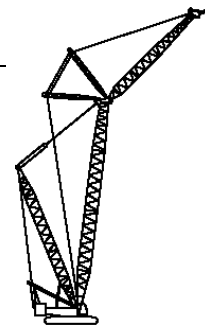




Liftcrane Luffing Jib Capacities

Luffing Jib No. 59 On Boom No. 58 HL
with 98.4 ft Mast No. 59A
332,000 lb Crane Counterweight
120,000 lb Carbody Counterweight
360 Degree Rating



16000 SERIES 3 With Mast



LIFTING CAPACITIES: Lifting capacities for various boom lengths, boom angles, luffing jib lengths, and luffing jib 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 (*).

Luffing Jib Backward Stability: Capacities indicated by (b) require 9,500 lb minimum weight suspended beneath luffing jib point. Capacities indicated by (c) require 16,000 lb minimum weight suspended beneath luffing jib point. **Caution: Do not luff into areas indicated by (b) or (c) without required minimum weights.** Luffing jib will not luff down and luffing hoist wire rope may overhaul luffing jib and cause luffing hoist to go slack causing wire rope damage or failure.

Upper luffing jib point capacity for liftcrane service with single part whip line is 30,000 lb or 60,000 lb with two part whip line. In all cases, upper luffing jib point capacities cannot exceed those listed for main luffing jib capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc. beneath boom and luffing jib point sheaves is considered part of luffing jib load. Boom and luffing jib are 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 on a firm uniformly supporting surface with mast up and bearing turntable level within a tolerance of 1/2 in. in 10 ft and properly supported. During operation, boom must be maintained at one of the selected angles shown in chart. Refer to luffing jib assembly **No. A13416**, Wire Rope Specification chart **No. 8771-A**, Counterweight Arrangement chart **No. 8682-A**, Luffing Jib Raising Procedure chart **No. 8761-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 with boom and luffing jib within angle range shown in capacity chart. Refer to Swing and Travel Specification chart **No. 8762-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.



LUFFING JIB ANGLE: Luffing jib angle in degrees ($^{\circ}$) is angle between horizontal and centerline of luffing jib butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



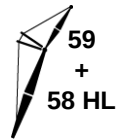
LUFFING JIB POINT ELEVATION: Luffing jib point elevation is vertical distance from ground level to centerline of luffing jib point shaft.

MACHINE EQUIPMENT: Machine equipped with 34 ft crawlers, 60 in. treads, 32 ft live mast, 98.4 ft mast, 12 part boom hoist reeving, boom support straps, 17 part luffing jib hoist reeving, luffing jib and backstay support straps, 332,000 lb crane counterweight, two 30,000 lb and four 15,000 lb carbody counterweights.

Boom and/or Jib Catwalks Deduct

Deduct 1,200 lb from capacities when boom and/or jib catwalks are attached.

Explanation of Symbols



Luffing Jib No. 59
+
Boom No. 58 Heavy Lift Top



Mast No. 59A



Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



Boom Length



Luffing Jib Length



Boom Angle
(see page 1)

Explanation of Symbols (continued)



Operating Radius
(see page 1)



Luffing Jib Angle
(see page 1)



Luffing Jib Point Elevation
(see page 1)



Lifting Capacities
(see page 1)

REFERENCE
ONLY!



137.8 ft



78.7 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	71.6	221.4	408,900 *c							45
50	67.7	219.4	360,700 b							50
55	63.6	216.9	316,900 b	69.5	219.5	307,200 b				55
60	59.4	214.0	282,200 b	65.5	217.2	273,600 b				60
65	55.0	210.5	254,100	61.3	214.5	246,300 b	67.2	217.0	238,600 b	65
70	50.3	206.4	230,800	57.0	211.3	223,800	63.2	214.5	216,700 b	70
75	45.2	201.6	211,200	52.4	207.5	204,800	58.9	211.5	198,300 b	75
80	39.6	195.7	194,400	47.5	203.0	188,500	54.5	208.0	182,600	80
85	33.2	188.5	179,900	42.2	197.7	174,500	49.7	203.9	169,000	85
90	25.3	178.8	167,100	36.2	191.1	162,200	44.6	198.9	157,200	90
95	13.0	162.7	155,600	29.1	182.7	151,300	38.9	192.9	146,700	95
100				19.6	170.6	141,600	32.4	185.4	137,400	100
105							24.2	175.4	128,900	105
110							10.6	157.4	121,100	110
115										115
120										120
125										125
130										130
135										135
140										140
145										145



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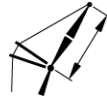
16000 S-3



332,000 lb
+
120,000 lb



137.8 ft



78.7 ft

	75°			70°			65°			
	ft	ft	lb	ft	lb	ft	lb	ft	ft	
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	60.5	209.8	159,900 lb							85
90	56.1	206.5	148,700							90
95	51.5	202.6	138,800							95
100	46.5	197.9	130,000	57.5	203.6	122,600				100
105	41.1	192.3	122,100	52.9	199.9	115,200				105
110	34.9	185.5	115,000	48.1	195.5	108,500				110
115	27.5	176.6	108,500	42.8	190.2	102,500				115
120	17.0	163.1	102,500	36.9	183.8	96,900	49.2	191.7	91,200	120
125				29.9	175.7	91,800	44.0	186.6	86,400	125
130				20.8	164.1	87,100	38.3	180.5	82,100	130
135							31.6	172.8	78,000	135
140							23.1	162.3	74,200	140
145							7.4	141.3	70,300	145



137.8 ft



98.4 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
50	72.4	240.5	360,100 b							50
55	69.2	238.6	316,300 b							55
60	66.1	236.4	281,700 b	70.6	238.7	272,800 b				60
65	62.8	233.9	253,600	67.5	236.6	245,600 b				65
70	59.4	230.9	230,300	64.3	234.2	223,000				70
75	55.9	227.6	210,800	60.9	231.5	204,100	65.7	234.1	197,400 b	75
80	52.3	223.8	194,100	57.5	228.3	188,000	62.4	231.5	181,800	80
85	48.4	219.4	179,700	53.9	224.7	174,000	59.0	228.5	168,300	85
90	44.3	214.4	167,200	50.1	220.6	161,800	55.5	225.1	156,500	90
95	39.8	208.5	156,100	46.1	215.9	151,100	51.8	221.2	146,100	95
100	34.8	201.6	146,200	41.8	210.4	141,600	47.9	216.8	136,900	100
105	29.0	193.1	137,400	37.1	204.0	133,100	43.8	211.7	128,700	105
110	21.9	181.8	129,400	31.8	196.3	125,400	39.2	205.7	121,300	110
115	10.3	162.6	121,900	25.3	186.5	118,400	34.2	198.6	114,500	115
120				16.6	172.3	111,900	28.3	189.9	108,400	120
125							20.9	178.1	102,700	125
130							7.8	156.2	97,200	130
135										135
140										140
145										145
150										150
155										155
160										160
165										165



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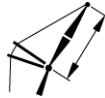
16000 S-3



332,000 lb
+
120,000 lb



137.8 ft



98.4 ft

	 75°			 70°			 65°				
	 ft	 °	 ft	 lb	 °	 ft	 lb	 °	 ft	 lb	 ft
50											50
55											55
60											60
65											65
70											70
75											75
80											80
85											85
90											90
95	60.3	226.7	137,800								95
100	56.8	223.5	129,100								100
105	53.2	219.8	121,300								105
110	49.4	215.6	114,300	57.9	220.6	107,500					110
115	45.3	210.7	108,000	54.3	217.1	101,500					115
120	40.9	205.1	102,200	50.5	213.0	96,100					120
125	36.1	198.4	97,000	46.6	208.4	91,100					125
130	30.6	190.4	92,100	42.3	203.0	86,600	51.4	209.1	81,100		130
135	23.9	180.0	87,600	37.6	196.7	82,300	47.5	204.6	77,100		135
140	14.2	164.2	83,300	32.3	189.1	78,400	43.3	199.4	73,500		140
145				26.1	179.6	74,800	38.7	193.3	70,100		145
150				17.7	166.1	71,300	33.6	186.1	66,900		150
155							27.6	177.1	63,900		155
160							19.9	164.9	61,000		160
165							3.1	136.5	58,000		165



137.8 ft



118.1 ft

	86°			83°			80°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft	 ft	 lb	 ft
55	72.8	259.6	315,300 b							55
60	70.3	257.8	280,600 b							60
65	67.7	255.8	252,600							65
70	65.0	253.5	229,400	68.8	255.9	221,800				70
75	62.2	250.8	209,800	66.2	253.7	202,900				75
80	59.4	247.9	193,200	63.5	251.2	186,800	67.4	253.4	180,400	80
85	56.5	244.6	178,800	60.7	248.4	172,900	64.7	251.1	166,900	85
90	53.5	241.0	166,300	57.8	245.3	160,700	61.9	248.4	155,200	90
95	50.4	236.9	155,300	54.9	241.8	150,100	59.1	245.5	144,800	95
100	47.1	232.3	145,500	51.8	237.9	140,600	56.2	242.1	135,700	100
105	43.6	227.1	136,700	48.6	233.6	132,100	53.2	238.4	127,500	105
110	39.9	221.3	128,900	45.2	228.7	124,500	50.0	234.3	120,100	110
115	35.8	214.5	121,700	41.6	223.1	117,600	46.7	229.6	113,500	115
120	31.3	206.6	115,200	37.7	216.8	111,400	43.2	224.4	107,400	120
125	26.0	196.9	109,300	33.4	209.5	105,600	39.4	218.5	101,900	125
130	19.3	184.2	103,800	28.5	200.7	100,400	35.3	211.6	96,800	130
135	8.1	161.6	98,500	22.6	189.6	95,500	30.7	203.5	92,100	135
140				14.4	173.5	90,900	25.3	193.6	87,800	140
145							18.4	180.3	83,700	145
150							5.1	153.4	79,600	150
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160										160
165										165
170										170
175										175
180										180



