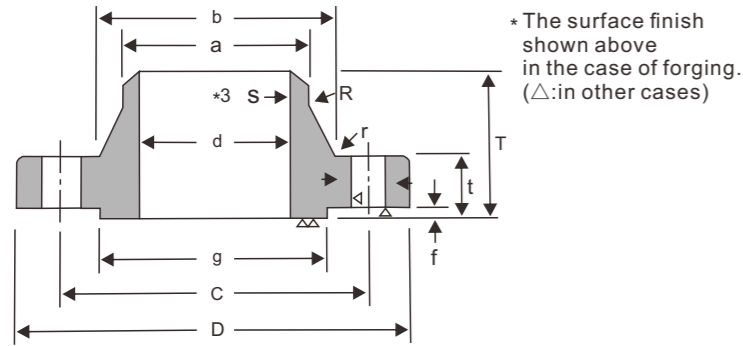
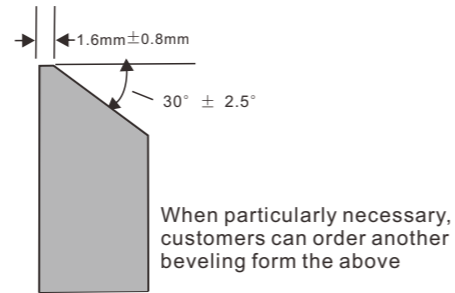


