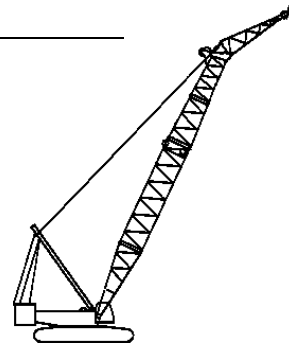


Liftcrane Boom Extended Upper Point Capacities

**Boom No. 58WA with 24.9 ft Extended
Upper Boom Point
368,000 lb Crane Counterweight
120,000 lb Carbody Counterweight
360 Degree Rating**



**16000
SERIES 4**



LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

Upper boom point (upper sheave) capacity for liftcrane service with single part whip line is 30,000 lb or 60,000 lb with two part line. In all cases, upper boom point capacities cannot exceed those listed for extended upper boom point (lower sheave) capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath upper boom point sheaves, is considered part of extended upper boom point load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface. Refer to boom rigging **No. 81009833**, Wire Rope Specification chart **No. 8889-A**, Counterweight Arrangement chart **No. 8682-A** and Wind Conditions chart **No. 8688-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface and boom within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8890-A**



OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.



BOOM ANGLE: Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



EXTENDED UPPER BOOM POINT ELEVATION: Extended upper boom point elevation is vertical distance from ground level to centerline of extended upper boom point (lower sheave) shaft.

MACHINE EQUIPMENT: Machine equipped with 34 ft crawlers, 60 in. treads, 32 ft live mast, 26 part boom hoist reeving, boom support straps, 368,000 lb crane counterweight, two 30,000 lb and four 15,000 lb carbody counterweights.

Maximum Boom Length Lifted Unassisted	
Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
301.8 ft (a) (b)	272.3 ft
Load block, hook and weight ball on ground until combined weights are within rated capacity of chart. (a) Machine must be equipped with optional upperworks jacking cylinders to both reeve and use the whip line on 301.8 ft boom with boom catwalks removed. (b) Machine must be equipped with optional upperworks jacking cylinders and boom must be rigged with one load hoist lead line to raise 301.8 ft boom with boom catwalks attached.	


Boom Catwalks Deduct

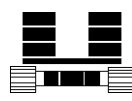
Deduct 600 lb from capacities when boom catwalks are attached.

Optional Block Reeving


When block is reeved with optional 6 or 8 part reeving with wire rope dead end on upper boom point (upper sheave), deduct 3,500 lb from capacities. Refer to reeving diagram **No. 81022461** for optional reeving.


Explanation of Symbols


58WA  Boom No. 58WA with 24.9 ft
Extended Upper Boom Point


 Crane Counterweight
+
Carbody Counterweight


 360°
360 Degree Rating


 Operating Radius
(see page 1)

 Boom Angle
(see page 1)

 Extended Upper Boom
Point Elevation
(see page 1)

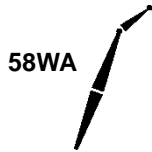
 Lifting Capacities
(see page 1)

 Boom Length

 Extended Upper Boom
Point Offset Angle

16000 S-4

ASME B30.5



58WA

368,000 lb
+
120,000 lb



360°



144.4 ft

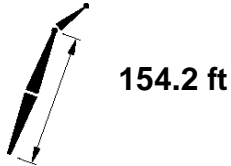
	28°			35°			
	ft	ft	lb	ft	lb	ft	
40	82.1	173.5	286,600 *				40
45	80.3	172.4	286,600 *				45
50	78.6	171.1	286,600 *				50
55	76.8	169.6	286,600 *				55
60	75.0	168.0	258,400	75.8	167.0	259,900	60
65	73.2	166.1	230,700	74.0	165.2	232,000	65
70	71.4	164.1	207,800	72.1	163.2	209,000	70
75	69.5	162.0	188,600	70.3	161.0	189,700	75
80	67.6	159.6	172,200	68.4	158.6	173,200	80
85	65.7	157.0	158,100	66.4	156.0	158,900	85
90	63.8	154.2	145,700	64.5	153.1	146,500	90
95	61.8	151.1	134,900	62.5	150.1	135,600	95
100	59.7	147.8	125,200	60.4	146.7	125,900	100
105	57.6	144.3	116,600	58.3	143.2	117,200	105
110	55.5	140.5	108,900	56.1	139.3	109,400	110
115	53.3	136.3	101,900	53.9	135.1	102,400	115
120	51.0	131.8	95,500	51.6	130.6	96,000	120
125	48.6	126.9	89,700	49.2	125.7	90,100	125
130	46.2	121.6	84,400	46.7	120.3	84,800	130
135	43.5	115.8	79,500	44.1	114.4	79,800	135
140	40.8	109.5	75,000	41.3	108.0	75,200	140
145	37.8	102.4	70,700	38.3	100.8	70,900	145
150	34.6	94.4	66,800				150
155	31.1	85.4	63,100				155

