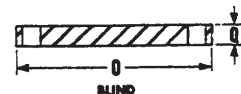
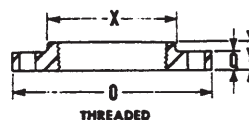
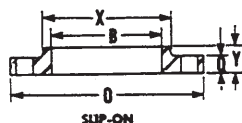
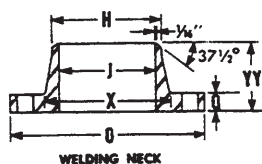


Stainless Steel Flanges

M.S.S. 150 POUND WORKING PRESSURE



Nominal Pipe Size	COMMON DIMENSIONS					WELDING NECK			SLIP-ON THREADED	SLIP-ON
	O	Q	X	Number and Diameter of Bolt Holes	Bolt Circle	YY	H	J	Y	B
1/2	3 1/2	5/16	1 3/16	4 - 3/8	2 1/2	1 7/8	.84	.62	5/8	.88
3/4	3 3/4	11/32	1 1/2	4 - 1/2	2 3/4	2 1/16	1.05	.82	5/8	1.09
1	4 1/4	3/8	1 15/16	4 - 1/2	3 1/2	2 3/16	1.32	1.05	11/16	1.36
1 1/4	4 3/4	13/32	2 5/16	4 - 1/2	3 3/4	2 1/4	1.66	1.38	13/16	1.70
1 1/2	5	7/16	2 9/16	4 - 1/2	3 3/4	2 7/16	1.90	1.61	7/8	1.95
2	6	1/2	3 1/16	4 - 3/4	4 1/2	2 1/2	2.38	2.07	1	2.44
2 1/2	7	9/16	3 9/16	4 - 3/4	5 1/2	2 3/4	2.88	2.47	1 1/8	2.94
3	7 1/2	5/8	4 1/4	4 - 3/4	6	2 3/4	3.50	3.07	1 3/16	3.57
4	9	11/16	5 5/16	8 - 3/4	7 1/2	3	4.50	4.03	1 5/16	4.57
5	10	3/4	6 7/16	8 - 7/8	8 1/2	3 1/2	5.56	5.05	1 7/16	5.66
6	11	13/16	7 9/16	8 - 7/8	9 1/2	3 1/2	6.63	6.07	1 9/16	6.72
8	13 1/2	15/16	9 11/16	8 - 7/8	11 3/4	4	8.63	7.98	1 3/4	8.72
10	16	1	12	12-1	14 1/4	4	10.75	10.02	1 15/16	10.88
12	19	1 1/16	14 3/8	12-1	17	4 1/2	12.75	12.00	2 3/16	12.88

Drilling and O.D. match A.S.A. B16.5-150 lb. Steel Flange Standard, M.S.S. SP-42-150 lb. Corrosion Resistant Valve Standard and A.S.A. B16.1-125 lb. Cast Iron Flange Standard.

Special stainless steels and other corrosion resisting metal alloys available from our Canadian warehouse stocks or from nearby mill sources.

ALLOYS AVAILABLE

304 SS	347 SS
304L SS	403 SS
309 SS	405 SS
309S SS	410 SS
310 SS	420 SS
316 SS	430 SS
316L SS	440 SS
317 SS	446 SS
317L SS	600 SS
321 SS	Carpenter
330 SS	Hastelloy A B C
333 SS	Titanium
Monel	Nickel
	Inconel

This list of alloys is representative only. All these alloys are available. However, a full range of sizes is not necessarily available in each alloy. We welcome all inquiries for non-standard items.

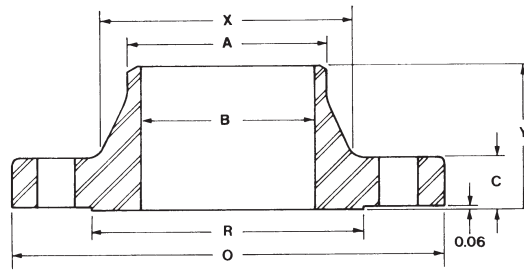
NOW AVAILABLE IN ALUMINUM CASTING GRADE 356-F

Stainless Steel Forged Flanges

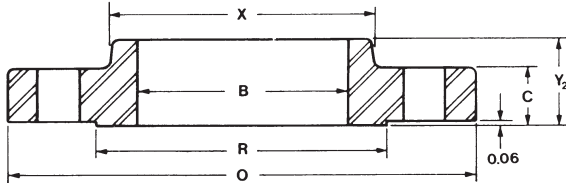
NOTE: Manufacturers Catalogs
on 1500 and 2500 pound A.S.A.
Flanges are available upon request.

