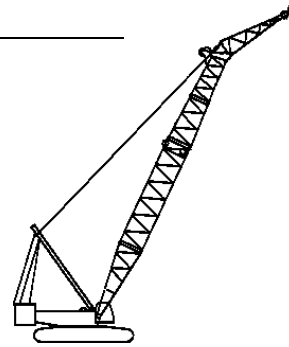


Liftcrane Boom Extended Upper Point Capacities



**Boom No. 58WA with 24.9 ft Extended
Upper Boom Point
296,000 lb Crane Counterweight
60,000 lb Carbody Counterweight
360 Degree Rating**



**16000
SERIES 2**



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 ($^{\circ}$) 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.




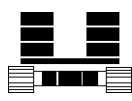
EXTENDED UPPER BOOM POINT ELEVATION: Extended upper boom point elevation is vertical distance from ground level to centerline of extended upper boom point (lower sheave) shaft.


MACHINE EQUIPMENT: Machine equipped with 34 ft crawlers, 60 in. treads, 32 ft live mast, 26 part boom hoist reeving, boom support straps, 296,000 lb crane counterweight and two 30,000 lb carbody counterweights.


WITH OR WITHOUT BOOM CATWALKS	
Maximum Boom Length Lifted Unassisted	
Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
262.5 ft	242.8 ft
Load block, hook and weight ball on ground until combined weights are within rated capacity of chart.	


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-2

ASME B30.5



296,000 lb
+
60,000 lb



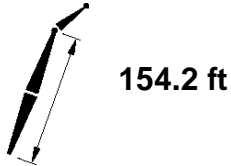
	28°			35°			
	ft	ft	lb	ft	lb	ft	
40	82.1	173.5	286,600 *				40
45	80.3	172.3	286,600 *				45
50	78.6	171.0	273,500				50
55	76.8	169.5	237,600				55
60	75.0	167.9	209,200	75.8	166.9	210,700	60
65	73.2	166.1	186,200	74.0	165.1	187,500	65
70	71.4	164.1	167,100	72.1	163.1	168,300	70
75	69.5	161.9	151,100	70.2	160.9	152,200	75
80	67.6	159.5	137,500	68.3	158.5	138,500	80
85	65.7	156.9	125,700	66.4	155.9	126,600	85
90	63.7	154.1	115,400	64.4	153.1	116,200	90
95	61.7	151.1	106,400	62.4	150.0	107,100	95
100	59.7	147.8	98,400	60.4	146.7	99,000	100
105	57.6	144.2	91,200	58.3	143.1	91,800	105
110	55.5	140.4	84,700	56.1	139.2	85,300	110
115	53.3	136.2	78,900	53.9	135.0	79,400	115
120	51.0	131.7	73,600	51.6	130.5	74,000	120
125	48.6	126.9	68,700	49.2	125.6	69,100	125
130	46.1	121.6	64,300	46.7	120.2	64,600	130
135	43.5	115.7	60,200	44.0	114.3	60,500	135
140	40.8	109.4	56,400	41.2	107.9	56,700	140
145	37.8	102.3	52,900	38.2	100.6	53,100	145
150	34.6	94.3	49,600				150
155	31.1	85.2	46,500				155