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



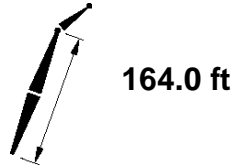
ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
40	82.5	183.5	286,600 *				40
45	80.9	182.5	286,600 *				45
50	79.2	181.2	286,600 *				50
55	77.6	179.9	286,600 *				55
60	75.9	178.3	257,900	76.6	177.4	259,500	60
65	74.2	176.6	230,200	74.9	175.6	231,600	65
70	72.5	174.7	207,300	73.2	173.8	208,500	70
75	70.7	172.7	188,000	71.4	171.7	189,100	75
80	69.0	170.5	171,600	69.7	169.5	172,600	80
85	67.2	168.1	157,400	67.9	167.0	158,300	85
90	65.4	165.4	145,000	66.0	164.4	145,900	90
95	63.5	162.6	134,200	64.2	161.6	134,900	95
100	61.6	159.6	124,500	62.3	158.5	125,200	100
105	59.7	156.3	115,900	60.4	155.2	116,500	105
110	57.8	152.8	108,200	58.4	151.7	108,700	110
115	55.7	149.0	101,200	56.3	147.9	101,700	115
120	53.7	145.0	94,800	54.3	143.8	95,300	120
125	51.5	140.6	89,000	52.1	139.3	89,400	125
130	49.3	135.8	83,700	49.9	134.5	84,100	130
135	47.0	130.7	78,800	47.5	129.4	79,100	135
140	44.6	125.2	74,200	45.1	123.7	74,500	140
145	42.1	119.1	70,000	42.5	117.6	70,300	145
150	39.4	112.4	66,100	39.8	110.8	66,300	150
155	36.5	105.0	62,400	36.9	103.3	62,600	155
160	33.4	96.8	59,000				160
165	30.0	87.3	55,800				165

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



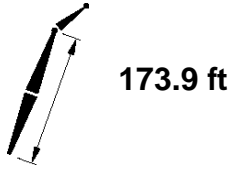
	28°			35°			
	ft	ft	lb	ft	ft	lb	
40	82.9	193.5	286,600 *				40
45	81.4	192.5	286,600 *				45
50	79.8	191.4	286,600 *				50
55	78.2	190.1	286,600 *				55
60	76.6	188.6	257,800	77.3	187.6	259,400	60
65	75.0	187.0	230,100	75.7	186.0	231,500	65
70	73.4	185.2	207,100	74.1	184.3	208,400	70
75	71.8	183.3	187,800	72.5	182.3	189,000	75
80	70.1	181.2	171,400	70.8	180.2	172,400	80
85	68.5	179.0	157,200	69.1	177.9	158,200	85
90	66.8	176.5	144,800	67.4	175.5	145,700	90
95	65.1	173.9	134,000	65.7	172.8	134,800	95
100	63.3	171.1	124,300	63.9	170.0	125,000	100
105	61.5	168.0	115,700	62.1	167.0	116,400	105
110	59.7	164.8	108,000	60.3	163.7	108,600	110
115	57.8	161.3	101,000	58.4	160.2	101,500	115
120	55.9	157.6	94,600	56.5	156.4	95,100	120
125	54.0	153.6	88,800	54.6	152.4	89,300	125
130	52.0	149.3	83,500	52.5	148.0	83,900	130
135	49.9	144.7	78,600	50.4	143.4	79,000	135
140	47.8	139.7	74,100	48.3	138.4	74,400	140
145	45.5	134.3	69,900	46.0	132.9	70,200	145
150	43.2	128.5	66,000	43.6	127.1	66,300	150
155	40.7	122.2	62,400	41.2	120.7	62,600	155
160	38.1	115.3	59,000	38.5	113.6	59,200	160
165	35.3	107.6	55,700	35.7	105.8	55,900	165
170	32.3	99.0	52,700				170
175	29.0	89.2	49,900				175

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
45	81.8	202.6	286,600 *				45
50	80.3	201.5	286,600 *				50
55	78.8	200.2	286,600 *				55
60	77.3	198.9	257,300	78.0	197.9	259,000	60
65	75.8	197.3	229,500	76.5	196.4	231,000	65
70	74.3	195.7	206,500	74.9	194.7	207,900	70
75	72.7	193.9	187,200	73.4	192.9	188,400	75
80	71.2	191.9	170,700	71.8	190.9	171,800	80
85	69.6	189.8	156,500	70.2	188.7	157,500	85
90	68.0	187.5	144,100	68.6	186.4	145,000	90
95	66.4	185.0	133,200	67.0	184.0	134,100	95
100	64.8	182.4	123,600	65.4	181.3	124,300	100
105	63.1	179.5	114,900	63.7	178.4	115,600	105
110	61.4	176.5	107,200	62.0	175.4	107,800	110
115	59.7	173.3	100,200	60.3	172.1	100,800	115
120	57.9	169.8	93,800	58.5	168.7	94,400	120
125	56.1	166.1	88,000	56.7	164.9	88,500	125
130	54.3	162.2	82,700	54.8	161.0	83,100	130
135	52.4	158.0	77,800	52.9	156.7	78,200	135
140	50.4	153.5	73,300	50.9	152.2	73,700	140
145	48.4	148.6	69,100	48.9	147.3	69,400	145
150	46.3	143.4	65,200	46.8	142.1	65,500	150
155	44.2	137.8	61,600	44.6	136.4	61,800	155
160	41.9	131.8	58,200	42.3	130.3	58,400	160
165	39.5	125.2	55,000	39.9	123.6	55,200	165
170	37.0	118.0	52,000	37.3	116.3	52,200	170
175	34.2	110.1	49,200				175
180	31.3	101.1	46,500				180