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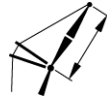
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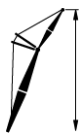
332,000 lb
+
120,000 lb



137.8 ft



118.1 ft

	 75°			 70°			 65°			
 ft	 °	 ft	 lb	 °	 ft	 lb	 °	 ft	 lb	 ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	62.9	246.6	127,500							100
105	60.1	243.7	119,800							105
110	57.3	240.5	112,900							110
115	54.3	236.9	106,600							115
120	51.2	232.9	100,900							120
125	47.9	228.5	95,700	55.2	234.1	89,500				125
130	44.5	223.5	90,900	52.1	230.3	85,100				130
135	40.8	217.8	86,500	48.9	226.0	80,900				135
140	36.9	211.3	82,500	45.6	221.2	77,100	52.8	226.3	71,800	140
145	32.4	203.7	78,700	42.0	215.7	73,500	49.7	222.1	68,500	145
150	27.4	194.6	75,100	38.1	209.5	70,200	46.3	217.4	65,400	150
155	21.2	182.8	71,800	33.8	202.3	67,200	42.8	212.1	62,500	155
160	12.0	164.6	68,500	29.0	193.7	64,200	39.0	206.1	59,800	160
165				23.2	182.9	61,500	34.8	199.1	57,300	165
170				15.4	167.6	58,800	30.2	190.9	54,900	170
175							24.7	180.7	52,600	175
180							17.5	166.8	50,300	180

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



137.8 ft



137.8 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
60	73.2	278.7	279,700 b							60
65	71.0	277.0	251,700							65
70	68.8	275.0	228,500							70
75	66.5	272.9	208,900	69.8	275.1	201,800				75
80	64.2	270.5	192,300	67.5	273.0	185,700				80
85	61.8	267.8	178,000	65.2	270.7	171,800				85
90	59.4	264.9	165,400	62.9	268.2	159,700	66.2	270.5	154,000	90
95	57.0	261.6	154,400	60.5	265.4	149,100	63.9	268.1	143,700	95
100	54.4	258.1	144,700	58.1	262.3	139,600	61.6	265.4	134,600	100
105	51.8	254.2	136,000	55.6	258.9	131,200	59.2	262.4	126,400	105
110	49.0	249.9	128,100	53.0	255.1	123,600	56.7	259.2	119,100	110
115	46.2	245.1	121,000	50.3	251.0	116,800	54.1	255.6	112,500	115
120	43.1	239.9	114,600	47.5	246.5	110,500	51.5	251.6	106,500	120
125	39.9	234.0	108,700	44.5	241.4	104,900	48.7	247.3	101,000	125
130	36.5	227.4	103,300	41.4	235.9	99,700	45.8	242.5	96,000	130
135	32.7	219.9	98,400	38.1	229.6	94,900	42.8	237.2	91,300	135
140	28.5	211.1	93,800	34.5	222.5	90,400	39.6	231.2	87,100	140
145	23.6	200.3	89,500	30.5	214.4	86,300	36.1	224.5	83,100	145
150	17.3	186.1	85,400	25.9	204.6	82,500	32.3	216.9	79,400	150
155	6.0	159.4	81,500	20.4	192.3	78,800	28.0	207.9	75,900	155
160				12.6	174.1	75,400	23.0	196.9	72,700	160
165							16.5	182.1	69,600	165
170										170
175										175
180										180
185										185
190										190
195										195
200										200



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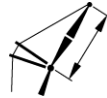
16000 S-3



332,000 lb
+
120,000 lb



137.8 ft



137.8 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110	62.4	263.5	111,700							110
115	60.0	260.6	105,400							115
120	57.6	257.5	99,800							120
125	55.1	254.0	94,600							125
130	52.4	250.2	89,800							130
135	49.7	246.0	85,500	55.8	251.2	79,700				135
140	46.9	241.4	81,500	53.2	247.5	75,900				140
145	43.9	236.3	77,700	50.6	243.4	72,400				145
150	40.8	230.6	74,200	47.8	238.9	69,100				150
155	37.4	224.2	71,000	44.8	234.0	66,100	51.2	239.5	61,300	155
160	33.7	216.9	68,000	41.7	228.4	63,300	48.4	235.1	58,600	160
165	29.6	208.4	65,100	38.4	222.3	60,600	45.5	230.2	56,100	165
170	24.9	198.3	62,400	34.9	215.3	58,100	42.5	224.9	53,800	170
175	19.1	185.2	59,800	30.9	207.2	55,700	39.2	218.9	51,600	175
180	10.2	164.5	57,300	26.4	197.7	53,400	35.7	212.1	49,500	180
185				21.0	185.7	51,300	31.8	204.3	47,500	185
190				13.6	168.5	49,200	27.5	195.1	45,600	190
195							22.4	183.8	43,800	195
200							15.6	168.3	42,000	200

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



137.8 ft



157.5 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
65	73.5	297.8	250,500							65
70	71.5	296.1	227,300							70
75	69.6	294.2	207,800							75
80	67.6	292.2	191,200	70.5	294.2	184,400				80
85	65.6	289.9	176,800	68.5	292.3	170,500				85
90	63.6	287.5	164,300	66.5	290.1	158,400				90
95	61.5	284.8	153,300	64.5	287.7	147,800	67.4	289.9	142,300	95
100	59.4	281.8	143,500	62.5	285.1	138,400	65.4	287.6	133,200	100
105	57.3	278.6	134,800	60.4	282.3	129,900	63.4	285.1	125,000	105
110	55.1	275.1	127,000	58.3	279.2	122,400	61.3	282.4	117,700	110
115	52.8	271.4	120,000	56.1	275.9	115,500	59.2	279.4	111,100	115
120	50.4	267.3	113,500	53.8	272.3	109,300	57.0	276.2	105,100	120
125	48.0	262.8	107,700	51.5	268.3	103,700	54.8	272.6	99,700	125
130	45.5	258.0	102,300	49.1	264.0	98,500	52.5	268.9	94,700	130
135	42.8	252.6	97,400	46.6	259.3	93,700	50.2	264.7	90,100	135
140	40.0	246.8	92,800	44.0	254.2	89,300	47.7	260.2	85,800	140
145	37.0	240.3	88,600	41.3	248.6	85,200	45.2	255.3	81,900	145
150	33.8	233.0	84,700	38.4	242.4	81,500	42.5	249.9	78,200	150
155	30.3	224.7	81,000	35.3	235.5	77,900	39.7	244.0	74,800	155
160	26.3	215.0	77,600	31.9	227.7	74,600	36.7	237.4	71,600	160
165	21.7	203.3	74,300	28.2	218.7	71,500	33.4	230.0	68,600	165
170	15.7	187.7	71,200	23.9	208.0	68,600	29.9	221.6	65,800	170
175	3.8	155.4	68,100	18.6	194.5	65,800	25.8	211.7	63,200	175
180				11.0	174.3	63,100	21.1	199.7	60,600	180
185							14.9	183.4	58,200	185
190										190
195										195
200										200
205										205
210										210
215										215
220										220



ANSI B30.5

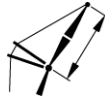
16000 S-3



332,000 lb
+
120,000 lb



137.8 ft



157.5 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120	62.1	280.5	98,200							120
125	60.0	277.6	93,000							125
130	57.8	274.5	88,300							130
135	55.6	271.1	84,000							135
140	53.4	267.4	80,000							140
145	51.0	263.4	76,300	56.3	268.2	70,800				145
150	48.6	259.0	72,800	54.1	264.6	67,500				150
155	46.1	254.2	69,600	51.7	260.7	64,500				155
160	43.5	249.0	66,600	49.4	256.5	61,700				160
165	40.7	243.3	63,800	46.9	251.8	59,100	52.3	256.7	54,500	165
170	37.8	237.0	61,200	44.3	246.7	56,600	49.9	252.6	52,100	170
175	34.6	229.9	58,700	41.6	241.2	54,300	47.4	248.0	50,000	175
180	31.2	221.9	56,400	38.7	235.1	52,100	44.9	243.1	47,900	180
185	27.4	212.6	54,100	35.6	228.2	50,000	42.2	237.6	46,000	185
190	22.9	201.5	52,000	32.3	220.5	48,100	39.3	231.6	44,100	190
195	17.4	187.1	50,000	28.6	211.7	46,200	36.3	224.9	42,400	195
200	8.7	163.8	47,900	24.3	201.2	44,400	33.0	217.5	40,700	200
205				19.2	188.1	42,600	29.4	208.9	39,100	205
210				12.1	169.0	40,900	25.4	198.9	37,600	210
215							20.5	186.5	36,100	215
220							14.0	169.4	34,700	220