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



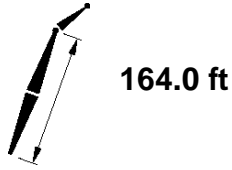
ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
40	82.5	183.5	286,600 *				40
45	80.9	182.4	286,600 *				45
50	79.2	181.2	273,200				50
55	77.5	179.8	237,100				55
60	75.9	178.2	208,700	76.6	177.3	210,300	60
65	74.2	176.5	185,600	74.9	175.6	187,000	65
70	72.4	174.7	166,500	73.2	173.7	167,800	70
75	70.7	172.6	150,500	71.4	171.6	151,600	75
80	68.9	170.4	136,800	69.6	169.4	137,800	80
85	67.2	168.0	125,000	67.8	167.0	125,900	85
90	65.3	165.4	114,700	66.0	164.3	115,600	90
95	63.5	162.5	105,600	64.2	161.5	106,400	95
100	61.6	159.5	97,600	62.3	158.4	98,300	100
105	59.7	156.2	90,400	60.3	155.1	91,100	105
110	57.7	152.7	84,000	58.4	151.6	84,600	110
115	55.7	148.9	78,100	56.3	147.8	78,700	115
120	53.6	144.9	72,800	54.2	143.7	73,300	120
125	51.5	140.5	68,000	52.1	139.2	68,400	125
130	49.3	135.7	63,500	49.8	134.5	63,900	130
135	47.0	130.6	59,400	47.5	129.3	59,800	135
140	44.6	125.1	55,700	45.1	123.7	56,000	140
145	42.0	119.0	52,100	42.5	117.5	52,400	145
150	39.4	112.3	48,900	39.8	110.7	49,100	150
155	36.5	104.9	45,800	36.9	103.2	46,000	155
160	33.4	96.6	42,900				160
165	29.9	87.2	40,200				165

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



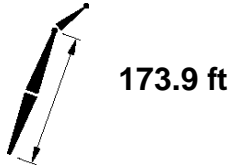
	28°			35°			
	ft	ft	lb	ft	lb	ft	
40	82.9	193.5	286,600 *				40
45	81.4	192.5	286,600 *				45
50	79.8	191.3	273,100				50
55	78.2	190.0	237,000				55
60	76.6	188.5	208,600	77.3	187.6	210,200	60
65	75.0	186.9	185,500	75.7	186.0	186,900	65
70	73.4	185.2	166,400	74.1	184.2	167,700	70
75	71.8	183.3	150,300	72.5	182.3	151,500	75
80	70.1	181.2	136,600	70.8	180.2	137,700	80
85	68.5	178.9	124,800	69.1	177.9	125,800	85
90	66.8	176.5	114,500	67.4	175.4	115,400	90
95	65.0	173.8	105,400	65.7	172.8	106,200	95
100	63.3	171.0	97,400	63.9	169.9	98,100	100
105	61.5	168.0	90,200	62.1	166.9	90,900	105
110	59.7	164.7	83,800	60.3	163.6	84,400	110
115	57.8	161.2	77,900	58.4	160.1	78,500	115
120	55.9	157.5	72,600	56.5	156.3	73,100	120
125	54.0	153.5	67,800	54.5	152.3	68,300	125
130	52.0	149.2	63,400	52.5	148.0	63,800	130
135	49.9	144.6	59,300	50.4	143.3	59,700	135
140	47.7	139.6	55,500	48.2	138.3	55,800	140
145	45.5	134.2	52,000	46.0	132.9	52,300	145
150	43.2	128.4	48,700	43.6	127.0	49,000	150
155	40.7	122.1	45,700	41.1	120.6	45,900	155
160	38.1	115.2	42,800	38.5	113.5	43,000	160
165	35.3	107.5	40,100	35.6	105.7	40,300	165
170	32.3	98.9	37,600				170
175	28.9	89.0	35,200				175