16000 S-4

ASME B30.5



58WA

368,000 lb
+
120,000 lb



360°



183.7 ft

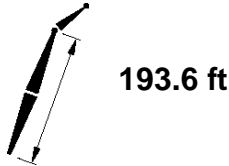
	28°			35°			
	ft	ft	lb	ft	ft	lb	
45	82.2	212.6	286,600 *				45
50	80.8	211.6	286,600 *				50
55	79.4	210.4	286,600 *				55
60	77.9	209.1	256,900	78.6	208.1	258,600	60
65	76.5	207.6	229,100	77.1	206.6	230,600	65
70	75.1	206.1	206,100	75.7	205.1	207,500	70
75	73.6	204.3	186,700	74.2	203.3	188,000	75
80	72.1	202.5	170,200	72.7	201.5	171,400	80
85	70.6	200.5	156,000	71.3	199.4	157,000	85
90	69.1	198.3	143,600	69.7	197.3	144,500	90
95	67.6	196.0	132,700	68.2	194.9	133,600	95
100	66.1	193.5	123,000	66.7	192.4	123,800	100
105	64.5	190.8	114,400	65.1	189.8	115,100	105
110	62.9	188.0	106,600	63.5	186.9	107,300	110
115	61.3	185.0	99,600	61.9	183.9	100,200	115
120	59.7	181.7	93,200	60.2	180.6	93,800	120
125	58.0	178.3	87,400	58.5	177.2	88,000	125
130	56.3	174.7	82,100	56.8	173.5	82,600	130
135	54.6	170.8	77,200	55.1	169.6	77,700	135
140	52.8	166.6	72,700	53.3	165.4	73,100	140
145	50.9	162.2	68,500	51.4	160.9	68,900	145
150	49.0	157.5	64,600	49.5	156.2	65,000	150
155	47.1	152.5	61,000	47.5	151.1	61,300	155
160	45.0	147.0	57,600	45.5	145.6	57,900	160
165	42.9	141.2	54,400	43.3	139.7	54,700	165
170	40.7	134.9	51,500	41.1	133.4	51,700	170
175	38.4	128.1	48,600	38.7	126.5	48,800	175
180	35.9	120.7	46,000	36.2	118.9	46,100	180
185	33.2	112.4	43,500				185
190	30.3	103.2	41,100				190

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
45	82.6	222.6	286,600 *				45
50	81.2	221.6	286,600 *				50
55	79.9	220.5	286,600 *				55
60	78.5	219.2	256,400	79.1	218.3	258,200	60
65	77.1	217.9	228,500	77.8	216.9	230,100	65
70	75.8	216.4	205,500	76.4	215.4	206,900	70
75	74.4	214.7	186,100	75.0	213.7	187,400	75
80	73.0	213.0	169,500	73.6	212.0	170,700	80
85	71.6	211.1	155,300	72.2	210.0	156,400	85
90	70.1	209.0	142,800	70.7	208.0	143,800	90
95	68.7	206.8	131,900	69.3	205.8	132,800	95
100	67.3	204.5	122,200	67.8	203.4	123,100	100
105	65.8	202.0	113,600	66.3	200.9	114,300	105
110	64.3	199.3	105,800	64.8	198.2	106,500	110
115	62.8	196.4	98,800	63.3	195.3	99,400	115
120	61.2	193.4	92,400	61.8	192.3	93,000	120
125	59.7	190.2	86,600	60.2	189.1	87,100	125
130	58.1	186.8	81,200	58.6	185.6	81,800	130
135	56.5	183.2	76,400	56.9	182.0	76,800	135
140	54.8	179.4	71,800	55.3	178.1	72,300	140
145	53.1	175.3	67,600	53.6	174.0	68,100	145
150	51.3	170.9	63,800	51.8	169.7	64,100	150
155	49.6	166.3	60,100	50.0	165.0	60,500	155
160	47.7	161.4	56,700	48.1	160.1	57,100	160
165	45.8	156.2	53,600	46.2	154.8	53,900	165
170	43.8	150.5	50,600	44.2	149.1	50,900	170
175	41.8	144.5	47,800	42.1	143.0	48,000	175
180	39.6	138.0	45,100	39.9	136.4	45,300	180
185	37.3	130.9	42,600	37.6	129.2	42,800	185
190	34.9	123.2	40,300	35.2	121.4	40,400	190
195	32.3	114.7	38,000				195
200	29.5	105.2	35,800				200

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



203.4 ft

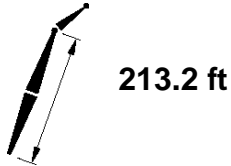
	28°			35°			
	ft	ft	lb	ft	ft	lb	
45	82.9	232.6	286,600 *				45
50	81.6	231.6	286,600 *				50
55	80.3	230.6	286,600 *				55
60	79.0	229.4	256,100	79.6	228.4	257,900	60
65	77.7	228.1	228,200	78.3	227.1	229,800	65
70	76.4	226.7	205,100	77.0	225.7	206,600	70
75	75.1	225.1	185,700	75.7	224.1	187,000	75
80	73.8	223.4	169,200	74.3	222.4	170,400	80
85	72.4	221.6	154,900	73.0	220.6	156,000	85
90	71.1	219.7	142,500	71.6	218.6	143,500	90
95	69.7	217.6	131,500	70.2	216.5	132,500	95
100	68.3	215.3	121,800	68.9	214.3	122,700	100
105	66.9	213.0	113,200	67.5	211.9	114,000	105
110	65.5	210.4	105,400	66.0	209.4	106,100	110
115	64.1	207.8	98,400	64.6	206.7	99,100	115
120	62.6	204.9	92,000	63.1	203.8	92,600	120
125	61.2	201.9	86,200	61.7	200.8	86,800	125
130	59.7	198.7	80,800	60.2	197.5	81,400	130
135	58.1	195.3	76,000	58.6	194.1	76,500	135
140	56.6	191.7	71,400	57.1	190.5	71,900	140
145	55.0	187.9	67,200	55.5	186.7	67,700	145
150	53.4	183.9	63,400	53.8	182.7	63,800	150
155	51.7	179.6	59,700	52.2	178.4	60,100	155
160	50.0	175.1	56,400	50.5	173.8	56,700	160
165	48.3	170.3	53,200	48.7	169.0	53,500	165
170	46.5	165.2	50,200	46.9	163.8	50,500	170
175	44.6	159.8	47,400	45.0	158.3	47,700	175
180	42.7	153.9	44,800	43.0	152.4	45,000	180
185	40.7	147.7	42,300	41.0	146.1	42,500	185
190	38.6	140.9	39,900	38.9	139.3	40,100	190
195	36.3	133.7	37,700	36.6	131.9	37,900	195
200	34.0	125.7	35,600				200
205	31.4	116.9	33,500				205
210	28.6	107.1	31,600				210