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



137.8 ft



177.2 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
70	73.7	316.8	213,200 *							70
75	72.0	315.2	206,800							75
80	70.3	313.4	190,100							80
85	68.5	311.4	175,800							85
90	66.8	309.3	163,300	69.3	311.5	157,300				90
95	65.0	307.0	152,300	67.5	309.4	146,700				95
100	63.2	304.4	142,500	65.8	307.2	137,200				100
105	61.3	301.7	133,800	64.0	304.7	128,800	66.6	307.0	123,800	105
110	59.4	298.8	126,000	62.1	302.1	121,300	64.8	304.6	116,500	110
115	57.5	295.6	119,000	60.3	299.3	114,400	63.0	302.0	109,900	115
120	55.6	292.2	112,600	58.4	296.2	108,300	61.1	299.3	104,000	120
125	53.6	288.5	106,700	56.5	292.9	102,600	59.2	296.3	98,500	125
130	51.5	284.6	101,400	54.5	289.4	97,400	57.3	293.1	93,500	130
135	49.4	280.3	96,400	52.4	285.5	92,700	55.3	289.7	88,900	135
140	47.2	275.7	91,900	50.3	281.4	88,300	53.3	286.0	84,700	140
145	44.9	270.8	87,700	48.2	277.0	84,200	51.3	282.0	80,800	145
150	42.5	265.4	83,800	45.9	272.2	80,500	49.1	277.7	77,100	150
155	40.0	259.5	80,200	43.6	267.0	77,000	46.9	273.1	73,800	155
160	37.4	253.1	76,800	41.2	261.4	73,700	44.6	268.1	70,600	160
165	34.6	246.0	73,600	38.6	255.2	70,600	42.3	262.7	67,600	165
170	31.6	238.1	70,600	35.9	248.4	67,700	39.7	256.7	64,800	170
175	28.2	229.1	67,800	33.0	240.9	65,000	37.1	250.2	62,200	175
180	24.5	218.6	65,100	29.8	232.4	62,400	34.3	243.1	59,800	180
185	20.1	205.9	62,600	26.2	222.7	60,000	31.2	235.0	57,400	185
190	14.3	188.8	60,100	22.2	211.1	57,700	27.8	225.9	55,200	190
195				17.1	196.4	55,500	24.0	215.2	53,100	195
200				9.7	174.0	53,300	19.5	202.1	51,100	200
205							13.5	184.3	49,100	205
210										210
215										215
220										220
225										225
230										230
235										235
240										240



ANSI B30.5

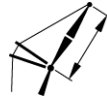
16000 S-3



332,000 lb
+
120,000 lb



137.8 ft



177.2 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130	61.8	297.4	87,000							130
135	59.9	294.5	82,700							135
140	58.0	291.4	78,700							140
145	56.1	288.1	75,100							145
150	54.1	284.5	71,600							150
155	52.0	280.6	68,500	56.7	285.2	63,200				155
160	49.9	276.4	65,500	54.7	281.7	60,400				160
165	47.7	271.9	62,700	52.6	277.9	57,800				165
170	45.5	267.1	60,100	50.6	273.8	55,400				170
175	43.1	261.8	57,600	48.4	269.4	53,100				175
180	40.7	256.1	55,300	46.2	264.7	50,900	51.0	269.9	46,600	180
185	38.1	249.8	53,100	43.9	259.5	48,900	48.9	265.6	44,700	185
190	35.3	242.9	51,000	41.4	253.9	46,900	46.7	260.9	42,900	190
195	32.3	235.2	49,100	38.9	247.8	45,100	44.4	255.8	41,200	195
200	29.1	226.5	47,200	36.2	241.1	43,300	42.0	250.4	39,500	200
205	25.5	216.4	45,400	33.3	233.7	41,700	39.5	244.4	38,000	205
210	21.2	204.4	43,700	30.1	225.3	40,100	36.8	237.8	36,500	210
215	15.9	188.7	42,000	26.6	215.7	38,500	33.9	230.5	35,100	215
220	7.3	162.5	40,300	22.6	204.4	37,100	30.9	222.4	33,700	220
225				17.7	190.1	35,700	27.4	213.1	32,400	225
230				10.7	169.1	34,200	23.6	202.2	31,200	230
235							18.9	188.8	29,900	235
240							12.7	170.1	28,700	240

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



137.8 ft



196.9 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
75	73.8	335.9	176,300 *							75
80	72.3	334.3	175,600 *							80
85	70.8	332.5	174,600							85
90	69.2	330.6	162,100							90
95	67.6	328.6	151,100	69.9	330.7	145,300				95
100	66.0	326.4	141,300	68.3	328.7	135,900				100
105	64.4	324.0	132,600	66.8	326.5	127,500				105
110	62.8	321.4	124,800	65.2	324.2	119,900	67.5	326.3	115,100	110
115	61.1	318.7	117,800	63.5	321.7	113,100	65.9	324.0	108,500	115
120	59.4	315.7	111,400	61.9	319.1	106,900	64.2	321.6	102,500	120
125	57.7	312.6	105,500	60.2	316.2	101,300	62.6	319.0	97,100	125
130	56.0	309.2	100,200	58.5	313.2	96,100	60.9	316.3	92,100	130
135	54.2	305.6	95,300	56.8	309.9	91,400	59.3	313.3	87,500	135
140	52.3	301.8	90,700	55.0	306.4	87,000	57.5	310.1	83,300	140
145	50.5	297.7	86,500	53.2	302.7	83,000	55.8	306.7	79,400	145
150	48.5	293.3	82,600	51.3	298.7	79,200	54.0	303.1	75,800	150
155	46.5	288.6	79,000	49.4	294.5	75,700	52.1	299.3	72,400	155
160	44.5	283.6	75,600	47.4	289.9	72,500	50.2	295.1	69,300	160
165	42.3	278.1	72,500	45.4	285.0	69,400	48.3	290.7	66,300	165
170	40.1	272.3	69,500	43.3	279.8	66,500	46.3	286.0	63,600	170
175	37.7	265.9	66,700	41.1	274.1	63,800	44.2	280.9	61,000	175
180	35.2	259.0	64,100	38.8	268.0	61,300	42.1	275.4	58,500	180
185	32.6	251.3	61,600	36.4	261.3	58,900	39.8	269.5	56,200	185
190	29.7	242.8	59,200	33.8	254.0	56,600	37.4	263.1	54,000	190
195	26.5	233.1	57,000	31.0	245.9	54,500	34.9	256.0	51,900	195
200	22.9	221.8	54,900	28.0	236.7	52,400	32.2	248.3	50,000	200
205	18.7	208.1	52,800	24.6	226.3	50,500	29.3	239.6	48,100	205
210	13.1	189.7	50,800	20.7	213.8	48,600	26.1	229.8	46,300	210
215				15.9	198.0	46,800	22.5	218.4	44,600	215
220				8.5	173.3	45,000	18.1	204.3	42,900	220
225							12.3	184.9	41,300	225
230										230
235										235
240										240
250										250
260										260



ANSI B30.5

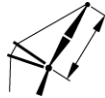
16000 S-3



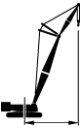
332,000 lb
+
120,000 lb



137.8 ft



196.9 ft

	75°			70°			65°			
										
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135										135
140	61.5	314.4	77,200							140
145	59.9	311.5	73,500							145
150	58.2	308.4	70,100							150
155	56.4	305.1	66,900							155
160	54.6	301.6	64,000							160
165	52.8	297.8	61,200	56.9	302.2	56,200				165
170	50.9	293.8	58,600	55.2	298.8	53,800				170
175	49.0	289.5	56,200	53.4	295.1	51,500				175
180	47.0	284.8	53,900	51.5	291.1	49,300				180
185	45.0	279.9	51,700	49.6	286.9	47,300				185
190	42.9	274.5	49,700	47.6	282.4	45,400	51.9	287.1	41,200	190
195	40.6	268.8	47,700	45.6	277.5	43,600	50.0	283.0	39,500	195
200	38.3	262.6	45,900	43.5	272.3	41,900	48.1	278.5	37,900	200
205	35.9	255.8	44,100	41.3	266.7	40,200	46.1	273.7	36,400	205
210	33.2	248.3	42,500	39.0	260.6	38,700	44.0	268.6	34,900	210
215	30.4	240.0	40,900	36.6	254.0	37,200	41.8	263.1	33,500	215
220	27.3	230.6	39,300	34.1	246.7	35,700	39.6	257.1	32,200	220
225	23.9	219.9	37,900	31.3	238.7	34,400	37.2	250.6	30,900	225
230	19.8	206.9	36,400	28.3	229.7	33,100	34.6	243.5	29,700	230
235	14.7	190.0	35,100	25.0	219.4	31,800	31.9	235.7	28,600	235
240	5.9	160.4	33,600	21.1	207.2	30,600	29.0	226.9	27,400	240
250				9.6	168.8	28,200	22.1	205.3	25,300	250
260							11.5	170.4	23,200	260