ANSI B16.5/ASA

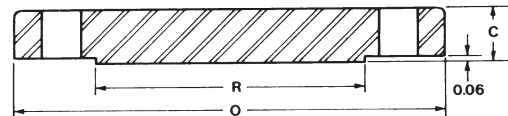
150 lbs



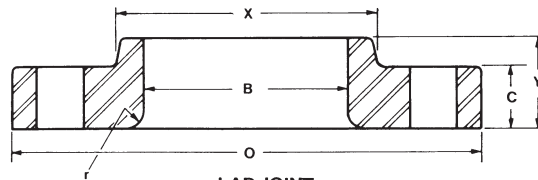
WELDING NECK



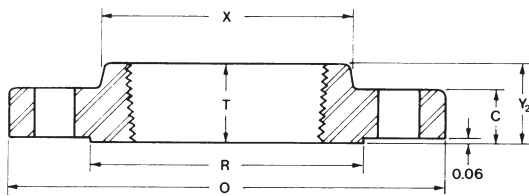
SLIP-ON



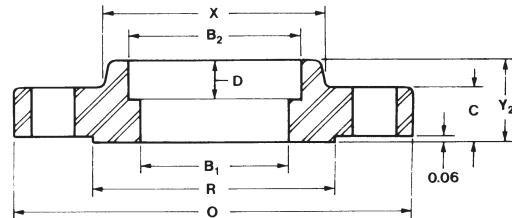
BLIND



LAP JOINT



THREADED



SOCKET WELD

150-LB.																	
Nom. Pipe Size	Outside Diam.	Thkn. (min.)	O.D. of Raised Face	Hub Diam.	Length thru Hub			Bore			Depth of Socket	Approx. Weight (Lbs.)				Drilling	
					Wldg. Neck	Slip-on Thrd. Sock. W.	Lap Joint	Wldg. Neck	Slip-on Sock. W.	Lap Joint		Wldg. Neck	Slip-on Thrd. Sock. W.	Lap Joint	Blind	No. Holes	Bolt Circle Diam.
					Y1	Y2	Y3	B1	B2	B3		D					
1/2	3 1/2	3/16	1 3/8	1 3/8	1 7/8	5/8	5/8	0.62	0.88	0.90	3/8	2	1	1	1	4	5/8
3/4	3 7/8	1/2	1 11/16	1 1/2	2 1/16	5/8	5/8	0.82	1.09	1.11	7/16	2	2	2	2	4	5/8
1	4 1/4	5/8	2	1 5/8	2 3/16	1 1/16	1 1/16	1.05	1.36	1.38	1/2	3	2	2	2	4	5/8
1 1/4	4 5/8	5/8	2 1/2	2 5/8	2 1/4	1 3/8	1 3/8	1.38	1.70	1.72	5/8	3	3	3	3	4	5/8
1 1/2	5	1 1/16	2 7/8	2 5/8	2 3/8	7/8	7/8	1.61	1.95	1.97	5/8	4	3	3	4	4	5/8
2	6	3/4	3 5/8	3 3/8	2 1/2	1	1	2.07	2.44	2.46	1 1/16	6	5	5	5	4	3/4
2 1/2	7	7/8	4 1/8	3 3/8	2 3/4	1 1/8	1 1/8	2.47	2.94	2.97	3/4	8	7	7	7	4	3/4
3	7 1/2	1 5/16	5	4 1/4	2 3/4	1 3/8	1 3/8	3.07	3.57	3.60	1 3/16	10	8	8	9	4	3/4
3 1/2	8 1/2	1 5/8	5 1/2	4 1 3/16	2 1 3/16	1 1/4	1 1/4	3.55	4.07	4.10	7/8	12	11	11	13	8	3/4
4	9	1 5/8	6 3/8	5 5/8	3	1 3/8	1 3/8	4.03	4.57	4.60	1 5/16	15	13	13	17	8	3/4
5	10	1 5/8	7 3/8	6 7/8	3 1/2	1 7/8	1 7/8	5.05	5.66	5.69	1 5/8	19	15	15	20	8	7/8
6	11	1	8 1/2	7 7/8	3 3/2	1 7/8	1 7/8	6.07	6.72	6.75	1 1/2	24	19	19	26	8	7/8
8	13 1/2	1 1/8	10 5/8	9 1 1/16	4	1 3/4	1 3/4	7.98	8.72	8.75	1 1/4	39	30	30	45	8	7/8
10	16	1 3/8	12 3/4	12	4	1 5/8	1 5/8	10.02	10.88	10.92	1 3/8	52	43	43	70	12	1
12	19	1 1/4	15	14 3/8	4 1/2	2 3/8	2 3/8	12.00	12.88	12.92	1 3/8	80	64	64	110	12	1
14	21	1 3/8	16 1/4	15 3/4	5	2 1/4	3 3/8	13.25	14.14	14.18	1 5/8	110	90	105	140	12	1 1/8
16	23 1/2	1 7/8	18 1/2	18	5	2 1/2	3 3/8	15.25	16.16	16.19	1 3/4	140	98	140	180	16	1 1/8
18	25	1 7/8	21	19 7/8	5 1/2	2 1 1/16	3 3/8	17.25	18.18	18.20	1 5/8	150	130	160	220	16	1 1/4
20	27 1/2	1 1 1/16	23	22	5 1 1/16	2 7/8	4 1/8	19.25	20.20	20.25	2 1/8	180	165	195	285	20	1 1/4
22	29 1/2	1 1 3/16	25 1/4	24 1/4	5 7/8	3 3/8	4 1/4	21.25	22.22	22.25	2 3/8	225	185	245	355	20	1 3/8
24	32	1 7/8	27 1/4	26 1/8	6	3 3/4	4 3/8	23.25	24.25	24.25	2 1/2	260	220	275	430	20	1 3/8