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



	28°			35°			
	ft	ft	lb	ft	ft	lb	
50	82.0	241.7	286,600 *	82.5	240.7	286,600 *	50
55	80.7	240.6	286,600 *	81.3	239.7	284,000 *	55
60	79.5	239.5	255,600	80.1	238.5	257,500	60
65	78.2	238.3	227,600	78.8	237.3	229,300	65
70	77.0	236.9	204,500	77.5	235.9	206,000	70
75	75.7	235.4	185,100	76.3	234.4	186,400	75
80	74.5	233.8	168,500	75.0	232.8	169,700	80
85	73.2	232.1	154,200	73.7	231.0	155,300	85
90	71.9	230.2	141,700	72.4	229.2	142,800	90
95	70.6	228.2	130,700	71.1	227.2	131,700	95
100	69.3	226.1	121,000	69.8	225.1	121,900	100
105	68.0	223.9	112,300	68.5	222.8	113,200	105
110	66.6	221.5	104,600	67.1	220.4	105,300	110
115	65.3	218.9	97,500	65.8	217.8	98,200	115
120	63.9	216.2	91,100	64.4	215.1	91,800	120
125	62.5	213.4	85,300	63.0	212.3	85,900	125
130	61.1	210.4	80,000	61.6	209.2	80,600	130
135	59.7	207.2	75,100	60.1	206.0	75,600	135
140	58.2	203.8	70,500	58.7	202.6	71,100	140
145	56.7	200.2	66,400	57.2	199.1	66,800	145
150	55.2	196.5	62,500	55.6	195.3	62,900	150
155	53.7	192.5	58,800	54.1	191.3	59,300	155
160	52.1	188.3	55,500	52.5	187.0	55,800	160
165	50.5	183.9	52,300	50.9	182.6	52,600	165
170	48.8	179.2	49,300	49.2	177.8	49,600	170
175	47.1	174.2	46,500	47.5	172.8	46,800	175
180	45.3	168.9	43,900	45.7	167.5	44,200	180
185	43.5	163.2	41,400	43.9	161.8	41,600	185
190	41.6	157.2	39,100	42.0	155.7	39,300	190
195	39.7	150.8	36,800	40.0	149.1	37,000	195
200	37.6	143.8	34,700	37.9	142.1	34,900	200
205	35.4	136.3	32,700	35.7	134.5	32,800	205
210	33.1	128.1	30,700				210
215	30.6	119.0	28,900				215

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



223.1 ft

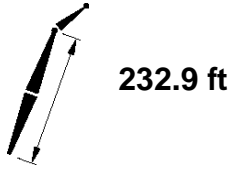
	28°			35°			
	ft	ft	lb	ft	ft	lb	
50	82.3	251.7	286,600 *	82.8	250.7	286,600 *	50
55	81.1	250.7	286,600 *	81.6	249.7	284,000 *	55
60	79.9	249.6	255,200	80.5	248.6	257,100	60
65	78.7	248.4	227,200	79.3	247.4	228,900	65
70	77.5	247.1	204,000	78.1	246.1	205,500	70
75	76.3	245.7	184,500	76.8	244.7	185,900	75
80	75.1	244.1	167,900	75.6	243.1	169,200	80
85	73.9	242.5	153,600	74.4	241.5	154,800	85
90	72.6	240.7	141,100	73.2	239.7	142,200	90
95	71.4	238.8	130,100	71.9	237.8	131,100	95
100	70.2	236.8	120,400	70.7	235.8	121,300	100
105	68.9	234.7	111,700	69.4	233.6	112,600	105
110	67.6	232.4	103,900	68.1	231.3	104,700	110
115	66.3	230.0	96,900	66.8	228.9	97,600	115
120	65.0	227.4	90,500	65.5	226.3	91,200	120
125	63.7	224.7	84,600	64.2	223.6	85,300	125
130	62.4	221.8	79,300	62.8	220.7	79,900	130
135	61.0	218.8	74,400	61.5	217.7	75,000	135
140	59.6	215.6	69,800	60.1	214.5	70,400	140
145	58.2	212.3	65,700	58.7	211.1	66,200	145
150	56.8	208.8	61,800	57.3	207.6	62,200	150
155	55.4	205.0	58,100	55.8	203.8	58,600	155
160	53.9	201.1	54,800	54.3	199.9	55,200	160
165	52.4	197.0	51,600	52.8	195.7	52,000	165
170	50.9	192.6	48,600	51.3	191.3	49,000	170
175	49.3	188.0	45,800	49.7	186.7	46,200	175
180	47.7	183.1	43,200	48.0	181.7	43,500	180
185	46.0	178.0	40,700	46.4	176.5	41,000	185
190	44.3	172.5	38,400	44.6	171.0	38,600	190
195	42.5	166.6	36,100	42.8	165.1	36,400	195
200	40.6	160.4	34,000	41.0	158.8	34,200	200
205	38.7	153.8	32,000	39.0	152.1	32,200	205
210	36.7	146.6	30,100	36.9	144.9	30,200	210
215	34.5	138.9	28,300				215
220	32.3	130.4	26,500				220
225	29.8	121.1	24,800				225