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



137.8 ft



216.5 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
80	74.0	354.9	147,400 *							80
85	72.6	353.4	146,700 *							85
90	71.2	351.6	145,900 *							90
95	69.8	349.8	145,100 *							95
100	68.3	347.8	140,000	70.4	349.8	134,400				100
105	66.9	345.7	131,300	69.0	347.9	126,000				105
110	65.5	343.4	123,500	67.6	345.8	118,500				110
115	64.0	341.0	116,400	66.1	343.6	111,700				115
120	62.5	338.4	110,000	64.6	341.2	105,500	66.7	343.4	101,000	120
125	61.0	335.6	104,200	63.2	338.7	99,900	65.3	341.1	95,600	125
130	59.4	332.7	98,800	61.7	336.0	94,700	63.8	338.6	90,600	130
135	57.9	329.6	93,900	60.1	333.2	90,000	62.3	336.0	86,000	135
140	56.3	326.2	89,400	58.6	330.1	85,600	60.8	333.2	81,800	140
145	54.7	322.7	85,200	57.0	326.9	81,600	59.3	330.2	77,900	145
150	53.0	319.0	81,300	55.4	323.5	77,800	57.7	327.1	74,300	150
155	51.3	315.0	77,700	53.8	319.8	74,300	56.1	323.8	70,900	155
160	49.6	310.8	74,300	52.1	316.0	71,000	54.5	320.2	67,800	160
165	47.8	306.3	71,200	50.4	311.8	68,000	52.8	316.4	64,900	165
170	46.0	301.5	68,200	48.6	307.5	65,100	51.1	312.4	62,100	170
175	44.1	296.4	65,400	46.8	302.8	62,500	49.4	308.2	59,500	175
180	42.1	290.9	62,800	45.0	297.8	59,900	47.6	303.6	57,100	180
185	40.1	285.0	60,300	43.0	292.5	57,500	45.8	298.8	54,800	185
190	38.0	278.7	58,000	41.0	286.9	55,300	43.9	293.7	52,600	190
195	35.7	271.9	55,800	38.9	280.7	53,200	41.9	288.2	50,500	195
200	33.3	264.4	53,700	36.7	274.1	51,100	39.9	282.2	48,600	200
205	30.8	256.2	51,700	34.4	267.0	49,200	37.7	275.9	46,700	205
210	28.1	247.1	49,700	32.0	259.1	47,400	35.5	269.0	45,000	210
215	25.0	236.8	47,900	29.3	250.5	45,600	33.1	261.4	43,300	215
220	21.6	224.8	46,200	26.4	240.7	43,900	30.5	253.1	41,700	220
225	17.5	210.1	44,500	23.2	229.6	42,300	27.7	243.9	40,100	225
230	12.1	190.2	42,800	19.4	216.3	40,800	24.7	233.4	38,700	230
235				14.7	199.3	39,300	21.2	221.2	37,200	235
240				7.4	172.1	37,700	17.0	206.1	35,800	240
250										250
260										260
270										270
280										280



ANSI B30.5

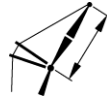
16000 S-3



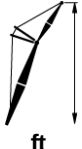
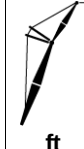
332,000 lb
+
120,000 lb



137.8 ft



216.5 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	lb	ft	lb	ft	ft	
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135										135
140										140
145	62.9	334.1	71,900							145
150	61.4	331.4	68,500							150
155	59.8	328.5	65,400							155
160	58.3	325.4	62,400							160
165	56.7	322.1	59,700							165
170	55.1	318.6	57,100							170
175	53.4	315.0	54,600	57.2	319.2	49,900				175
180	51.8	311.0	52,400	55.6	315.8	47,700				180
185	50.0	306.9	50,200	53.9	312.2	45,700				185
190	48.3	302.4	48,200	52.3	308.3	43,800				190
195	46.5	297.7	46,200	50.6	304.2	42,000				195
200	44.6	292.7	44,400	48.8	299.9	40,300	52.7	304.3	36,300	200
205	42.6	287.3	42,700	47.0	295.3	38,700	51.0	300.3	34,700	205
210	40.6	281.5	41,000	45.2	290.3	37,100	49.2	296.0	33,300	210
215	38.5	275.4	39,400	43.2	285.1	35,600	47.4	291.5	31,900	215
220	36.3	268.6	37,900	41.2	279.4	34,200	45.6	286.6	30,600	220
225	34.0	261.4	36,500	39.2	273.4	32,900	43.7	281.4	29,400	225
230	31.5	253.4	35,100	37.0	266.8	31,600	41.7	275.9	28,200	230
235	28.8	244.5	33,800	34.7	259.7	30,400	39.6	269.9	27,000	235
240	25.8	234.5	32,500	32.2	251.9	29,200	37.5	263.5	25,900	240
250	18.6	209.1	30,100	26.7	233.8	27,000	32.8	248.9	23,800	250
260	4.5	157.1	27,700	19.9	209.7	24,900	27.4	231.1	21,900	260
270				8.5	168.0	22,800	20.7	208.0	20,100	270
280							10.4	170.4	18,300	280

16000 S-3

ANSI B30.5



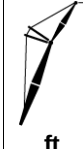
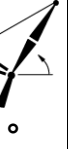
332,000 lb
+
120,000 lb



137.8 ft



236.2 ft

	86°			83°			80°			
										
	ft	o	ft	lb	o	ft	lb	o	ft	lb
90		72.8	372.4	122,600 *						90
95		71.5	370.8	121,800 *						95
100		70.2	369.0	121,100 *						100
105		68.9	367.0	120,200 *	70.8	368.9	117,800 *			105
110		67.6	365.0	119,400 *	69.5	367.1	117,200			110
115		66.3	362.8	115,200	68.2	365.1	110,400			115
120		65.0	360.5	108,800	66.9	362.9	104,200			120
125		63.6	358.0	103,000	65.6	360.7	98,600	67.5	362.7	94,200
130		62.2	355.4	97,600	64.2	358.3	93,400	66.2	360.5	89,200
135		60.9	352.6	92,700	62.9	355.7	88,700	64.8	358.1	84,600
140		59.4	349.6	88,200	61.5	353.0	84,300	63.5	355.6	80,400
145		58.0	346.5	84,000	60.1	350.1	80,300	62.1	353.0	76,500
150		56.6	343.2	80,100	58.7	347.1	76,500	60.7	350.2	72,900
155		55.1	339.8	76,500	57.2	343.9	73,000	59.3	347.2	69,600
160		53.6	336.1	73,100	55.8	340.5	69,800	57.9	344.1	66,400
165		52.1	332.2	70,000	54.3	336.9	66,700	56.4	340.8	63,500
170		50.5	328.1	67,000	52.7	333.1	63,900	54.9	337.3	60,800
175		48.9	323.8	64,300	51.2	329.1	61,200	53.4	333.6	58,200
180		47.2	319.2	61,600	49.6	324.9	58,700	51.9	329.7	55,800
185		45.5	314.3	59,200	48.0	320.4	56,300	50.3	325.5	53,500
190		43.8	309.1	56,800	46.3	315.7	54,100	48.7	321.2	51,300
195		42.0	303.6	54,600	44.6	310.6	52,000	47.0	316.6	49,300
200		40.1	297.8	52,600	42.8	305.3	49,900	45.3	311.7	47,300
205		38.2	291.5	50,600	41.0	299.6	48,000	43.6	306.5	45,500
210		36.1	284.7	48,700	39.1	293.5	46,200	41.8	300.9	43,700
215		34.0	277.5	46,900	37.1	287.0	44,500	39.9	295.0	42,100
220		31.7	269.5	45,200	35.0	279.9	42,800	37.9	288.7	40,500
225		29.3	260.8	43,500	32.8	272.3	41,200	35.9	281.9	39,000
230		26.6	251.1	41,900	30.4	264.0	39,700	33.7	274.5	37,500
235		23.7	240.2	40,400	27.9	254.8	38,300	31.5	266.5	36,100
240		20.4	227.4	39,000	25.1	244.4	36,900	29.0	257.7	34,800
250		11.1	190.4	36,200	18.3	218.5	34,200	23.4	236.8	32,200
260					6.3	170.2	31,600	15.9	207.7	29,900
270										270
280										280
290										290



ANSI B30.5

16000 S-3



137.8 ft



236.2 ft

	75°			70°			
ft	ft	ft	lb	ft	ft	lb	ft
90							90
95							95
100							100
105							105
110							110
115							115
120							120
125							125
130							130
135							135
140							140
145							145
150							150
155	62.6	351.1	63,900				155
160	61.2	348.3	60,900				160
165	59.8	345.4	58,200				165
170	58.4	342.4	55,600				170
175	56.9	339.1	53,200				175
180	55.5	335.7	50,900				180
185	54.0	332.0	48,800	57.4	336.2	44,100	185
190	52.4	328.2	46,700	55.9	332.8	42,300	190
195	50.9	324.2	44,800	54.4	329.3	40,500	195
200	49.3	319.9	43,000	52.9	325.5	38,800	200
205	47.6	315.4	41,300	51.4	321.5	37,200	205
210	46.0	310.6	39,600	49.8	317.3	35,600	210
215	44.2	305.5	38,100	48.1	312.9	34,200	215
220	42.4	300.1	36,600	46.5	308.2	32,800	220
225	40.6	294.3	35,200	44.8	303.1	31,500	225
230	38.7	288.1	33,800	43.0	297.8	30,200	230
235	36.7	281.5	32,500	41.2	292.2	29,000	235
240	34.5	274.3	31,300	39.3	286.1	27,800	240
250	29.9	258.1	28,900	35.2	272.7	25,600	250
260	24.5	238.1	26,700	30.6	256.8	23,600	260
270	17.5	211.1	24,700	25.4	237.5	21,700	270
280	2.8	151.6	22,500	18.7	212.0	19,900	280
290				7.5	166.8	18,100	290

16000 S-3

ANSI B30.5



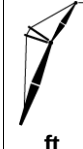
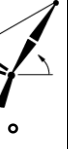
332,000 lb
+
120,000 lb