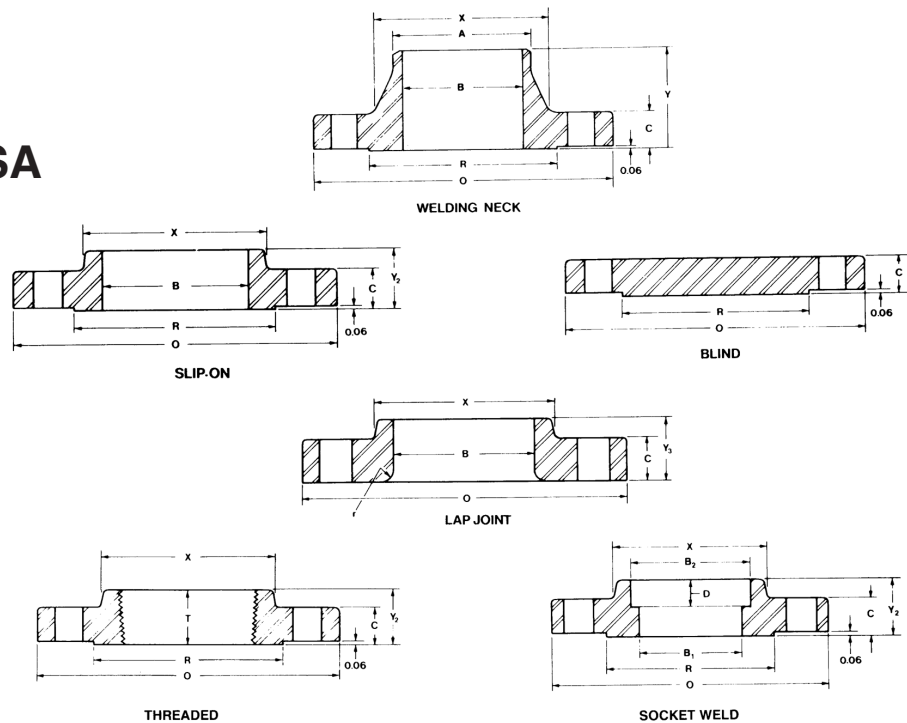
The 1/16" raised face is included in thickness C and length Y.

ANSI B16.5 only covers sizes through 24". For larger sizes refer to MSS - SP44, API 605, AWWA C207, Class 125, Class 175 p. 8-13.
Special designs can also be furnished.