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
50	82.6	261.7	286,600 *	82.0	259.7	284,000 *	50
55	81.4	260.7	286,600 *	80.8	258.7	256,500	55
60	80.3	259.7	254,500	79.7	257.5	228,200	60
65	79.2	258.5	226,400	78.5	256.3	204,800	65
70	78.0	257.3	203,200	77.4	254.9	185,100	70
75	76.9	255.9	183,600	76.2	253.4	168,300	75
80	75.7	254.4	167,000	75.0	251.8	153,800	80
85	74.5	252.9	152,600	73.8	250.1	141,200	85
90	73.3	251.2	140,100	72.7	248.3	130,100	90
95	72.2	249.3	129,000	71.5	246.4	120,300	95
100	71.0	247.4	119,300	70.2	244.3	111,500	100
105	69.8	245.4	110,600	69.0	242.1	103,600	105
110	68.5	243.2	102,700	67.8	239.8	96,500	110
115	67.3	240.9	95,700	66.5	237.4	90,000	115
120	66.1	238.4	89,300	65.3	234.8	84,100	120
125	64.8	235.9	83,400	64.0	232.0	78,700	125
130	63.5	233.2	78,100	62.7	229.2	73,700	130
135	62.3	230.3	73,100	61.4	226.1	69,200	135
140	61.0	227.3	68,600	60.1	223.0	64,900	140
145	59.6	224.1	64,400	58.7	219.6	61,000	145
150	58.3	220.8	60,500	57.4	216.1	57,300	150
155	56.9	217.3	56,800	56.0	212.4	53,900	155
160	55.5	213.6	53,500	54.5	208.5	50,700	160
165	54.1	209.7	50,300	53.1	204.4	47,700	165
170	52.7	205.6	47,300	51.6	200.0	44,900	170
175	51.2	201.3	44,500	50.1	195.5	42,200	175
180	49.7	196.8	41,900	48.5	190.6	39,700	180
185	48.2	192.0	39,400	46.9	185.6	37,300	185
190	46.6	187.0	37,000	45.3	180.2	35,100	190
195	45.0	181.6	34,800	43.6	174.5	32,900	195
200	43.3	176.0	32,700	41.8	168.4	30,900	200
205	41.5	169.9	30,700	40.0	161.9	29,000	205
210	39.7	163.5	28,800	38.1	155.0	27,100	210
215	37.8	156.7	26,900	36.1	147.5	25,300	215
220	35.8	149.3	25,200				220
225	33.7	141.3	23,500				225
230	31.5	132.7	21,900				230
235	29.1	123.1	20,400				235

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



242.8 ft

	28°			35°			
	ft	ft	lb	ft	ft	lb	
50	82.9	271.6	286,600 *				50
55	81.8	270.7	286,600 *	82.3	269.7	284,000 *	55
60	80.7	269.7	254,200	81.2	268.7	256,200	60
65	79.6	268.6	226,000	80.1	267.6	227,900	65
70	78.5	267.4	202,700	79.0	266.4	204,400	70
75	77.4	266.1	183,200	77.8	265.1	184,700	75
80	76.2	264.7	166,500	76.7	263.7	167,900	80
85	75.1	263.2	152,100	75.6	262.2	153,400	85
90	74.0	261.6	139,600	74.5	260.5	140,800	90
95	72.8	259.8	128,500	73.3	258.8	129,600	95
100	71.7	258.0	118,800	72.2	256.9	119,800	100
105	70.5	256.0	110,100	71.0	254.9	111,000	105
110	69.4	253.9	102,200	69.8	252.9	103,100	110
115	68.2	251.7	95,200	68.7	250.6	96,000	115
120	67.0	249.4	88,700	67.5	248.3	89,500	120
125	65.8	246.9	82,900	66.3	245.8	83,600	125
130	64.6	244.4	77,500	65.1	243.2	78,200	130
135	63.4	241.6	72,600	63.8	240.5	73,200	135
140	62.2	238.8	68,100	62.6	237.6	68,700	140
145	60.9	235.8	63,800	61.3	234.6	64,400	145
150	59.6	232.6	59,900	60.1	231.4	60,500	150
155	58.3	229.3	56,300	58.8	228.1	56,800	155
160	57.0	225.8	52,900	57.4	224.6	53,400	160
165	55.7	222.1	49,800	56.1	220.9	50,200	165
170	54.3	218.3	46,800	54.7	217.0	47,200	170
175	53.0	214.3	44,000	53.3	213.0	44,400	175
180	51.6	210.0	41,300	51.9	208.7	41,700	180
185	50.1	205.6	38,900	50.5	204.2	39,200	185
190	48.6	200.9	36,500	49.0	199.5	36,800	190
195	47.1	195.9	34,300	47.5	194.5	34,600	195
200	45.6	190.7	32,200	45.9	189.3	32,400	200
205	44.0	185.2	30,200	44.3	183.7	30,400	205
210	42.3	179.4	28,300	42.6	177.8	28,500	210
215	40.6	173.2	26,400	40.9	171.6	26,600	215
220	38.8	166.6	24,700	39.1	164.9	24,900	220
225	37.0	159.5	23,000	37.2	157.8	23,200	225
230	35.0	151.9	21,400	35.3	150.1	21,600	230
235	33.0	143.8	19,900				235
240	30.8	134.9	18,400				240
245	28.4	125.1	17,000				245