10K 10K WELDING NECK FLANGE

10Kg/cm²

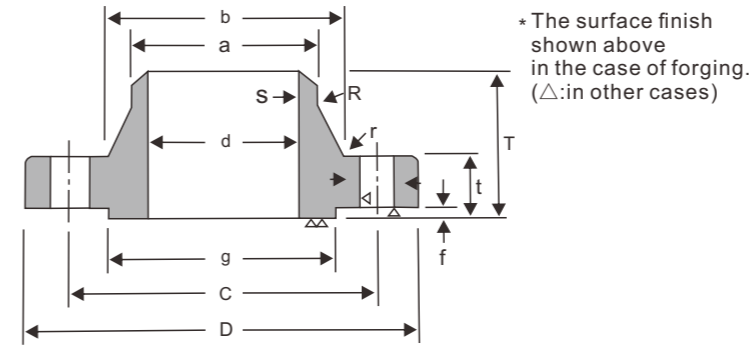


Reference: Beveling

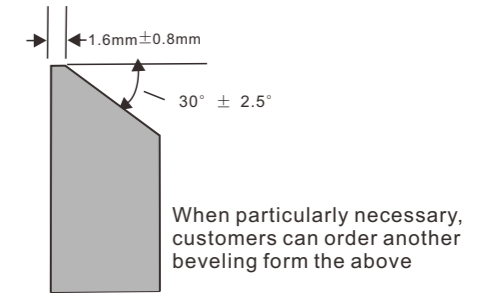


20K WELDING NECK FLANGE

20Kg/cm²



Reference: Beveling



Unit:mm

Nominal Bore of Flange	Outside Dia. of Applicable Pipe	Inside Dia. of Flange d	Outside Dia. of Flange D	Sectional Dimensions of Flange						Bolt Hole				Nominal Bolt Size	Length of wecr Depat P*4
				t	T*1	Dia. of Hub		Rdd -ius r*2	Raised Face f	Dia. of Raised Face g	Bolt Circle Dia. c	Num -ber of Bolt Holes	Hole Dia. h		
						a	b								
10	17.3	To be specified by purchaser	90	12	28.9	17.3	25	4	1	46	65	4	15	M12	3.5
15	21.7		95	12	30.6	21.7	33	4	1	51	70	4	15	M12	4.5
20	27.2		100	14	33.9	27.2	38	4	1	56	75	4	15	M12	6.4
25	34.0		125	14	36.3	34.0	47	4	1	67	90	4	19	M16	6.0
32	42.7		135	16	40.3	42.7	57	5	2	76	100	4	19	M16	6.4
40	48.6		140	16	41.2	48.6	64	5	2	81	105	4	19	M16	5.9
50	60.5		155	16	42.9	60.5	77	5	2	96	120	4	19	M16	6.3
65	76.3		175	18	53.0	76.3	97	5	2	116	140	4	19	M16	9.1
80	89.1		185	18	53.0	89.1	109	6	2	126	150	8	19	M16	9.6
(90)	101.6		195	18	50.6	101.6	120	6	2	136	160	8	19	M16	9.6
100	114.3		210	18	54.3	114.3	135	6	2	151	175	8	19	M16	10.4
125	139.8		250	20	56.2	139.8	160	6	2	182	210	8	23	M20	10.9
150	165.2		280	22	65.3	165.2	190	6	2	212	240	8	23	M20	12.3
(175)	190.7		305	22	66.1	190.7	215	6	2	237	265	12	23	M20	13.7
200	216.3		330	22	66.1	216.3	240	6	2	262	290	12	23	M20	14.4
(225)	241.8		350	22	62.3	241.8	262	6	2	282	310	12	23	M20	15.0
250	267.4		400	24	70.7	267.4	292	6	2	324	355	12	25	M22	15.9
300	318.5		445	24	75.9	318.5	346	6	3	368	400	16	25	M22	17.5
350	355.6		490	26	83.0	355.6	386	8	3	413	445	16	25	M22	19.0
400	406.4		560	28	94.4	406.4	442	8	3	475	510	16	27	M24	21.9
450	457.2	620	30	107.9	457.2	502	10	3	530	565	20	27	M24	21.9	
500	508.0	675	30	110.2	508.0	554	10	3	585	620	20	27	M24	22.7	
550	558.8	745	32	119.9	558.8	610	10	3	640	680	20	33	M30	23.9	
600	609.6	795	32	123.6	609.6	662	10	3	690	730	24	33	M30	26.1	

Notes:
 1.*1*2*4Dimensions of "T""r""s""P"are maker, Won's standard.
 2.*2Under nominal size 225m/m & under dimension of "b" is maker, Won's standard
 3.All dimensions of flange was designed on JIS B 2220 & B 1503 base.