137.8 ft



255.9 ft

	86°			83°			80°			
										
	ft	o	ft	lb	o	ft	lb	o	ft	lb
95		73.0	391.5	103,500 *						95
100		71.8	389.9	102,800 *						100
105		70.6	388.1	102,000 *						105
110		69.4	386.2	101,200 *						110
115		68.2	384.2	100,500 *						115
120		67.0	382.1	99,700 *	70.0	386.2	98,800 *			120
125		65.8	379.9	99,000 *	68.8	384.3	98,300 *			125
130		64.6	377.5	96,500	67.6	382.2	97,300			130
135		63.3	375.0	91,600	66.3	380.0	92,200			135
140		62.0	372.3	87,100	65.1	377.7	87,500	66.9	379.8	83,400
145		60.7	369.5	82,900	63.9	375.3	83,100	65.7	377.5	79,200
150		59.5	366.6	79,000	62.6	372.7	79,100	64.4	375.1	75,300
155		58.1	363.5	75,400	61.3	370.0	75,300	63.2	372.6	71,700
160		56.8	360.2	72,000	60.0	367.1	71,800	61.9	369.9	68,300
165		55.4	356.8	68,900	58.7	364.0	68,600	60.6	367.1	65,200
170		54.1	353.2	65,900	57.4	360.9	65,600	59.3	364.2	62,300
175		52.7	349.4	63,100	56.1	357.5	62,700	58.0	361.0	59,500
180		51.2	345.4	60,500	54.7	354.0	60,000	56.6	357.8	57,000
185		49.8	341.2	58,100	53.3	350.3	57,500	55.3	354.3	54,500
190		48.3	336.7	55,700	51.9	346.4	55,200	53.9	350.7	52,300
195		46.7	332.1	53,500	50.4	342.2	52,900	52.5	346.9	50,100
200		45.2	327.1	51,500	48.9	337.9	50,800	51.1	342.9	48,100
205		43.5	321.9	49,500	47.4	333.4	48,800	49.6	338.6	46,100
210		41.9	316.4	47,600	45.9	328.5	46,900	48.1	334.1	44,300
215		40.1	310.5	45,800	44.3	323.5	45,100	46.6	329.5	42,600
220		38.3	304.3	44,100	42.6	318.1	43,400	45.0	324.5	40,900
225		36.5	297.6	42,500	40.9	312.3	41,700	43.3	319.2	39,300
230		34.5	290.4	40,900	39.2	306.3	40,100	41.7	313.7	37,800
235		32.5	282.7	39,400	37.3	299.8	38,600	39.9	307.7	36,400
240		30.3	274.3	38,000	35.4	292.9	37,200	38.1	301.5	35,000
250		25.4	254.9	35,300	33.4	285.4	35,800	36.3	294.7	33,700
260		19.4	229.9	32,800	29.0	268.5	33,200	32.2	279.7	31,200
270		10.2	190.4	30,400	23.9	247.9	30,800	27.7	261.9	28,900
280					17.3	220.4	28,600	22.2	239.9	26,700
290					5.3	167.6	26,300	15.0	209.1	24,700

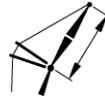


ANSI B30.5

16000 S-3



137.8 ft



255.9 ft

	75°		
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155			
160			
165	62.3	368.0	56,800
170	61.1	365.3	54,300
175	59.8	362.4	51,900
180	58.5	359.3	49,600
185	57.1	356.1	47,500
190	55.8	352.7	45,500
195	54.4	349.1	43,500
200	53.0	345.4	41,700
205	51.6	341.4	40,000
210	50.1	337.3	38,400
215	48.6	332.9	36,800
220	47.1	328.3	35,400
225	45.5	323.4	33,900
230	43.9	318.3	32,600
235	42.3	312.8	31,300
240	40.6	307.0	30,100
250	37.0	294.3	27,700
260	33.0	279.7	25,600
270	28.5	262.5	23,600
280	23.3	241.4	21,700
290	16.5	212.9	19,900

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



137.8 ft



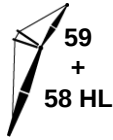
275.6 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
100	73.2	410.6	87,600 *							100
105	72.1	408.9	86,900 *							105
110	71.0	407.2	86,100 *							110
115	69.9	405.4	85,400 *							115
120	68.7	403.4	84,600 *	70.4	405.4	83,400 *				120
125	67.6	401.4	83,900 *	69.3	403.5	82,800 *				125
130	66.5	399.2	83,100 *	68.1	401.5	82,200 *				130
135	65.3	396.9	82,300 *	67.0	399.4	81,600 *				135
140	64.2	394.5	81,600 *	65.9	397.1	81,000 *	67.5	399.1	77,700	140
145	63.0	392.0	80,900 *	64.7	394.7	77,700	66.4	396.9	73,800	145
150	61.8	389.3	77,700	63.6	392.3	73,900	65.2	394.6	70,200	150
155	60.7	386.5	74,100	62.4	389.7	70,400	64.1	392.1	66,800	155
160	59.5	383.5	70,700	61.2	386.9	67,200	62.9	389.6	63,700	160
165	58.2	380.5	67,600	60.0	384.0	64,200	61.7	386.9	60,800	165
170	57.0	377.2	64,600	58.8	381.0	61,300	60.5	384.1	58,100	170
175	55.7	373.8	61,800	57.5	377.9	58,700	59.3	381.1	55,500	175
180	54.5	370.3	59,200	56.3	374.5	56,200	58.1	378.0	53,100	180
185	53.2	366.5	56,800	55.0	371.0	53,800	56.9	374.8	50,800	185
190	51.8	362.6	54,500	53.7	367.4	51,600	55.6	371.4	48,700	190
195	50.5	358.5	52,300	52.4	363.6	49,400	54.3	367.8	46,600	195
200	49.1	354.2	50,200	51.1	359.5	47,400	53.0	364.0	44,700	200
205	47.7	349.7	48,200	49.7	355.3	45,500	51.7	360.1	42,900	205
210	46.3	345.0	46,300	48.4	350.9	43,700	50.3	356.0	41,100	210
215	44.8	340.0	44,500	46.9	346.3	42,000	49.0	351.6	39,500	215
220	43.3	334.7	42,800	45.5	341.4	40,400	47.6	347.1	37,900	220
225	41.8	329.1	41,200	44.0	336.2	38,800	46.1	342.3	36,400	225
230	40.2	323.3	39,700	42.5	330.8	37,300	44.7	337.3	35,000	230
235	38.5	317.0	38,200	40.9	325.1	35,900	43.1	332.0	33,600	235
240	36.8	310.4	36,800	39.2	319.0	34,500	41.6	326.4	32,300	240
250	33.1	295.8	34,100	35.8	305.7	32,000	38.3	314.2	29,800	250
260	29.0	278.9	31,600	32.0	290.6	29,600	34.8	300.5	27,500	260
270	24.3	258.4	29,300	27.8	272.8	27,400	30.9	284.6	25,400	270
280	18.4	232.1	27,200	22.8	251.1	25,300	26.5	265.9	23,500	280
290	9.4	190.0	25,100	16.4	222.2	23,400	21.2	242.7	21,600	290
300				4.1	164.0	21,400	14.1	210.3	19,800	300



ANSI B30.5

16000 S-3



REFERENCE
ONLY!



157.5 ft



78.7 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	72.7	241.6	387,800 *c							45
50	68.8	239.6	356,800 *b							50
55	64.8	237.3	316,300 b							55
60	60.6	234.5	281,700 b	67.4	237.9	271,600 b				60
65	56.2	231.2	253,600	63.3	235.4	244,500 b				65
70	51.6	227.3	230,400	59.1	232.4	222,100 b	66.0	235.7	213,800 b	70
75	46.7	222.6	210,800	54.7	228.9	203,300	61.8	233.0	195,700 b	75
80	41.2	217.1	194,100	49.9	224.8	187,200	57.5	229.9	180,200 b	80
85	35.1	210.3	179,600	44.8	219.9	173,300	53.0	226.2	166,800	85
90	27.7	201.4	166,900	39.2	214.0	161,100	48.2	221.8	155,100	90
95	17.3	188.2	155,600	32.7	206.6	150,300	42.9	216.5	144,800	95
100				24.6	196.7	140,700	37.0	210.1	135,600	100
105				11.6	179.5	131,800	30.1	202.0	127,300	105
110							21.0	190.6	119,800	110
115										115
120										120
125										125
130										130
135										135
140										140
145										145
150										150



ANSI B30.5

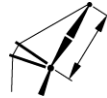
16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



78.7 ft

	75°			70°			65°			
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	60.6	228.9	145,000 lb							90
95	56.2	225.6	135,400 lb							95
100	51.6	221.6	126,800							100
105	46.6	217.0	119,200							105
110	41.2	211.5	112,300	54.5	219.8	104,500				110
115	35.0	204.6	106,000	49.8	215.6	98,700				115
120	27.6	195.8	100,200	44.7	210.7	93,400				120
125	17.3	182.4	94,800	39.0	204.7	88,500	52.4	212.4	82,000	125
130				32.5	197.2	84,000	47.5	207.9	77,800	130
135				24.3	187.2	79,800	42.2	202.5	74,000	135
140				10.9	169.4	75,700	36.2	196.0	70,400	140
145							29.0	187.6	67,100	145
150							19.5	175.4	63,900	150