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
55	82.1	280.7	286,600 *	82.6	279.7	284,000 *	55
60	81.0	279.8	253,700	81.5	278.8	255,800	60
65	79.9	278.7	225,500	80.4	277.7	227,400	65
70	78.9	277.5	202,100	79.4	276.5	203,900	70
75	77.8	276.3	182,500	78.3	275.3	184,100	75
80	76.7	274.9	165,800	77.2	273.9	167,200	80
85	75.7	273.5	151,400	76.1	272.4	152,700	85
90	74.6	271.9	138,800	75.0	270.9	140,000	90
95	73.5	270.2	127,800	73.9	269.2	128,900	95
100	72.4	268.5	118,000	72.8	267.4	119,000	100
105	71.3	266.6	109,200	71.7	265.5	110,200	105
110	70.2	264.6	101,400	70.6	263.5	102,300	110
115	69.0	262.5	94,300	69.5	261.4	95,200	115
120	67.9	260.2	87,900	68.3	259.2	88,700	120
125	66.8	257.9	82,000	67.2	256.8	82,700	125
130	65.6	255.4	76,600	66.0	254.3	77,300	130
135	64.4	252.8	71,700	64.9	251.7	72,400	135
140	63.3	250.1	67,100	63.7	249.0	67,800	140
145	62.1	247.2	62,900	62.5	246.1	63,500	145
150	60.9	244.2	59,000	61.3	243.1	59,600	150
155	59.6	241.1	55,400	60.0	239.9	55,900	155
160	58.4	237.8	52,000	58.8	236.6	52,500	160
165	57.1	234.3	48,800	57.5	233.1	49,300	165
170	55.8	230.7	45,800	56.2	229.4	46,300	170
175	54.5	226.9	43,000	54.9	225.6	43,400	175
180	53.2	222.9	40,400	53.6	221.6	40,800	180
185	51.9	218.7	37,900	52.2	217.4	38,300	185
190	50.5	214.3	35,600	50.8	213.0	35,900	190
195	49.1	209.7	33,300	49.4	208.3	33,600	195
200	47.6	204.8	31,200	48.0	203.4	31,500	200
205	46.2	199.7	29,200	46.5	198.3	29,500	205
210	44.6	194.4	27,300	44.9	192.9	27,500	210
215	43.1	188.7	25,500	43.4	187.2	25,700	215
220	41.4	182.7	23,700	41.7	181.1	23,900	220
225	39.8	176.3	22,100	40.0	174.7	22,300	225
230	38.0	169.5	20,500	38.3	167.8	20,700	230
235	36.2	162.3	19,000	36.4	160.5	19,100	235
240	34.3	154.5	17,500				240
245	32.3	146.1	16,100				245
250	30.1	137.0	14,700				250

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



262.5 ft

ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
55	82.3	290.7	286,600 *	82.8	289.7	284,000 *	55
60	81.3	289.8	253,200	81.8	288.8	255,400	60
65	80.3	288.8	225,000	80.8	287.8	226,900	65
70	79.3	287.7	201,600	79.7	286.6	203,400	70
75	78.2	286.4	181,900	78.7	285.4	183,600	75
80	77.2	285.1	165,200	77.7	284.1	166,700	80
85	76.2	283.7	150,800	76.6	282.7	152,100	85
90	75.1	282.2	138,200	75.6	281.2	139,400	90
95	74.1	280.6	127,100	74.5	279.6	128,300	95
100	73.0	278.9	117,300	73.5	277.9	118,400	100
105	72.0	277.1	108,500	72.4	276.0	109,500	105
110	70.9	275.2	100,700	71.3	274.1	101,600	110
115	69.8	273.2	93,600	70.2	272.1	94,500	115
120	68.7	271.0	87,100	69.1	269.9	88,000	120
125	67.6	268.8	81,300	68.0	267.7	82,000	125
130	66.5	266.4	75,900	66.9	265.3	76,600	130
135	65.4	263.9	70,900	65.8	262.8	71,600	135
140	64.3	261.3	66,400	64.7	260.2	67,000	140
145	63.1	258.6	62,200	63.5	257.4	62,800	145
150	62.0	255.7	58,200	62.4	254.6	58,800	150
155	60.8	252.7	54,600	61.2	251.5	55,200	155
160	59.6	249.6	51,200	60.0	248.4	51,700	160
165	58.4	246.3	48,000	58.8	245.1	48,500	165
170	57.2	242.8	45,000	57.6	241.6	45,500	170
175	56.0	239.2	42,200	56.3	238.0	42,700	175
180	54.7	235.4	39,600	55.1	234.2	40,000	180
185	53.4	231.5	37,100	53.8	230.2	37,500	185
190	52.1	227.3	34,800	52.5	226.1	35,100	190
195	50.8	223.0	32,500	51.2	221.7	32,900	195
200	49.5	218.5	30,400	49.8	217.1	30,700	200
205	48.1	213.7	28,400	48.4	212.3	28,700	205
210	46.7	208.7	26,500	47.0	207.3	26,800	210
215	45.2	203.5	24,700	45.5	202.0	25,000	215
220	43.7	197.9	23,000	44.0	196.4	23,200	220
225	42.2	192.1	21,300	42.5	190.5	21,500	225
230	40.6	185.9	19,700	40.9	184.3	19,900	230
235	39.0	179.4	18,200	39.2	177.7	18,400	235
240	37.2	172.4	16,800	37.5	170.7	16,900	240
245	35.4	165.0	15,400	35.7	163.2	15,500	245
250	33.6	157.0	14,000				250
255	31.6	148.4	12,700				255
260	29.5	139.1	11,300 *				260