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



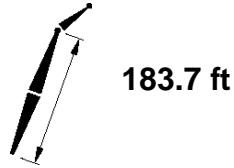
ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
45	81.8	202.5	286,600 *				45
50	80.3	201.4	272,800				50
55	78.8	200.2	236,600				55
60	77.3	198.8	208,100	78.0	197.8	209,700	60
65	75.8	197.3	184,900	76.5	196.3	186,400	65
70	74.3	195.6	165,800	74.9	194.6	167,100	70
75	72.7	193.8	149,700	73.4	192.8	150,900	75
80	71.2	191.8	135,900	71.8	190.8	137,000	80
85	69.6	189.7	124,100	70.2	188.7	125,100	85
90	68.0	187.4	113,800	68.6	186.4	114,700	90
95	66.4	184.9	104,700	67.0	183.9	105,500	95
100	64.8	182.3	96,600	65.4	181.2	97,400	100
105	63.1	179.5	89,400	63.7	178.4	90,100	105
110	61.4	176.4	83,000	62.0	175.3	83,600	110
115	59.7	173.2	77,100	60.2	172.1	77,700	115
120	57.9	169.7	71,800	58.5	168.6	72,400	120
125	56.1	166.0	67,000	56.7	164.9	67,500	125
130	54.3	162.1	62,500	54.8	160.9	63,000	130
135	52.4	157.9	58,400	52.9	156.6	58,900	135
140	50.4	153.4	54,700	50.9	152.1	55,000	140
145	48.4	148.5	51,200	48.9	147.2	51,500	145
150	46.3	143.3	47,900	46.8	142.0	48,200	150
155	44.1	137.7	44,900	44.6	136.3	45,100	155
160	41.9	131.7	42,000	42.3	130.2	42,300	160
165	39.5	125.1	39,300	39.9	123.5	39,600	165
170	36.9	117.9	36,800	37.3	116.2	37,000	170
175	34.2	109.9	34,500				175
180	31.2	101.0	32,200				180

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



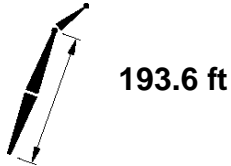
	28°			35°			
	ft	ft	lb	ft	ft	lb	
45	82.2	212.5	286,600 *				45
50	80.8	211.5	272,500				50
55	79.4	210.3	236,300				55
60	77.9	209.0	207,700	78.6	208.0	209,400	60
65	76.5	207.6	184,500	77.1	206.6	186,000	65
70	75.1	206.0	165,300	75.7	205.0	166,700	70
75	73.6	204.3	149,200	74.2	203.3	150,400	75
80	72.1	202.4	135,400	72.7	201.4	136,600	80
85	70.6	200.4	123,600	71.2	199.4	124,600	85
90	69.1	198.2	113,200	69.7	197.2	114,200	90
95	67.6	195.9	104,100	68.2	194.9	105,000	95
100	66.1	193.4	96,100	66.6	192.4	96,900	100
105	64.5	190.8	88,800	65.1	189.7	89,600	105
110	62.9	187.9	82,400	63.5	186.8	83,100	110
115	61.3	184.9	76,500	61.9	183.8	77,200	115
120	59.7	181.7	71,200	60.2	180.5	71,800	120
125	58.0	178.2	66,400	58.5	177.1	66,900	125
130	56.3	174.6	61,900	56.8	173.4	62,400	130
135	54.5	170.7	57,800	55.0	169.5	58,300	135
140	52.7	166.5	54,100	53.2	165.3	54,500	140
145	50.9	162.1	50,600	51.4	160.9	51,000	145
150	49.0	157.4	47,300	49.5	156.1	47,700	150
155	47.0	152.4	44,300	47.5	151.0	44,600	155
160	45.0	146.9	41,400	45.4	145.5	41,700	160
165	42.9	141.1	38,800	43.3	139.6	39,000	165
170	40.7	134.8	36,300	41.0	133.3	36,500	170
175	38.3	128.0	33,900	38.7	126.4	34,100	175
180	35.9	120.5	31,700	36.2	118.8	31,900	180
185	33.2	112.3	29,600				185
190	30.3	103.1	27,600				190