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



98.4 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
50	73.2	260.6	343,200 *c							50
55	70.1	258.8	315,700 b							55
60	66.9	256.7	281,100 b							60
65	63.7	254.3	253,100 b	69.0	257.2	243,700 b				65
70	60.4	251.4	229,900	65.8	254.9	221,300 b				70
75	56.9	248.2	210,400	62.6	252.4	202,500	67.9	255.0	194,700 b	75
80	53.3	244.5	193,800	59.2	249.4	186,500	64.7	252.7	179,200 b	80
85	49.5	240.3	179,400	55.7	246.0	172,700	61.4	250.0	165,900	85
90	45.4	235.4	166,800	52.0	242.2	160,600	57.9	246.9	154,300	90
95	41.0	229.9	155,800	48.1	237.7	150,000	54.4	243.3	144,100	95
100	36.2	223.2	146,000	43.9	232.7	140,500	50.6	239.3	135,000	100
105	30.7	215.2	137,200	39.4	226.7	132,100	46.6	234.6	126,900	105
110	24.1	204.9	129,200	34.4	219.7	124,400	42.4	229.3	119,600	110
115	14.5	189.3	121,800	28.6	211.1	117,500	37.7	223.0	112,900	115
120				21.3	199.5	111,100	32.4	215.4	106,900	120
125				8.8	178.7	105,100	26.2	206.0	101,300	125
130							17.9	192.6	96,200	130
135										135
140										140
145										145
150										150
155										155
160										160
165										165
170										170



ANSI B30.5

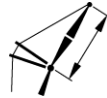
16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



98.4 ft

	75°			70°			65°			
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	60.3	245.8	125,800							100
105	56.9	242.6	118,200							105
110	53.3	238.9	111,400							110
115	49.4	234.7	105,200							115
120	45.4	229.8	99,600	55.5	236.9	92,300				120
125	41.0	224.2	94,500	51.9	233.0	87,500				125
130	36.2	217.6	89,700	48.0	228.5	83,100				130
135	30.7	209.6	85,400	43.8	223.4	79,100				135
140	24.0	199.2	81,300	39.3	217.5	75,400	50.1	225.5	69,400	140
145	14.4	183.6	77,400	34.2	210.4	71,900	46.1	220.7	66,200	145
150				28.4	201.7	68,600	41.8	215.3	63,200	150
155				21.0	190.0	65,500	37.1	208.9	60,400	155
160				8.1	168.4	62,400	31.7	201.1	57,700	160
165							25.3	191.3	55,200	165
170							16.5	177.1	52,800	170

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



118.1 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
55	73.6	279.7	305,800 *b							55
60	71.0	278.0	280,100 b							60
65	68.4	276.0	252,000							65
70	65.7	273.8	228,900	70.1	276.4	220,000 b				70
75	63.0	271.2	209,400	67.5	274.3	201,200				75
80	60.2	268.4	192,800	64.8	272.0	185,300				80
85	57.3	265.2	178,400	62.0	269.3	171,400	66.5	272.1	164,400	85
90	54.4	261.6	165,900	59.2	266.4	159,400	63.8	269.7	152,900	90
95	51.3	257.7	154,900	56.3	263.1	148,800	61.0	266.9	142,700	95
100	48.0	253.2	145,200	53.3	259.4	139,400	58.2	263.8	133,700	100
105	44.6	248.2	136,400	50.2	255.2	131,000	55.3	260.4	125,600	105
110	40.9	242.6	128,600	46.9	250.6	123,500	52.2	256.6	118,300	110
115	37.0	236.1	121,500	43.4	245.4	116,700	49.0	252.3	111,800	115
120	32.6	228.6	115,000	39.6	239.5	110,400	45.6	247.4	105,800	120
125	27.5	219.5	109,100	35.5	232.7	104,800	42.0	242.0	100,400	125
130	21.4	207.8	103,600	30.9	224.7	99,500	38.2	235.8	95,400	130
135	12.4	189.9	98,400	25.6	214.9	94,700	33.9	228.6	90,800	135
140				18.8	201.8	90,200	29.1	220.0	86,500	140
145				6.4	176.8	85,800	23.4	209.3	82,500	145
150							15.6	194.1	78,700	150
155										155
160										160
165										165
170										170
175										175
180										180
185										185
190										190



ANSI B30.5

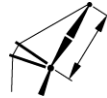
16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



118.1 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105	63.0	265.6	116,600							105
110	60.2	262.8	109,800							110
115	57.3	259.6	103,700							115
120	54.3	256.0	98,100							120
125	51.2	252.1	93,100							125
130	48.0	247.6	88,400	56.2	253.9	81,500				130
135	44.6	242.6	84,100	53.2	250.2	77,500				135
140	40.9	236.9	80,200	50.1	246.0	73,800				140
145	36.9	230.5	76,500	46.7	241.4	70,400				145
150	32.5	222.9	73,000	43.2	236.2	67,200	51.8	242.8	61,500	150
155	27.5	213.8	69,800	39.5	230.2	64,300	48.6	238.4	58,800	155
160	21.3	202.1	66,800	35.4	223.4	61,500	45.2	233.6	56,200	160
165	12.3	184.1	63,800	30.8	215.3	58,900	41.6	228.0	53,800	165
170				25.4	205.4	56,400	37.6	221.7	51,500	170
175				18.5	192.2	54,000	33.3	214.4	49,400	175
180				5.5	165.9	51,500	28.4	205.6	47,400	180
185							22.5	194.4	45,400	185
190							14.3	178.2	43,500	190

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



137.8 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
60	73.8	298.8	272,900 *b							60
65	71.6	297.1	251,100							65
70	69.4	295.2	227,900							70
75	67.1	293.1	208,500	70.8	295.5	200,100				75
80	64.8	290.8	191,900	68.6	293.6	184,200				80
85	62.5	288.2	177,500	66.3	291.4	170,400				85
90	60.1	285.3	165,100	64.0	289.0	158,400	67.8	291.4	151,700	90
95	57.6	282.2	154,100	61.7	286.3	147,800	65.5	289.2	141,500	95
100	55.1	278.7	144,300	59.3	283.3	138,400	63.2	286.6	132,500	100
105	52.5	274.9	135,600	56.8	280.1	130,100	60.8	283.9	124,500	105
110	49.8	270.7	127,800	54.2	276.5	122,500	58.4	280.8	117,300	110
115	47.0	266.1	120,800	51.6	272.6	115,800	55.9	277.4	110,700	115
120	44.0	261.0	114,300	48.8	268.2	109,600	53.3	273.7	104,800	120
125	40.8	255.3	108,500	46.0	263.5	103,900	50.6	269.7	99,400	125
130	37.5	248.9	103,100	42.9	258.2	98,800	47.8	265.2	94,400	130
135	33.8	241.7	98,100	39.7	252.3	94,000	44.9	260.2	89,900	135
140	29.7	233.3	93,600	36.2	245.6	89,600	41.8	254.7	85,700	140
145	25.1	223.2	89,300	32.5	238.0	85,500	38.5	248.6	81,800	145
150	19.3	210.2	85,300	28.2	229.1	81,700	34.9	241.6	78,100	150
155	10.6	189.9	81,400	23.2	218.1	78,200	31.0	233.6	74,700	155
160				16.8	203.6	74,800	26.5	224.0	71,500	160
165				3.8	172.8	71,400	21.1	212.1	68,500	165
170							13.8	195.1	65,600	170
175										175
180										180
185										185
190										190
195										195
200										200
205										205
210										210



ANSI B30.5

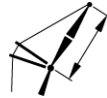
16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



137.8 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115	62.5	282.6	102,400							115
120	60.1	279.7	96,900							120
125	57.6	276.6	91,900							125
130	55.1	273.1	87,200							130
135	52.5	269.3	83,000							135
140	49.8	265.1	79,100	56.7	270.9	72,500				140
145	46.9	260.5	75,400	54.1	267.3	69,200				145
150	44.0	255.4	72,100	51.5	263.4	66,000				150
155	40.8	249.7	68,900	48.7	259.0	63,100				155
160	37.5	243.3	65,900	45.9	254.2	60,400	52.9	260.0	54,900	160
165	33.8	236.0	63,200	42.8	248.9	57,800	50.3	255.9	52,500	165
170	29.7	227.6	60,600	39.6	243.0	55,400	47.4	251.4	50,300	170
175	25.0	217.5	58,100	36.1	236.3	53,100	44.5	246.3	48,200	175
180	19.2	204.5	55,700	32.3	228.7	51,000	41.4	240.8	46,200	180
185	10.5	184.1	53,400	28.1	219.7	48,900	38.1	234.5	44,400	185
190				23.0	208.7	47,000	34.4	227.4	42,600	190
195				16.6	193.9	45,100	30.5	219.2	40,900	195
200							25.9	209.4	39,300	200
205							20.3	197.1	37,700	205
210							12.5	178.8	36,100	210