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



272.3 ft

ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
55	82.6	300.7	286,600 *	82.1	298.8	254,900	55
60	81.6	299.8	252,700	81.1	297.8	226,400	60
65	80.6	298.8	224,400	80.1	296.7	202,800	65
70	79.6	297.7	200,900	79.1	295.6	182,900	70
75	78.6	296.6	181,200	78.1	294.3	166,000	75
80	77.6	295.3	164,500	77.1	292.9	151,400	80
85	76.6	294.0	150,000	76.1	291.5	138,700	85
90	75.6	292.5	137,400	75.1	289.9	127,500	90
95	74.6	291.0	126,300	74.0	288.3	117,600	95
100	73.6	289.3	116,400	73.0	286.5	108,700	100
105	72.6	287.6	107,700	72.0	284.7	100,800	105
110	71.6	285.7	99,800	70.9	282.7	93,600	110
115	70.5	283.8	92,700	69.9	280.7	87,100	115
120	69.5	281.7	86,200	68.8	278.5	81,200	120
125	68.4	279.6	80,300	67.8	276.2	75,700	125
130	67.4	277.3	75,000	66.7	273.8	70,700	130
135	66.3	274.9	70,000	65.6	271.3	66,100	135
140	65.2	272.4	65,400	64.5	268.7	61,800	140
145	64.1	269.8	61,200	63.4	265.9	57,900	145
150	63.0	267.0	57,300	62.3	263.0	54,200	150
155	61.9	264.2	53,600	61.1	260.0	50,800	155
160	60.8	261.2	50,200	60.0	256.9	47,600	160
165	59.6	258.0	47,000	58.8	253.6	44,500	165
170	58.5	254.7	44,100	57.6	250.1	41,700	170
175	57.3	251.3	41,300	56.5	246.5	39,000	175
180	56.1	247.7	38,600	55.2	242.7	36,500	180
185	54.9	244.0	36,100	54.0	238.8	34,200	185
190	53.7	240.1	33,800	52.7	234.7	31,900	190
195	52.4	236.0	31,500	51.5	230.4	29,800	195
200	51.1	231.7	29,400	50.2	225.9	27,700	200
205	49.8	227.2	27,400	48.8	221.2	25,800	205
210	48.5	222.6	25,500	47.5	216.2	24,000	210
215	47.2	217.6	23,700	46.1	211.1	22,200	215
220	45.8	212.5	22,000	44.6	205.6	20,600	220
225	44.3	207.1	20,300	43.2	199.9	19,000	225
230	42.9	201.4	18,700	41.6	193.8	17,400	230
235	41.4	195.4	17,200	40.1	187.4	15,900	235
240	39.8	189.1	15,800	38.4	180.6	14,500	240
245	38.2	182.3	14,400	36.7	173.4	13,200	245
250	36.5	175.2	13,000				250
255	34.7	167.6	11,600 *				255
260	32.9	159.4	10,000 *				260

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



282.1 ft

	28°			35°			
	ft	ft	lb	ft	ft	lb	
55	82.8	310.7	273,300 *				55
60	81.9	309.8	252,300	82.3	308.8	254,500	60
65	80.9	308.9	223,900	81.4	307.8	225,900	65
70	80.0	307.8	200,400	80.4	306.8	202,300	70
75	79.0	306.7	180,700	79.5	305.7	182,400	75
80	78.1	305.5	163,900	78.5	304.4	165,500	80
85	77.1	304.2	149,400	77.5	303.1	150,900	85
90	76.1	302.8	136,800	76.5	301.7	138,100	90
95	75.1	301.3	125,700	75.6	300.2	126,900	95
100	74.2	299.7	115,900	74.6	298.6	117,000	100
105	73.2	298.0	107,100	73.6	296.9	108,200	105
110	72.2	296.2	99,200	72.6	295.2	100,200	110
115	71.2	294.3	92,100	71.6	293.3	93,000	115
120	70.2	292.4	85,600	70.6	291.3	86,500	120
125	69.2	290.3	79,700	69.6	289.2	80,600	125
130	68.1	288.1	74,300	68.5	287.0	75,100	130
135	67.1	285.8	69,400	67.5	284.7	70,100	135
140	66.1	283.4	64,800	66.5	282.3	65,500	140
145	65.0	280.9	60,600	65.4	279.8	61,200	145
150	64.0	278.3	56,700	64.3	277.1	57,300	150
155	62.9	275.5	53,000	63.3	274.4	53,600	155
160	61.8	272.6	49,600	62.2	271.5	50,200	160
165	60.7	269.6	46,400	61.1	268.5	47,000	165
170	59.6	266.5	43,400	60.0	265.3	43,900	170
175	58.5	263.2	40,600	58.8	262.0	41,100	175
180	57.4	259.8	38,000	57.7	258.6	38,400	180
185	56.2	256.3	35,500	56.6	255.0	35,900	185
190	55.0	252.5	33,100	55.4	251.3	33,500	190
195	53.9	248.7	30,900	54.2	247.4	31,300	195
200	52.7	244.6	28,800	53.0	243.3	29,200	200
205	51.4	240.4	26,800	51.7	239.1	27,100	205
210	50.2	236.0	24,900	50.5	234.6	25,200	210
215	48.9	231.4	23,100	49.2	230.0	23,400	215
220	47.6	226.5	21,400	47.9	225.1	21,600	220
225	46.3	221.5	19,700	46.6	220.1	20,000	225
230	44.9	216.2	18,100	45.2	214.7	18,400	230
235	43.5	210.6	16,600	43.8	209.1	16,800	235
240	42.1	204.8	15,200	42.3	203.2	15,400	240
245	40.6	198.6	13,800	40.8	197.0	14,000	245
250	39.1	192.1	12,400 *	39.3	190.5	12,600	250
255	37.5	185.3	10,800 *	37.7	183.5	11,000 *	255