Stainless Steel Forged Flanges (cont'd)

ANSI B16.5/ASA

300 lbs & 400 lbs

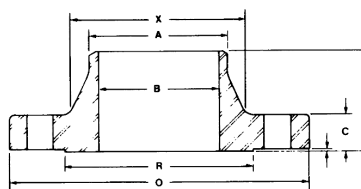


300-lb.																		
Nom. Pipe Size	Out-side Diam.	Thkn. (min.)	O.D. of Raised Face	Hub Diam.	Length thru Hub			Bore □			Depth of Sock.	Approx. Weight (Lbs.)				Drilling		
					Wldg. Neck	Slip-on Thrd. Sock. W.	Lap Joint	Wldg. Neck ²	Slip-On Sock. W.	Lap Joint		Wldg. Neck	Slip-On Thrd. Sock. W.	Lap Joint	Blind	No. Holes	Diam. Holes	Bolt Circle Diam.
	O	C	R	X	Y ₁	Y ₂	Y ₃	B ₁	B ₂	B ₃	D							
½	3¾	⅝	1⅜	1½	2⅞	⅞	⅞	0.62	0.88	0.90	⅜	2	2	2	2	4	⅝	2⅝
¾	4⅝	⅞	1⅞	1⅞	2¼	1	1	0.82	1.09	1.11	⅞	3	3	3	3	4	¾	3¼
1	4⅞	1⅞	2	2⅞	2⅞	1⅞	1⅞	1.05	1.36	1.38	½	4	3	3	3	4	¾	3½
1¼	5¼	¾	2½	2½	2⅞	1⅞	1⅞	1.38	1.70	1.72	⅝	5	4	4	4	4	¾	3⅞
1½	6⅞	1⅞	2⅞	2¾	2⅞	1⅞	1⅞	1.61	1.95	1.97	⅝	7	6	6	6	4	7/8	4½
2	6½	⅞	3⅝	3⅞	2¾	1⅞	1⅞	2.07	2.44	2.46	⅞	9	7	7	8	8	¾	5
2½	7½	1	4⅞	3⅞	3	1½	1½	2.47	2.94	2.97	¾	12	10	10	12	8	⅞	5⅞
3	8¼	1⅞	5	4⅝	3⅞	1⅞	1⅞	3.07	3.57	3.60	⅞	15	13	13	16	8	⅞	6⅝
3½	9	1⅞	5½	5¼	3⅞	1¾	1¾	3.55	4.07	4.10	—	18	17	17	21	8	⅞	7¼
4	10	1¼	6⅞	5¾	3⅞	1⅞	1⅞	4.03	4.57	4.60	—	25	22	22	27	8	⅞	7⅞
5	11	1⅞	7⅞	7	3⅞	2	2	5.05	5.66	5.69	—	32	28	28	35	8	⅞	9¼
6	12½	1⅞	8½	8⅞	3⅞	2⅞	2⅞	6.07	6.72	6.75	—	42	39	39	50	12	⅞	10⅝
8	15	1⅞	10⅝	10¼	4⅞	2⅞	2⅞	7.98	8.72	8.75	—	67	58	58	81	12	1	13
10	17½	1⅞	12¾	12⅝	4⅞	2⅞	3¾	10.02	10.88	10.92	—	91	81	91	124	16	1⅞	15¼
12	20½	2	15	14¾	5⅞	2⅞	4	12.00	12.88	12.92	—	140	115	140	185	16	1¼	17¾
14	23	2⅞	16¼	16¾	5⅞	3	4⅞	13.25	14.14	14.18	—	180	165	190	250	20	1¼	20¼
16	25½	2¼	18½	19	5¾	3¼	4¾	15.25	16.16	16.19	—	250	190	250	295	20	1⅞	22½
18	28	2⅞	21	21	6¼	3½	5⅞	17.25	18.18	18.20	—	320	250	295	395	24	1⅞	24¾
20	30½	2½	23	23⅞	6⅞	3¾	5½	19.25	20.20	20.25	—	400	315	370	505	24	1⅞	27
22	33	2⅞	25¼	25¼	6½	4	5¾	21.25	22.22	22.25	—	465	370	435	640	24	1⅞	29¼
24	36	2¾	27¼	27⅞	6⅞	4⅞	6	23.25	24.25	24.25	—	580	475	550	790	24	1⅞	32
The ⅞" raised face is included in thickness C and length Y.																		
400-lb. (NOTE: Sizes ½" thru 3⅞" are identical with 600 lb. flanges (see next page).																		
4	10	1⅞	6⅞	5¾	3½	2	2	To be specified	4.57	4.60		35	26	25	33	8	1	7⅞
5	11	1½	7⅞	7	4	2⅞	2⅞		5.66	5.69		43	31	29	44	8	1	9¼
6	12½	1⅞	8½	8⅞	4⅞	2¼	2¼		6.72	6.75		57	44	42	61	12	1	10⅝
8	15	1⅞	10⅝	10¼	4⅞	2⅞	2⅞	To be specified	8.72	8.75		89	67	64	100	12	1⅞	13
10	17½	2⅞	12¾	12⅝	4⅞	2⅞	4		10.88	10.92		125	91	110	155	16	1¼	15¼
12	20½	2¼	15	14¾	5⅞	3⅞	4¼		12.88	12.92		175	130	150	225	16	1⅞	17¾
14	23	2⅞	16¼	16¾	5⅞	3⅞	4⅞	To be specified	14.14	14.18		230	180	205	290	20	1⅞	20¼
16	25½	2½	18½	19	6	3⅞	5		16.16	16.19		295	235	260	370	20	1½	22½
18	28	2⅞	21	21	6½	3⅞	5⅞		18.18	18.20		350	285	315	455	24	1½	24¾
20	30½	2¾	23	23⅞	6⅞	4	5¾	To be specified	20.20	20.25		425	345	385	587	24	1⅞	27
22	33	2⅞	25¼	25¼	6¾	4¼	6		22.22	22.25		505	405	455	720	24	1¾	29¼
24	36	3	27¼	27⅞	6⅞	4½	6¼		24.25	24.25		620	510	570	890	24	1⅞	32
The ¼" raised face is not included in thickness C and length Y.																		