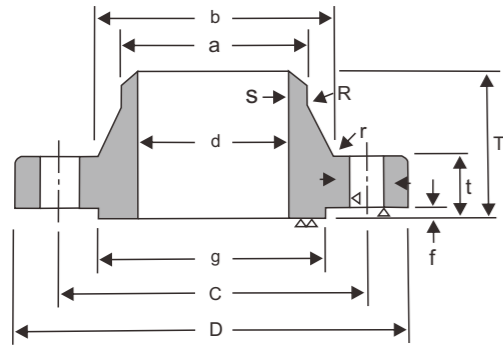
Unit:mm

Nominal Bore of Flange	Outside Dia. of Applicable Pipe	Outside Dia. of Flange D	Sectional Dimensions of Flange										Bolt Hole			Nominal Bolt Size
			t	d	a	b	S	T	P	Radius	f	g	Bolt Circle Dia. c	Num -ber of Bolt Holes	Hole Dia. h	
10	17.3	90	14		17.3	32		35.9	3.5	4	1	46	65	4	15	M12
15	21.7	95	14		21.7	36		36.4	4.5	4	1	51	70	4	15	M12
20	27.2	100	16		27.2	42		40.9	6.4	4	1	56	75	4	15	M12
25	34.0	125	16		34.0	50		42.0	6.0	4	1	67	90	4	19	M16
32	42.7	135	18		42.7	60		46.0	6.4	5	2	76	100	4	19	M16
40	48.6	140	18		48.6	66		45.7	5.9	5	2	81	105	4	19	M16
50	60.5	155	18		60.5	80		48.7	6.3	5	2	96	120	8	19	M16
65	76.3	175	20		76.3	104		63.7	9.1	5	2	116	140	8	19	M16
80	89.1	200	22		89.1	117		66.5	9.6	6	2	132	160	8	23	M20
90	101.6	210	24		101.6	130		68.9	9.4	6	2	145	170	8	23	M20
100	114.3	225	24		114.3	142		69.0	10.4	6	2	160	185	8	23	M20
125	139.8	270	26		139.6	172		77.2	10.9	6	2	195	225	8	25	M22
150	165.2	305	28		165.2	202		86.3	12.3	6	2	230	260	12	25	M22
200	216.3	350	30		216.3	252		89.0	14.4	6	2	275	305	12	25	M22
250	267.4	430	34		267.4	312		105.7	15.9	6	2	345	380	12	27	M24
300	318.5	480	36		318.5	364		110.4	17.5	8	3	395	430	16	27	M24
350	355.6	540	40		355.6	408		124.5	19.0	8	3	440	480	16	33	M30×3
400	406.4	605	46		406.4	456		129.9	21.9	10	3	495	540	16	33	M30×3
450	457.2	675	48		457.2	514		140.9	21.9	10	3	560	605	20	33	M30×3
500	508.0	730	50		508.0	568		147.7	22.7	10	3	615	660	20	33	M30×3
550	558.0	795	52		558.8	622		154.9	23.9	10	3	670	720	20	39	M36×3
600	609.6	845	54		609.6	676		163.1	26.1	10	3	720	770	24	39	M36×3

Notes:
 1. Dimensions are maker Won Flange standard and design base is JIS B 2220-1984

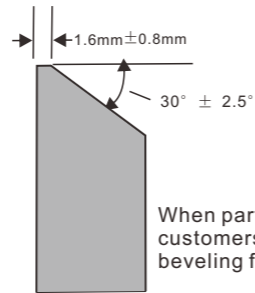
30K WELDING NECK FLANGE

30Kg/cm²



* The surface finish shown above in the case of forging. (△:in other cases)

Reference:Beveling



When particularly necessary, customers can order another beveling form the above

Unit:mm

Nominal Bore of Flange	Outside Dia.of Applicable Pipe	Outside Dia.of Flange D	Sectional Dimensions of Flange										Boit Hole			Nomi-nal Bolt Size	Approx. Weight (kg)	
			t	d	a	b	S	T	P	Radius	f	g	Bolt Circle Dia. C	Num-ber of Bolt Holes	Hole Dia. h			
15	21.7	115	18		22.0	40			45	20	6	1	55	80	4	19	M16	1.33
20	27.2	120	18		27.5	44			45	20	6	1	60	85	4	19	M16	1.47
25	34.0	130	20		34.4	52			48	20	6	1	70	95	4	19	M16	1.95
32	42.7	140	22		43.1	62			52	30	6	2	80	105	4	19	M16	2.43
40	48.6	160	22		49.1	70			54	30	6	2	90	120	4	23	M20	3.16
50	60.5	165	22		61.0	84			57	30	8	2	105	130	8	19	M16	3.33
65	76.3	200	23	To be specified by purchaser	76.9	104			69	30	8	2	130	160	8	23	M20	5.91
80	89.1	210	28		89.7	118			73	30	8	2	140	170	8	23	M20	7.05
90	101.6	230	30		102.3	130			74	30	8	2	150	185	8	25	M22	8.54
100	114.3	240	32	To be specified by purchaser	115.1	142			76	30	8	2	160	195	8	25	M22	9.72
125	139.8	275	36		140.7	172			86	50	10	2	195	230	8	25	M22	14.4
150	165.2	325	38		166.2	202			95	50	10	2	235	275	12	27	M24	20.6
200	316.3	370	42	To be specified by purchaser	217.5	254			102	50	10	2	280	320	12	27	M24	28.7
250	267.4	450	48		268.7	312			118	50	12	2	345	390	12	33	M30×3	47.3
300	318.5	515	52		320.0	366			127	50	15	3	405	450	16	33	M30×3	62.8
350	355.6	560	54	To be specified by purchaser	357.2	406			134	80	15	3	450	495	16	33	M30×3	77.0
400	406.4	630	60		408.3	462			149	80	20	3	510	560	16	39	M36×3	108.0