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
45	82.5	222.5	286,600 *				45
50	81.2	221.5	272,200				50
55	79.9	220.4	235,800				55
60	78.5	219.2	207,100	79.1	218.2	208,900	60
65	77.1	217.8	183,900	77.7	216.8	185,500	65
70	75.8	216.3	164,700	76.4	215.3	166,100	70
75	74.4	214.7	148,500	75.0	213.7	149,800	75
80	73.0	212.9	134,700	73.6	211.9	135,900	80
85	71.6	211.0	122,800	72.1	210.0	123,900	85
90	70.1	208.9	112,400	70.7	207.9	113,500	90
95	68.7	206.8	103,300	69.3	205.7	104,300	95
100	67.2	204.4	95,200	67.8	203.3	96,100	100
105	65.8	201.9	88,000	66.3	200.8	88,800	105
110	64.3	199.2	81,500	64.8	198.1	82,300	110
115	62.8	196.4	75,700	63.3	195.3	76,300	115
120	61.2	193.4	70,400	61.7	192.2	71,000	120
125	59.7	190.1	65,500	60.2	189.0	66,100	125
130	58.1	186.7	61,000	58.6	185.6	61,600	130
135	56.4	183.1	57,000	56.9	181.9	57,500	135
140	54.8	179.3	53,200	55.3	178.1	53,600	140
145	53.1	175.2	49,700	53.5	174.0	50,100	145
150	51.3	170.9	46,400	51.8	169.6	46,800	150
155	49.5	166.2	43,400	50.0	164.9	43,700	155
160	47.7	161.3	40,600	48.1	160.0	40,900	160
165	45.8	156.1	37,900	46.2	154.7	38,200	165
170	43.8	150.4	35,400	44.2	149.0	35,700	170
175	41.7	144.4	33,100	42.1	142.9	33,300	175
180	39.6	137.9	30,800	39.9	136.3	31,000	180
185	37.3	130.8	28,700	37.6	129.1	28,900	185
190	34.9	123.1	26,700	35.1	121.3	26,900	190
195	32.3	114.6	24,800				195
200	29.4	105.1	23,000				200

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



203.4 ft

	28°			35°			
	ft	ft	lb	ft	ft	lb	
45	82.9	232.5	286,600 *				45
50	81.6	231.6	271,900				50
55	80.3	230.5	235,600				55
60	79.0	229.3	206,800	79.6	228.3	208,700	60
65	77.7	228.0	183,600	78.3	227.0	185,200	65
70	76.4	226.6	164,300	77.0	225.6	165,800	70
75	75.1	225.0	148,100	75.6	224.0	149,500	75
80	73.7	223.3	134,300	74.3	222.3	135,600	80
85	72.4	221.5	122,400	73.0	220.5	123,600	85
90	71.0	219.6	112,100	71.6	218.6	113,100	90
95	69.7	217.5	102,900	70.2	216.5	103,900	95
100	68.3	215.3	94,800	68.8	214.2	95,700	100
105	66.9	212.9	87,600	67.4	211.8	88,400	105
110	65.5	210.4	81,100	66.0	209.3	81,900	110
115	64.1	207.7	75,300	64.6	206.6	76,000	115
120	62.6	204.8	69,900	63.1	203.7	70,600	120
125	61.1	201.8	65,100	61.6	200.7	65,700	125
130	59.6	198.6	60,600	60.1	197.5	61,200	130
135	58.1	195.2	56,500	58.6	194.1	57,100	135
140	56.6	191.6	52,800	57.0	190.5	53,200	140
145	55.0	187.8	49,300	55.5	186.6	49,700	145
150	53.4	183.8	46,000	53.8	182.6	46,400	150
155	51.7	179.6	43,000	52.2	178.3	43,400	155
160	50.0	175.0	40,200	50.4	173.7	40,500	160
165	48.3	170.2	37,500	48.7	168.9	37,800	165
170	46.5	165.1	35,000	46.9	163.7	35,300	170
175	44.6	159.7	32,700	45.0	158.2	32,900	175
180	42.7	153.8	30,500	43.0	152.3	30,700	180
185	40.6	147.6	28,400	41.0	146.0	28,600	185
190	38.5	140.8	26,400	38.8	139.2	26,600	190
195	36.3	133.5	24,500	36.6	131.8	24,700	195
200	33.9	125.6	22,700				200
205	31.4	116.8	21,000				205
210	28.6	107.0	19,300				210

