BY THIRD PARTY INSPECTION AGENCIES LIKE B.V.I.S, UHDE, H&GC, BAX COUNSEL ETC.
- MANUFACTURING INFRASTRUCTURE CONSISTS OF STATE-OF-THE-ART TECHNOLOGY, EQUIPMENTS AND MACHINES.
- COMMITMENT TO QUALITY IS INITIATED RIGHT FROM SOURCING OF RAW MATERIAL TO THE FINISHED PRODUCTS. SOPHISTICATED METALLURGICAL & METROLOGICAL LABS INVOLVING HARDNESS TESTER, UNIVERSAL TESTING MACHINES, MEASURING INSTRUMENTS ETC. ENSURE HIGH QUALITY READY TO FIT PRODUCTS.
- PLANNING R&D, PERFECT ENGINEERING AND DEVELOPMENT OF JIGS & FIXTURES IS ACHIEVED THROUGH PRO/ENGINEER SOFTWARE.
- PROCESS CONTROL IS ENSURED AT DIFFERENT STAGES TO MAINTAIN CONSISTENT QUALITY AND TRACEABILITY.
- WITH CUSTOMER SATISFACTION AS QUALITY POLICY, BHAVANI STRIVES HARD FOR CONTINUOUS IMPROVEMENT TO ACHIEVE DESIRED QUALITY AT OPTIMUM COST.