157.5 ft



157.5 ft

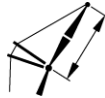
	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
65	74.0	317.8	234,700 *							65
70	72.1	316.2	226,800							70
75	70.1	314.4	207,300							75
80	68.2	312.4	190,700							80
85	66.2	310.2	176,400	69.5	312.8	169,000				85
90	64.2	307.8	163,900	67.5	310.7	157,000				90
95	62.1	305.2	152,900	65.5	308.4	146,500				95
100	60.0	302.3	143,200	63.5	306.0	137,100	66.8	308.5	131,000	100
105	57.9	299.2	134,500	61.4	303.2	128,700	64.8	306.2	123,000	105
110	55.7	295.8	126,700	59.3	300.3	121,200	62.7	303.6	115,800	110
115	53.4	292.1	119,700	57.1	297.1	114,500	60.6	300.8	109,300	115
120	51.1	288.1	113,300	54.9	293.6	108,300	58.5	297.8	103,400	120
125	48.7	283.7	107,400	52.6	289.8	102,700	56.3	294.5	98,000	125
130	46.2	279.0	102,100	50.3	285.7	97,600	54.1	290.9	93,100	130
135	43.5	273.8	97,100	47.8	281.2	92,800	51.8	287.0	88,500	135
140	40.8	268.1	92,600	45.3	276.3	88,500	49.4	282.7	84,400	140
145	37.9	261.8	88,400	42.6	270.9	84,400	46.9	278.1	80,500	145
150	34.7	254.7	84,500	39.8	265.0	80,700	44.3	273.0	76,900	150
155	31.3	246.7	80,800	36.8	258.5	77,200	41.6	267.5	73,500	155
160	27.5	237.5	77,400	33.6	251.1	73,900	38.7	261.4	70,400	160
165	23.0	226.4	74,200	30.0	242.7	70,800	35.7	254.6	67,400	165
170	17.6	212.2	71,100	26.0	233.0	67,900	32.3	246.9	64,700	170
175	9.0	189.4	68,100	21.3	221.0	65,200	28.6	238.0	62,100	175
180				15.2	205.0	62,500	24.4	227.6	59,600	180
185							19.3	214.5	57,200	185
190							12.2	195.7	54,900	190
195										195
200										200
205										205
210										210
215										215
220										220
225										225
230										230



ANSI B30.5

16000 S-3
332,000 lb
+
120,000 lb

157.5 ft



157.5 ft

	 75°			 70°			 65°			
 ft	 °	 ft	 lb	 °	 ft	 lb	 °	 ft	 lb	 ft
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125	62.1	299.5	90,200							125
130	60.0	296.7	85,600							130
135	57.9	293.5	81,400							135
140	55.7	290.1	77,500							140
145	53.4	286.5	73,900							145
150	51.1	282.5	70,600	57.1	287.9	64,300				150
155	48.7	278.1	67,400	54.8	284.4	61,400				155
160	46.2	273.4	64,500	52.5	280.6	58,700				160
165	43.5	268.1	61,800	50.2	276.5	56,200				165
170	40.8	262.4	59,200	47.7	272.0	53,800				170
175	37.8	256.1	56,800	45.2	267.1	51,600	51.5	273.2	46,500	175
180	34.7	249.1	54,500	42.5	261.7	49,500	49.1	268.9	44,600	180
185	31.3	241.1	52,400	39.7	255.8	47,500	46.6	264.2	42,700	185
190	27.4	231.8	50,300	36.7	249.2	45,600	44.0	259.1	41,000	190
195	23.0	220.7	48,400	33.5	241.8	43,800	41.3	253.5	39,300	195
200	17.5	206.5	46,500	29.9	233.4	42,100	38.4	247.3	37,800	200
205	8.9	183.5	44,600	25.9	223.6	40,500	35.2	240.4	36,300	205
210				21.1	211.5	38,900	31.9	232.6	34,900	210
215				15.0	195.3	37,400	28.1	223.6	33,500	215
220							23.8	212.9	32,200	220
225							18.6	199.3	30,900	225
230							11.0	179.0	29,600	230

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



177.2 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
75	72.4	335.3	194,800 *							75
80	70.7	333.5	188,900 *							80
85	69.0	331.6	175,300							85
90	67.2	329.5	162,800	70.1	332.0	155,800				90
95	65.5	327.3	151,900	68.4	330.0	145,300				95
100	63.7	324.8	142,100	66.6	327.8	135,900				100
105	61.8	322.1	133,500	64.8	325.5	127,600	67.8	327.8	121,700	105
110	60.0	319.2	125,700	63.0	322.9	120,100	66.0	325.6	114,600	110
115	58.1	316.1	118,600	61.2	320.2	113,400	64.2	323.2	108,100	115
120	56.1	312.8	112,200	59.3	317.2	107,200	62.4	320.6	102,200	120
125	54.1	309.2	106,400	57.4	314.0	101,600	60.5	317.8	96,800	125
130	52.1	305.3	101,100	55.4	310.6	96,500	58.6	314.7	91,900	130
135	50.0	301.2	96,200	53.4	306.9	91,800	56.7	311.5	87,400	135
140	47.8	296.7	91,600	51.4	303.0	87,400	54.7	308.0	83,200	140
145	45.5	291.8	87,500	49.2	298.7	83,400	52.7	304.2	79,300	145
150	43.2	286.5	83,600	47.0	294.1	79,700	50.6	300.1	75,800	150
155	40.7	280.8	79,900	44.7	289.1	76,200	48.4	295.7	72,400	155
160	38.1	274.6	76,500	42.4	283.7	72,900	46.2	291.0	69,300	160
165	35.4	267.7	73,400	39.9	277.8	69,900	43.9	285.8	66,400	165
170	32.4	260.0	70,400	37.2	271.3	67,000	41.5	280.2	63,700	170
175	29.2	251.3	67,600	34.4	264.1	64,300	38.9	274.1	61,100	175
180	25.6	241.3	64,900	31.3	256.1	61,800	36.2	267.4	58,600	180
185	21.4	229.3	62,400	28.0	247.1	59,400	33.3	260.0	56,400	185
190	16.1	213.8	60,000	24.2	236.5	57,100	30.2	251.7	54,200	190
195	7.7	188.2	57,600	19.7	223.5	54,900	26.7	242.1	52,100	195
200				13.8	206.0	52,800	22.7	230.8	50,100	200
205							17.8	216.6	48,200	205
210							10.9	195.8	46,300	210
215										215
220										220
225										225
230										230
235										235
240										240
250										250



ANSI B30.5

16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



177.2 ft

	75°			70°			65°			
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135	61.8	316.5	80,100							135
140	59.9	313.6	76,200							140
145	58.0	310.5	72,600							145
150	56.1	307.2	69,300							150
155	54.1	303.6	66,200							155
160	52.1	299.7	63,300	57.3	304.9	57,400				160
165	50.0	295.5	60,600	55.4	301.5	54,900				165
170	47.8	291.0	58,100	53.4	297.8	52,500				170
175	45.5	286.2	55,700	51.3	293.8	50,300				175
180	43.2	280.9	53,400	49.2	289.5	48,200				180
185	40.7	275.2	51,300	47.0	284.9	46,300	52.4	290.4	41,400	185
190	38.1	268.9	49,300	44.7	279.9	44,400	50.3	286.3	39,700	190
195	35.4	262.0	47,400	42.3	274.4	42,600	48.2	281.9	38,000	195
200	32.4	254.3	45,500	39.8	268.5	41,000	45.9	277.1	36,500	200
205	29.2	245.6	43,800	37.1	262.0	39,400	43.6	271.9	35,000	205
210	25.5	235.6	42,100	34.3	254.9	37,900	41.2	266.2	33,600	210
215	21.3	223.6	40,500	31.2	246.8	36,400	38.6	260.1	32,300	215
220	16.1	208.1	39,000	27.9	237.7	35,000	35.9	253.3	31,000	220
225	7.6	182.3	37,400	24.1	227.1	33,700	32.9	245.7	29,800	225
230				19.6	214.0	32,400	29.7	237.3	28,600	230
235				13.6	196.2	31,100	26.2	227.5	27,500	235
240							22.1	215.9	26,400	240
250							9.6	178.7	24,200	250

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



196.9 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
80	72.7	354.4	162,600 *							80
85	71.2	352.7	162,200 *							85
90	69.6	350.8	158,400 *							90
95	68.1	348.8	150,600	70.7	351.1	143,900				95
100	66.5	346.6	140,900	69.1	349.2	134,600				100
105	64.9	344.3	132,200	67.5	347.1	126,200				105
110	63.2	341.8	124,500	65.9	344.9	118,700				110
115	61.6	339.1	117,400	64.3	342.5	112,000	67.0	345.0	106,600	115
120	59.9	336.2	111,000	62.7	339.9	105,900	65.4	342.7	100,700	120
125	58.2	333.1	105,200	61.0	337.1	100,300	63.7	340.2	95,300	125
130	56.5	329.8	99,900	59.3	334.2	95,200	62.1	337.6	90,400	130
135	54.7	326.3	95,000	57.6	331.0	90,500	60.4	334.7	85,900	135
140	52.9	322.5	90,500	55.8	327.7	86,100	58.7	331.7	81,800	140
145	51.0	318.5	86,300	54.1	324.0	82,100	57.0	328.5	77,900	145
150	49.1	314.2	82,400	52.2	320.2	78,400	55.2	325.0	74,400	150
155	47.1	309.6	78,800	50.3	316.1	74,900	53.4	321.3	71,000	155
160	45.0	304.6	75,400	48.4	311.7	71,700	51.5	317.4	67,900	160
165	42.9	299.3	72,200	46.4	307.0	68,600	49.6	313.1	65,000	165
170	40.7	293.6	69,300	44.3	301.9	65,800	47.7	308.6	62,300	170
175	38.4	287.3	66,500	42.2	296.4	63,100	45.7	303.8	59,800	175
180	35.9	280.6	63,900	39.9	290.5	60,600	43.6	298.6	57,300	180
185	33.3	273.1	61,400	37.5	284.1	58,200	41.4	293.0	55,100	185
190	30.5	264.8	59,000	35.0	277.1	56,000	39.1	286.9	52,900	190
195	27.4	255.5	56,800	32.4	269.4	53,900	36.7	280.3	50,900	195
200	24.0	244.8	54,700	29.5	260.8	51,800	34.1	273.0	48,900	200
205	19.9	231.9	52,700	26.3	251.0	49,900	31.4	265.0	47,100	205
210	14.9	215.1	50,700	22.7	239.6	48,000	28.4	256.1	45,300	210
215	6.3	186.4	48,700	18.3	225.7	46,300	25.0	245.8	43,700	215
220				12.6	206.7	44,500	21.2	233.6	42,000	220
225							16.5	218.4	40,500	225
230							9.7	195.6	38,900	230
235										235
240										240
250										250
260										260
270										270