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



213.2 ft

	28°			35°			
	ft	ft	lb	ft	ft	lb	
50	81.9	241.6	271,600	82.5	240.6	274,100	50
55	80.7	240.6	235,100	81.3	239.6	237,300	55
60	79.5	239.4	206,300	80.0	238.5	208,200	60
65	78.2	238.2	183,000	78.8	237.2	184,700	65
70	77.0	236.8	163,700	77.5	235.8	165,200	70
75	75.7	235.3	147,500	76.3	234.3	148,800	75
80	74.4	233.7	133,600	75.0	232.7	134,900	80
85	73.2	232.0	121,700	73.7	231.0	122,800	85
90	71.9	230.1	111,300	72.4	229.1	112,300	90
95	70.6	228.2	102,100	71.1	227.1	103,100	95
100	69.3	226.0	94,000	69.8	225.0	94,900	100
105	67.9	223.8	86,800	68.5	222.7	87,600	105
110	66.6	221.4	80,300	67.1	220.3	81,100	110
115	65.2	218.8	74,400	65.7	217.8	75,100	115
120	63.9	216.2	69,100	64.4	215.1	69,700	120
125	62.5	213.3	64,200	63.0	212.2	64,800	125
130	61.1	210.3	59,700	61.6	209.2	60,300	130
135	59.6	207.1	55,600	60.1	205.9	56,200	135
140	58.2	203.7	51,800	58.6	202.6	52,400	140
145	56.7	200.2	48,300	57.2	199.0	48,800	145
150	55.2	196.4	45,100	55.6	195.2	45,500	150
155	53.6	192.4	42,100	54.1	191.2	42,500	155
160	52.1	188.2	39,200	52.5	187.0	39,600	160
165	50.5	183.8	36,600	50.9	182.5	36,900	165
170	48.8	179.1	34,100	49.2	177.7	34,400	170
175	47.1	174.1	31,800	47.5	172.7	32,100	175
180	45.3	168.8	29,500	45.7	167.4	29,800	180
185	43.5	163.1	27,500	43.9	161.7	27,700	185
190	41.6	157.1	25,500	41.9	155.6	25,700	190
195	39.6	150.7	23,600	39.9	149.0	23,800	195
200	37.6	143.7	21,800	37.8	142.0	22,000	200
205	35.4	136.2	20,100	35.6	134.4	20,300	205
210	33.1	128.0	18,500				210
215	30.6	118.9	16,900				215

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



	28°			35°			
	ft	ft	lb	ft	lb	ft	
50	82.3	251.6	271,300	82.8	250.6	273,800	50
55	81.1	250.6	234,700	81.6	249.6	236,900	55
60	79.9	249.5	205,900	80.4	248.5	207,800	60
65	78.7	248.3	182,500	79.3	247.3	184,200	65
70	77.5	247.0	163,100	78.0	246.0	164,700	70
75	76.3	245.6	146,900	76.8	244.6	148,300	75
80	75.1	244.1	133,000	75.6	243.1	134,300	80
85	73.9	242.4	121,100	74.4	241.4	122,300	85
90	72.6	240.6	110,600	73.2	239.6	111,800	90
95	71.4	238.8	101,500	71.9	237.7	102,500	95
100	70.1	236.7	93,400	70.7	235.7	94,300	100
105	68.9	234.6	86,100	69.4	233.5	87,000	105
110	67.6	232.3	79,600	68.1	231.2	80,400	110
115	66.3	229.9	73,700	66.8	228.8	74,500	115
120	65.0	227.3	68,400	65.5	226.2	69,100	120
125	63.7	224.6	63,500	64.2	223.5	64,200	125
130	62.4	221.8	59,000	62.8	220.6	59,600	130
135	61.0	218.8	54,900	61.5	217.6	55,500	135
140	59.6	215.6	51,100	60.1	214.4	51,700	140
145	58.2	212.2	47,600	58.7	211.0	48,100	145
150	56.8	208.7	44,400	57.2	207.5	44,900	150
155	55.4	205.0	41,300	55.8	203.7	41,800	155
160	53.9	201.0	38,500	54.3	199.8	38,900	160
165	52.4	196.9	35,900	52.8	195.6	36,200	165
170	50.8	192.5	33,400	51.2	191.2	33,700	170
175	49.3	187.9	31,000	49.7	186.6	31,400	175
180	47.6	183.0	28,800	48.0	181.7	29,100	180
185	46.0	177.9	26,800	46.3	176.4	27,000	185
190	44.3	172.4	24,800	44.6	170.9	25,000	190
195	42.5	166.5	22,900	42.8	165.0	23,100	195
200	40.6	160.3	21,100	40.9	158.7	21,300	200
205	38.7	153.7	19,400	39.0	152.0	19,600	205
210	36.7	146.5	17,800	36.9	144.7	18,000	210
215	34.5	138.7	16,300				215
220	32.2	130.3	14,800				220
225	29.8	121.0	13,400				225