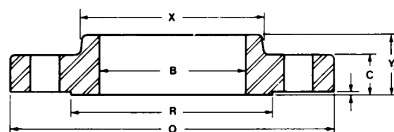
Stainless Steel Forged Flanges (cont'd)

ANSI B16.5/ASA

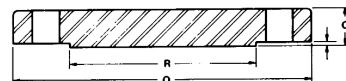
600 lbs & 900 lbs



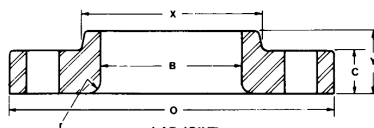
WELDING NECK



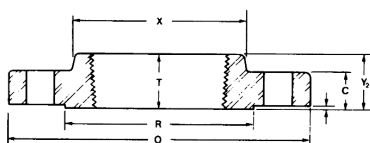
SLIP-ON



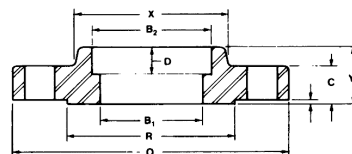
BLIND



LAP JOINT



THREADED



SOCKET WELD

600-lb.																		
Nom. Pipe Size	Out-side Diam.	Thkn. (min.)	O.D. of Raised Face	Hub Diam.	Length thru Hub			Bore [□]			Depth of Socket	Approx. Weight (Lbs.)				Drilling		
					Wldg. Neck	Slip-On Thrd. Sock. W.	Lap Joint	Wldg. Neck	Slip-On Socket W.	Lap Joint		Wldg. Neck	Slip-On Thrd. Sock. W.	Lap Joint	Blind	No. Holes	Diam. Holes	Bolt Circle Diam.
	O	C	R	X	Y ₁	Y ₂	Y ₃	B ₁	B ₂	B ₃	D							
½	3¾	⅜	1⅝	1½	2⅞	⅞	⅞	To Be Specified	0.88	0.90	⅜	2	2	2	2	4	⅝	2⅝
¾	4⅝	⅝	1⅞ ₁₆	1⅞	2¼	1	1		1.09	1.11	⅞ ₁₆	4	3	3	3	4	¾	3¼
1	4⅞	1⅞ ₁₆	2	2⅞	2⅞	1⅞ ₁₆	1⅞ ₁₆		1.36	1.38	½	4	4	4	4	4	¾	3½
1¼	5¼	1⅞ ₁₆	2½	2½	2⅝	1⅞	1⅞	To Be Specified	1.70	1.72	⅝	6	5	5	5	4	¾	3⅞
1½	6⅞	⅞	2⅞	2¾	2¾	1¼	1¼		1.95	1.97	⅝	8	7	7	8	4	⅞	4½
2	6½	1	3⅝	3⅞	2⅞	1⅞ ₁₆	1⅞ ₁₆		2.44	2.46	1⅞ ₁₆	12	9	9	10	8	¾	5
2½	7½	1⅞	4⅞	3⅞ ₁₆	3⅞	1⅝	1⅝	To Be Specified	2.94	2.97	¾	18	13	12	15	8	⅞	5⅞
3	8¼	1¼	5	4⅝	3¼	1⅞ ₁₆	1⅞ ₁₆		3.57	3.60	1⅞ ₁₆	23	16	15	20	8	⅞	6⅝
3½	9	1⅞	5½	5¼	3⅞	1⅞ ₁₆	1⅞ ₁₆		4.07	4.10	—	26	21	20	29	8	1	7¼
4	10¾	1½	6⅞ ₁₆	6	4	2⅞	2⅞	To Be Specified	4.57	4.60	—	42	37	36	41	8	1	8½
5	13	1¾	7⅞ ₁₆	7⅞ ₁₆	4½	2⅞	2⅞		5.66	5.69	—	68	63	61	68	8	1⅞	10½
6	14	1⅞	8½	8¾	4⅝	2⅝	2⅝		6.72	6.75	—	81	80	78	86	12	1⅞	11½
8	16½	2⅞ ₁₆	10⅝	10¾	5¼	3	3	To Be Specified	8.72	8.75	—	120	115	110	140	12	1¼	13¾