16000 S-4

ASME B30.5



368,000 lb
+
120,000 lb



ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
60	82.1	319.8	251,800	82.6	318.8	245,700 *	60
65	81.2	318.9	223,300	81.7	317.9	225,500	65
70	80.3	317.9	199,800	80.7	316.9	201,700	70
75	79.4	316.8	180,100	79.8	315.8	181,800	75
80	78.4	315.6	163,200	78.9	314.6	164,800	80
85	77.5	314.3	148,700	77.9	313.3	150,200	85
90	76.6	313.0	136,100	77.0	311.9	137,400	90
95	75.6	311.5	124,900	76.0	310.5	126,200	95
100	74.7	310.0	115,100	75.1	309.0	116,200	100
105	73.7	308.4	106,300	74.1	307.3	107,400	105
110	72.8	306.7	98,400	73.2	305.6	99,400	110
115	71.8	304.9	91,200	72.2	303.8	92,200	115
120	70.8	303.0	84,700	71.2	301.9	85,700	120
125	69.8	301.0	78,800	70.2	299.9	79,700	125
130	68.9	298.8	73,400	69.2	297.8	74,300	130
135	67.9	296.6	68,500	68.2	295.5	69,200	135
140	66.9	294.3	63,900	67.2	293.2	64,600	140
145	65.9	291.9	59,700	66.2	290.8	60,300	145
150	64.8	289.4	55,700	65.2	288.3	56,400	150
155	63.8	286.7	52,100	64.2	285.6	52,700	155
160	62.8	284.0	48,600	63.1	282.8	49,200	160
165	61.7	281.1	45,500	62.1	280.0	46,000	165
170	60.7	278.1	42,500	61.0	276.9	43,000	170
175	59.6	275.0	39,700	60.0	273.8	40,200	175
180	58.5	271.7	37,000	58.9	270.5	37,500	180
185	57.4	268.3	34,500	57.8	267.1	35,000	185
190	56.3	264.8	32,200	56.7	263.6	32,600	190
195	55.2	261.1	29,900	55.5	259.8	30,300	195
200	54.0	257.3	27,800	54.4	256.0	28,200	200
205	52.9	253.2	25,800	53.2	252.0	26,200	205
210	51.7	249.1	23,900	52.0	247.8	24,200	210
215	50.5	244.7	22,100	50.8	243.4	22,400	215
220	49.3	240.2	20,400	49.6	238.8	20,700	220
225	48.0	235.4	18,700	48.3	234.0	19,000	225
230	46.7	230.5	17,100	47.0	229.0	17,400	230
235	45.4	225.3	15,600	45.7	223.8	15,900	235
240	44.1	219.8	14,200	44.4	218.3	14,400	240
245	42.7	214.1	12,600 *	43.0	212.6	12,900 *	245
250	41.3	208.1	10,900 *	41.5	206.5	11,200 *	250

16000 S-4

ASME B30.5



58WA

368,000 lb
+
120,000 lb



360°



301.8 ft

	28°			35°			
	ft	ft	lb	ft	ft	lb	
60	82.4	329.8	239,400 *	82.8	328.8	231,600 *	60
65	81.5	328.9	223,000	81.9	327.9	225,000	65
70	80.6	327.9	199,500	81.0	326.9	201,200	70
75	79.7	326.9	179,700	80.1	325.8	181,300	75
80	78.8	325.7	162,800	79.2	324.7	164,200	80
85	77.9	324.5	148,300	78.3	323.5	149,600	85
90	77.0	323.2	135,600	77.4	322.1	136,800	90
95	76.1	321.8	124,500	76.5	320.7	125,500	95
100	75.1	320.3	114,600	75.5	319.3	115,600	100
105	74.2	318.7	105,800	74.6	317.7	106,700	105
110	73.3	317.1	97,900	73.7	316.0	98,700	110
115	72.4	315.3	90,700	72.8	314.3	91,500	115
120	71.4	313.5	84,200	71.8	312.4	84,900	120
125	70.5	311.6	78,300	70.9	310.5	79,000	125
130	69.5	309.5	72,900	69.9	308.4	73,500	130
135	68.6	307.4	67,900	69.0	306.3	68,500	135
140	67.6	305.2	63,400	68.0	304.1	63,800	140
145	66.6	302.8	59,100	67.0	301.7	59,600	145
150	65.7	300.4	55,200	66.0	299.3	55,600	150
155	64.7	297.9	51,500	65.0	296.7	51,900	155
160	63.7	295.2	48,100	64.0	294.1	48,400	160
165	62.7	292.5	44,900	63.0	291.3	45,200	165
170	61.7	289.6	41,900	62.0	288.4	42,200	170
175	60.6	286.6	39,100	61.0	285.4	39,400	175
180	59.6	283.5	36,500	59.9	282.3	36,700	180
185	58.6	280.2	34,000	58.9	279.0	34,200	185
190	57.5	276.8	31,600	57.8	275.6	31,800	190
195	56.4	273.3	29,400	56.7	272.1	29,500	195
200	55.3	269.6	27,300	55.6	268.4	27,400	200
205	54.2	265.8	25,300	54.5	264.6	25,400	205
210	53.1	261.9	23,300	53.4	260.6	23,400	210
215	52.0	257.7	21,500	52.3	256.4	21,600	215
220	50.8	253.4	19,800	51.1	252.1	19,800	220
225	49.6	248.9	18,100	49.9	247.6	18,200	225
230	48.4	244.3	16,600	48.7	242.9	16,600	230
235	47.2	239.4	15,100	47.5	238.0	15,000	235
240	45.9	234.3	13,400 *	46.2	232.8	13,400 *	240
245	44.6	228.9	11,700 *	44.9	227.5	11,600 *	245
250	43.3	223.4	10,100 *	43.6	221.8	10,000 *	250