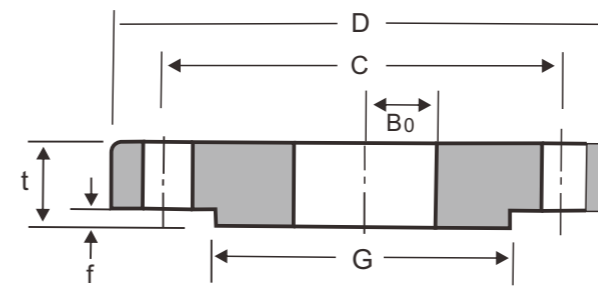
Notes:

- Flanges of parenthesized nominal diameter had better not be used.
- The Flange gasket surface is based on "laroe rased facing speciedin JIS B 2202.I necessary.customers can order for other types of facing.
- Size d and size s are example for schedule 40 of JIS G 3454 and.Js G 3456.Customers can aso order for other sizes
- For dimensional tolerance:refer to JIS B 2203.
- Material Carbon Steel:s25C specified in JIS G4051,or SF45 specied in JIS G 3201.
Molybdenum Steel:1/2 Mo Steel specified in tables 1 and 2 of JIS B 2215.
Chromm-Moybdenum steel:1/4 Cr 1/2 Mo Steel specified intables 1 and 2 of JIS B 2215.

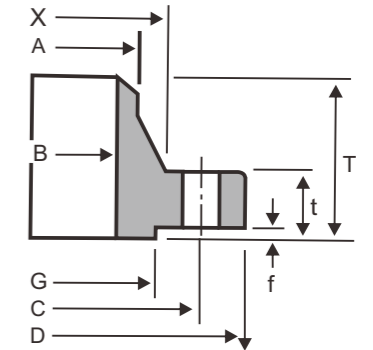
40K WELDING NECK STEEL PIPE FLANGE

40Kg/cm² JIS B 2210-1984

PL-Type



WN-Type



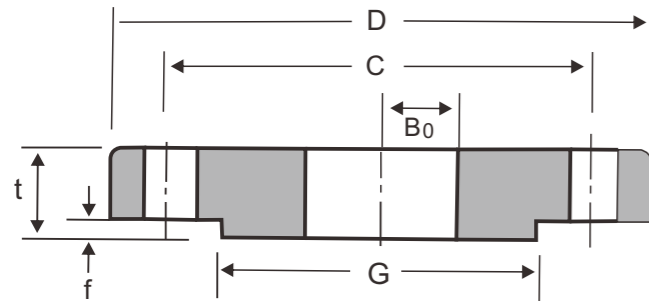
Unit:mm

Nominal Bore of Flange	Outside Dia.of Applicable Pipe	Outside Dia.of Flange D	Sectional Dimensions of Flange										Approx. Weight(kg)							
			bo	t	f	G	C	Num-ber of Bolt Holes	Hole Dia. h	B	A	X	T	PL Type	BL Type	WN Type				
10	17.3	110	17.8	18	1	52	75	4	19						17.3	38	53	1.2	1.2	1.3
15	21.7	115	22.2	20	1	55	80	4	19						21.7	40	53	1.3	1.4	1.5
20	27.2	120	27.7	20	1	60	85	4	19						27.2	45	58	1.5	1.6	1.7
25	34.0	130	34.5	22	1	70	95	4	19						34.0	54	63	1.9	2.1	2.2
32	42.7	140	43.2	24	2	80	105	4	19						42.7	62	69	2.4	2.7	2.8
40	48.6	160	49.1	24	2	90	120	4	23						48.6	72	72	3.1	3.5	3.5
50	60.5	165	61.1	26	2	105	130	8	19	To be specified by purchaser					60.5	88	75	3.3	3.9	4.1
65	76.3	200	77.1	30	2	130	160	8	23		76.3	108	81	5.5	6.6	6.9				
80	89.1	210	90.0	32	2	140	170	8	23		89.1	119	85	6.4	8.0	7.9				
90	101.6	230	102.6	34	2	150	185	8	25	101.6	130	88	7.9	10.1	9.4					
100	114.3	250	115.4	36	2	165	205	8	25	114.3	146	104	9.9	12.9	12.3					
125	139.8	300	141.2	40	2	200	250	8	27	139.8	186	112	15.9	20.8	-					
150	165.2	355	166.6	44	2	240	295	12	33	165.2	215	120	23.2	30.8	30.6					
200	216.3	405	218.0	50	2	290	345	12	33	216.3	270	135	32.1	46.8	41.6					
250	267.4	475	269.5	56	2	355	410	12	33	267.4	333	154	48.6	73.8	68.1					
300	318.5	540	321.0	60	3	410	470	16	39	318.5	400	159	61.1	99.4	96.0					
350	355.6	585	358.1	64	3	455	515	16	39	355.6	432	168	75.2	126.1	115.0					
400	406.4	645	409.0	70	3	515	570	16	39	406.4	466	181	97.4	170.0	143.0					