10	20	2½	12¾	13½	6	3⅞	4⅞		10.88	10.92	—	190	170	170	230	16	1⅞	17
12	22	2⅝	15	15¾	6⅞	3⅝	4⅝		12.88	12.92	—	225	200	200	295	20	1⅞	19¼
14	23¾	2¾	16¼	17	6½	3⅞ ₁₆	5	To Be Specified	14.14	14.18	—	280	230	250	355	20	1½	20¾
16	27	3	18½	19½	7	4⅞ ₁₆	5½		16.16	16.19	—	390	330	365	495	20	1⅝	23¾
18	29¼	3¼	21	21½	7¼	4⅝	6		18.18	18.20	—	475	400	435	630	20	1¾	25¾
20	32	3½	23	24	7½	5	6½	To Be Specified	20.20	20.25	—	590	510	570	810	24	1¾	28½
22	34¼	3¾	25¼	26¼	7¾	5¼	6⅞		22.22	22.25	—	720	590	670	1000	24	1⅞	30⅝
24	37	4	27¼	28¼	8	5½	7¼		24.25	24.25	—	830	730	810	1250	24	2	33
900-lb.																		
(NOTE: Sizes ½" thru 2½" are identical with 1500 lb. flanges (see next page).)																		
3	9½	1½	5	5	4	2⅞	2⅞	To Be Specified	3.57	3.60	—	31	26	25	29	8	1	7½
4	11½	1¾	6⅞ ₁₆	6¼	4½	2¾	2¾		4.57	4.60	—	53	53	51	54	8	1¼	9¼
5	13¾	2	7⅞ ₁₆	7½	5	3⅞	3⅞		5.66	5.69	—	86	83	81	87	8	1⅞	11
6	15	2⅞ ₁₆	8½	9¼	5½	3⅞	3⅞		6.72	6.75	—	110	110	105	115	12	1¼	12½
8	18½	2½	10⅝	11¾	6⅞	4	4½	To Be Specified	8.72	8.75	—	175	170	190	200	12	1½	15½
10	21½	2¾	12¾	14½	7¼	4¼	5		10.88	10.92	—	260	245	275	290	16	1½	18½
12	24	3⅞	15	16½	7⅞	4⅝	5⅝		12.88	12.92	—	325	325	370	415	20	1½	21
14	25¼	3⅞	16¼	17¾	8⅞	5⅞	6⅞		14.14	14.18	—	400	400	415	520	20	1⅝	22
16	27¾	3½	18½	20	8½	5¼	6½	To Be Specified	16.16	16.19	—	495	425	465	600	20	1¾	24¼
18	31	4	21	22¼	9	6	7½		18.18	18.20	—	680	600	650	850	20	2	27
20	33¾	4¼	23	24½	9¾	6¼	8¼		20.20	20.25	—	830	730	810	1075	20	2⅞	29½
22	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
24	41	5½	27¼	29½	11½	8	10½	To Be Specified	24.25	24.25	—	1500	1400	1550	2025	20	2⅝	35½