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



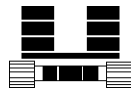
ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
50	82.6	261.6	270,800	82.0	259.7	236,500	50
55	81.4	260.7	234,200	80.8	258.6	207,200	55
60	80.3	259.6	205,200	79.7	257.5	183,500	60
65	79.2	258.5	181,700	78.5	256.2	163,900	65
70	78.0	257.2	162,300	77.4	254.8	147,500	70
75	76.8	255.8	145,900	76.2	253.4	133,400	75
80	75.7	254.4	132,000	75.0	251.8	121,300	80
85	74.5	252.8	120,000	73.8	250.1	110,700	85
90	73.3	251.1	109,600	72.6	248.2	101,400	90
95	72.1	249.3	100,400	71.4	246.3	93,200	95
100	71.0	247.3	92,200	70.2	244.2	85,800	100
105	69.7	245.3	84,900	69.0	242.1	79,200	105
110	68.5	243.1	78,400	67.8	239.7	73,300	110
115	67.3	240.8	72,500	66.5	237.3	67,900	115
120	66.1	238.4	67,100	65.3	234.7	62,900	120
125	64.8	235.8	62,200	64.0	232.0	58,400	125
130	63.5	233.1	57,700	62.7	229.1	54,200	130
135	62.2	230.2	53,600	61.4	226.1	50,400	135
140	60.9	227.2	49,800	60.1	222.9	46,800	140
145	59.6	224.0	46,300	58.7	219.5	43,500	145
150	58.3	220.7	43,000	57.3	216.0	40,500	150
155	56.9	217.2	40,000	55.9	212.3	37,600	155
160	55.5	213.5	37,200	54.5	208.4	34,900	160
165	54.1	209.6	34,500	53.1	204.3	32,400	165
170	52.7	205.5	32,000	51.6	199.9	30,000	170
175	51.2	201.2	29,700	50.1	195.4	27,800	175
180	49.7	196.7	27,400	48.5	190.6	25,700	180
185	48.2	191.9	25,400	46.9	185.5	23,700	185
190	46.6	186.9	23,400	45.3	180.1	21,800	190
195	44.9	181.5	21,500	43.6	174.4	20,000	195
200	43.3	175.9	19,700	41.8	168.3	18,300	200
205	41.5	169.8	18,100	40.0	161.8	16,600	205
210	39.7	163.4	16,400	38.1	154.9	15,100	210
215	37.8	156.6	14,900	36.1	147.4	13,600	215
220	35.8	149.2	13,400				220
225	33.7	141.2	12,000				225
230	31.5	132.5	10,700				230