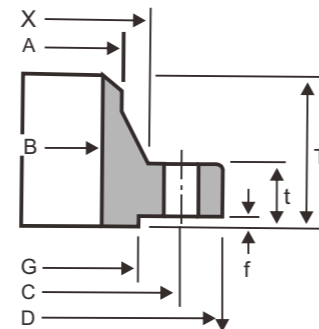
63K WELDING NECK STEEL PIPE FLANGE

63Kg/cm² JIS B 2210-1984

PL-Type



WN-Type



Unit:mm

Nominal Bore of Flange	Outside Dia. of Applicable Pipe	Outside Dia. of Flange D	Sectional Dimensions of Flange							Approx. Weight(kg)						
			bo	t	f	G	C	Num-ber of Bolt Holes	Hole Dia. h	B	A	X	T	PL Type	BL Type	WN Type
10	17.3	115	17.8	23	1	52	80	4	19	To be specified by purchaser	17.3	40	61	1.6	1.7	1.6
15	21.7	120	22.2	23	1	55	85	4	19		21.7	42	61	1.8	1.9	1.9
20	27.2	135	27.7	25	1	60	95	4	23		27.2	46	71	2.4	2.5	2.5
25	34.0	140	34.5	27	1	70	100	4	23		34.0	56	74	2.7	2.9	3.5
32	42.7	150	43.2	30	2	80	110	4	23		42.7	60	75	3.4	3.8	3.7
40	48.6	175	49.1	32	2	90	130	4	25		48.6	75	85	5.1	5.6	5.5
50	60.5	185	61.1	34	2	105	145	8	23		60.5	92	104	5.5	6.3	6.5
65	76.3	220	77.1	38	2	130	175	8	25		76.3	118	107	5.8	7.2	10.3
80	89.1	230	90.0	40	2	140	185	8	25		89.1	130	120	9.9	11.9	12.4
90	101.6	255	102.6	42	2	150	205	8	27		101.6	140	126	12.7	15.4	15.2
100	114.3	270	115.4	44	2	165	220	8	27		114.3	154	126	14.7	18.3	17.7
125	139.8	325	141.2	50	2	200	265	8	33		139.8	190	128	23.8	30.0	-
150	165.2	365	166.6	54	2	240	305	12	33		165.2	230	173	30.9	40.2	39.4
200	216.3	425	218.0	60	2	290	360	12	33		216.3	280	215	44.6	62.3	60.1
250	267.4	500	269.5	68	2	355	430	12	39		267.4	348	256	67.1	97.7	114.0
300	318.5	560	321.0	77	3	410	485	16	39		318.5	402	286	88.9	138.1	154.0
350	355.6	615	358.1	81	3	455	530	16	46	355.6	438	301	108.5	172.9	191.0	
400	406.4	680	409.0	89	3	515	590	16	46	406.4	490	314	144.2	236.5	247.0	