16000 S-2

ASME B30.5



58WA



296,000 lb
+
60,000 lb



360°



242.8 ft

	28°			35°			
	ft	ft	lb	ft	ft	lb	
50	82.8	271.6	270,600	82.3	269.7	236,200	50
55	81.8	270.7	233,800	81.2	268.7	206,900	55
60	80.7	269.7	204,800	80.1	267.6	183,200	60
65	79.6	268.6	181,300	79.0	266.3	163,500	65
70	78.5	267.4	161,800	77.8	265.0	147,000	70
75	77.3	266.0	145,500	76.7	263.6	133,000	75
80	76.2	264.6	131,600	75.6	262.1	120,800	80
85	75.1	263.1	119,500	74.5	260.5	110,300	85
90	74.0	261.5	109,100	73.3	258.7	101,000	90
95	72.8	259.8	99,800	72.2	256.9	92,700	95
100	71.7	257.9	91,700	71.0	254.9	85,300	100
105	70.5	255.9	84,400	69.8	252.8	78,700	105
110	69.4	253.9	77,800	68.7	250.6	72,800	110
115	68.2	251.7	71,900	67.5	248.2	67,300	115
120	67.0	249.3	66,600	66.3	245.8	62,400	120
125	65.8	246.9	61,700	65.0	243.2	57,900	125
130	64.6	244.3	57,200	63.8	240.4	53,700	130
135	63.4	241.6	53,100	62.6	237.6	49,900	135
140	62.1	238.7	49,300	61.3	234.5	46,300	140
145	60.9	235.7	45,700	60.0	231.4	43,000	145
150	59.6	232.5	42,500	58.7	228.0	39,900	150
155	58.3	229.2	39,400	57.4	224.5	37,100	155
160	57.0	225.7	36,600	56.1	220.8	34,400	160
165	55.7	222.1	33,900	54.7	217.0	31,900	165
170	54.3	218.2	31,400	53.3	212.9	29,500	170
175	53.0	214.2	29,100	51.9	208.6	27,300	175
180	51.5	209.9	26,900	50.5	204.1	25,100	180
185	50.1	205.5	24,800	49.0	199.4	23,200	185
190	48.6	200.8	22,800	47.5	194.4	21,300	190
195	47.1	195.8	21,000	45.9	189.2	19,500	195
200	45.6	190.6	19,200	44.3	183.6	17,800	200
205	44.0	185.1	17,500	42.6	177.7	16,100	205
210	42.3	179.3	15,900	40.9	171.5	14,600	210
215	40.6	173.1	14,400	39.1	164.8	13,100	215
220	38.8	166.5	12,900	37.2	157.7	11,700	220
225	37.0	159.4	11,500	35.2	150.0	10,300	225
230	35.0	151.8	10,200				230

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb

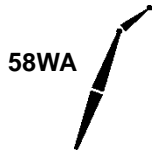


252.6 ft

ft	28°			35°			ft
	ft	ft	lb	ft	ft	lb	
55	82.1	280.7	233,400	82.5	279.7	235,900	55
60	81.0	279.7	204,300	81.5	278.7	206,500	60
65	79.9	278.6	180,700	80.4	277.6	182,700	65
70	78.9	277.5	161,200	79.4	276.5	163,000	70
75	77.8	276.2	144,800	78.3	275.2	146,400	75
80	76.7	274.9	130,800	77.2	273.8	132,300	80
85	75.7	273.4	118,800	76.1	272.4	120,100	85
90	74.6	271.8	108,300	75.0	270.8	109,500	90
95	73.5	270.2	99,000	73.9	269.1	100,200	95
100	72.4	268.4	90,900	72.8	267.4	91,900	100
105	71.3	266.5	83,500	71.7	265.5	84,500	105
110	70.2	264.5	77,000	70.6	263.5	77,900	110
115	69.0	262.4	71,000	69.5	261.3	71,900	115
120	67.9	260.2	65,700	68.3	259.1	66,500	120
125	66.7	257.8	60,800	67.2	256.7	61,500	125
130	65.6	255.4	56,300	66.0	254.3	57,000	130
135	64.4	252.8	52,100	64.8	251.6	52,800	135
140	63.2	250.0	48,300	63.7	248.9	49,000	140
145	62.0	247.2	44,800	62.5	246.0	45,400	145
150	60.8	244.2	41,500	61.2	243.0	42,100	150
155	59.6	241.0	38,500	60.0	239.8	39,000	155
160	58.4	237.7	35,600	58.8	236.5	36,100	160
165	57.1	234.2	33,000	57.5	233.0	33,400	165
170	55.8	230.6	30,500	56.2	229.4	30,900	170
175	54.5	226.8	28,100	54.9	225.5	28,500	175
180	53.2	222.8	25,900	53.6	221.5	26,300	180
185	51.8	218.6	23,800	52.2	217.3	24,200	185
190	50.5	214.2	21,900	50.8	212.9	22,200	190
195	49.1	209.6	20,000	49.4	208.2	20,300	195
200	47.6	204.7	18,200	47.9	203.4	18,500	200
205	46.1	199.6	16,500	46.5	198.2	16,800	205
210	44.6	194.3	14,900	44.9	192.8	15,200	210
215	43.0	188.6	13,400	43.3	187.1	13,600	215
220	41.4	182.6	11,900	41.7	181.0	12,100	220
225	39.7	176.2	10,500	40.0	174.6	10,700	225

16000 S-2

ASME B30.5



296,000 lb
+
60,000 lb



262.5 ft

	28°			35°			
	ft	ft	lb	ft	lb	ft	
55	82.3	290.7	233,000	82.8	289.7	235,500	55
60	81.3	289.7	203,800	81.8	288.7	206,000	60
65	80.3	288.7	180,200	80.8	287.7	182,200	65
70	79.3	287.6	160,700	79.7	286.6	162,400	70
75	78.2	286.4	144,200	78.7	285.4	145,900	75
80	77.2	285.1	130,200	77.7	284.0	131,700	80
85	76.2	283.7	118,100	76.6	282.6	119,500	85
90	75.1	282.2	107,600	75.6	281.1	108,900	90
95	74.1	280.6	98,400	74.5	279.5	99,500	95
100	73.0	278.8	90,200	73.5	277.8	91,200	100
105	71.9	277.0	82,800	72.4	276.0	83,900	105
110	70.9	275.1	76,200	71.3	274.1	77,200	110
115	69.8	273.1	70,300	70.2	272.0	71,200	115
120	68.7	271.0	64,900	69.1	269.9	65,800	120
125	67.6	268.7	60,000	68.0	267.6	60,800	125
130	66.5	266.3	55,500	66.9	265.2	56,200	130
135	65.4	263.9	51,400	65.8	262.7	52,100	135
140	64.3	261.2	47,500	64.7	260.1	48,200	140
145	63.1	258.5	44,000	63.5	257.4	44,600	145
150	62.0	255.6	40,700	62.4	254.5	41,300	150
155	60.8	252.6	37,700	61.2	251.5	38,200	155
160	59.6	249.5	34,800	60.0	248.3	35,400	160
165	58.4	246.2	32,200	58.8	245.0	32,700	165
170	57.2	242.7	29,700	57.6	241.5	30,100	170
175	56.0	239.1	27,300	56.3	237.9	27,800	175
180	54.7	235.4	25,100	55.1	234.1	25,500	180
185	53.4	231.4	23,000	53.8	230.1	23,400	185
190	52.1	227.3	21,100	52.5	226.0	21,400	190
195	50.8	222.9	19,200	51.1	221.6	19,500	195
200	49.5	218.4	17,400	49.8	217.0	17,700	200
205	48.1	213.6	15,700	48.4	212.2	16,000	205
210	46.7	208.6	14,100	47.0	207.2	14,400	210
215	45.2	203.4	12,600	45.5	201.9	12,900	215
220	43.7	197.8	11,100	44.0	196.3	11,400	220
225				42.4	190.4	10,000	225