ANSI B30.5

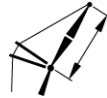
16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



196.9 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135										135
140										140
145	61.6	333.5	71,000							145
150	59.9	330.6	67,700							150
155	58.2	327.5	64,600							155
160	56.4	324.2	61,700							160
165	54.7	320.7	59,100							165
170	52.8	316.9	56,500	57.5	321.9	50,800				170
175	51.0	312.9	54,200	55.8	318.5	48,700				175
180	49.1	308.6	51,900	54.0	314.9	46,600				180
185	47.1	304.0	49,800	52.2	311.0	44,600				185
190	45.0	299.0	47,800	50.3	306.9	42,800				190
195	42.9	293.7	45,900	48.3	302.5	41,100				195
200	40.7	287.9	44,100	46.3	297.7	39,400	51.3	303.6	34,800	200
205	38.4	281.7	42,400	44.2	292.6	37,800	49.4	299.4	33,300	205
210	35.9	274.9	40,800	42.1	287.2	36,300	47.4	294.8	32,000	210
215	33.3	267.5	39,300	39.8	281.3	34,900	45.4	289.9	30,700	215
220	30.5	259.2	37,800	37.5	274.8	33,600	43.3	284.7	29,400	220
225	27.4	249.9	36,400	35.0	267.8	32,300	41.1	279.0	28,200	225
230	23.9	239.1	35,000	32.3	260.1	31,000	38.8	272.9	27,100	230
235	19.9	226.2	33,700	29.4	251.4	29,800	36.3	266.2	26,000	235
240	14.8	209.4	32,400	26.2	241.6	28,600	33.8	258.8	24,900	240
250				18.2	216.2	26,400	28.0	241.6	22,900	250
260							20.7	218.6	21,000	260
270							8.4	177.9	19,200	270



157.5 ft



216.5 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135										135
140										140
145										145
150										150
155										155
160										160
165										165
170										170
175										175
180										180
185										185
190										190
195										195
200										200
205										205
210										210
215										215
220										220
225										225
230										230
235										235
240										240
250										250
260										260
270										270



ANSI B30.5

16000 S-3



332,000 lb
+
120,000 lb



157.5 ft



216.5 ft

	75°			70°			
ft	ft	ft	lb	ft	ft	lb	ft
85							85
90							90
95							95
100							100
105							105
110							110
115							115
120							120
125							125
130							130
135							135
140							140
145							145
150	62.9	353.1	66,100				150
155	61.4	350.4	63,000				155
160	59.9	347.5	60,100				160
165	58.3	344.5	57,500				165
170	56.7	341.2	54,900				170
175	55.1	337.7	52,600				175
180	53.5	334.0	50,400	57.7	338.9	44,900	180
185	51.8	330.1	48,300	56.1	335.5	43,000	185
190	50.1	326.0	46,300	54.5	332.0	41,200	190
195	48.3	321.5	44,400	52.9	328.2	39,400	195
200	46.5	316.8	42,600	51.2	324.2	37,800	200
205	44.6	311.8	40,900	49.4	319.9	36,200	205
210	42.7	306.4	39,300	47.6	315.4	34,700	210
215	40.7	300.7	37,800	45.8	310.6	33,300	215
220	38.5	294.5	36,300	43.9	305.4	32,000	220
225	36.3	287.8	34,900	41.9	299.9	30,700	225
230	34.0	280.5	33,600	39.9	294.0	29,500	230
235	31.5	272.5	32,300	37.7	287.6	28,300	235
240	28.8	263.7	31,100	35.5	280.7	27,200	240
250	22.6	242.2	28,700	30.5	265.0	25,000	250
260	13.7	210.4	26,500	24.7	245.3	23,000	260
270				17.0	218.0	21,100	270



157.5 ft



236.2 ft

	86°			83°			80°			
	ft	o	ft	lb	o	ft	lb	ft	lb	ft
90	73.2	392.5	115,300 *							90
95	71.9	390.9	114,700 *							95
100	70.6	389.1	114,200 *							100
105	69.3	387.2	113,600 *							105
110	68.0	385.2	112,900 *	70.1	387.5	110,800 *				110
115	66.7	383.0	110,500 *	68.8	385.6	109,200				115
120	65.3	380.8	107,400 *	67.5	383.5	103,000				120
125	64.0	378.3	102,600	66.2	381.3	97,500				125
130	62.6	375.7	97,300	64.9	379.0	92,400	67.1	381.4	87,400	130
135	61.2	373.0	92,400	63.5	376.5	87,700	65.7	379.1	82,900	135
140	59.8	370.1	87,900	62.1	373.9	83,300	64.4	376.7	78,800	140
145	58.4	367.0	83,700	60.8	371.1	79,300	63.0	374.2	75,000	145
150	57.0	363.8	79,800	59.3	368.1	75,600	61.7	371.5	71,400	150
155	55.5	360.4	76,200	57.9	365.0	72,200	60.3	368.6	68,100	155
160	54.0	356.8	72,900	56.5	361.7	69,000	58.8	365.6	65,000	160
165	52.5	352.9	69,700	55.0	358.2	65,900	57.4	362.4	62,200	165
170	50.9	348.9	66,800	53.5	354.5	63,100	55.9	359.1	59,500	170
175	49.3	344.6	64,000	51.9	350.6	60,500	54.4	355.5	56,900	175
180	47.7	340.1	61,400	50.4	346.5	58,000	52.9	351.7	54,500	180
185	46.0	335.3	59,000	48.8	342.1	55,600	51.4	347.8	52,300	185
190	44.3	330.2	56,600	47.1	337.5	53,400	49.8	343.6	50,200	190
195	42.5	324.8	54,400	45.4	332.6	51,300	48.2	339.1	48,100	195
200	40.6	319.1	52,300	43.7	327.4	49,300	46.5	334.4	46,200	200
205	38.7	312.9	50,400	41.9	321.9	47,400	44.8	329.4	44,400	205
210	36.7	306.3	48,500	40.0	316.0	45,600	43.0	324.1	42,700	210
215	34.6	299.1	46,700	38.0	309.7	43,900	41.2	318.5	41,100	215
220	32.4	291.4	45,000	36.0	302.9	42,200	39.3	312.4	39,500	220
225	30.0	282.9	43,300	33.8	295.6	40,700	37.3	306.0	38,000	225
230	27.4	273.5	41,800	31.5	287.6	39,200	35.2	299.0	36,600	230
235	24.6	263.0	40,300	29.1	278.8	37,700	33.0	291.4	35,200	235
240	21.4	250.8	38,800	26.4	269.1	36,400	30.7	283.2	33,900	240
250	12.8	216.9	36,000	20.1	245.1	33,700	25.4	263.9	31,400	250
260				10.6	207.1	31,200	18.8	238.5	29,100	260
270							7.7	193.8	26,800	270
280										280

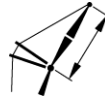


ANSI B30.5

16000 S-3



157.5 ft



236.2 ft

	75°		
90			
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155			
160	62.6	370.1	58,600
165	61.2	367.4	55,900
170	59.8	364.5	53,400
175	58.4	361.4	51,100
180	57.0	358.2	48,900
185	55.5	354.8	46,800
190	54.0	351.1	44,800
195	52.5	347.3	42,900
200	50.9	343.3	41,200
205	49.3	339.0	39,500
210	47.7	334.5	37,900
215	46.0	329.7	36,400
220	44.3	324.6	34,900
225	42.5	319.2	33,600
230	40.6	313.4	32,200
235	38.7	307.3	31,000
240	36.7	300.6	29,800
250	32.3	285.7	27,500
260	27.4	267.9	25,400
270	21.3	245.1	23,400
280	12.8	211.2	21,500

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



255.9 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
95	73.3	411.6	97,800 *							95
100	72.1	410.0	97,300 *							100
105	71.0	408.2	96,800 *							105
110	69.8	406.4	96,200 *							110
115	68.6	404.4	95,600 *	70.5	406.6	93,800 *				115
120	67.4	402.3	95,000 *	69.4	404.8	93,500 *				120
125	66.1	400.1	94,400 *	68.1	402.8	93,100 *				125
130	64.9	397.8	92,200 *	66.9	400.6	91,100				130
135	63.6	395.3	89,700 *	65.7	398.4	86,400	67.7	400.6	81,600	135
140	62.4	392.7	86,700	64.5	396.0	82,100	66.5	398.5	77,500	140
145	61.1	390.0	82,600	63.2	393.5	78,100	65.3	396.2	73,700	145
150	59.8	387.1	78,700	61.9	390.8	74,400	64.0	393.7	70,100	150
155	58.5	384.0	75,100	60.7	388.0	71,000	62.8	391.2	66,800	155
160	57.2	380.8	71,700	59.4	385.1	67,700	61.5	388.5	63,800	160
165	55.8	377.4	68,600	58.0	382.0	64,700	60.2	385.6	60,900	165
170	54.4	373.8	65,600	56.7	378.7	61,900	58.9	382.6	58,200	170
175	53.0	370.1	62,900	55.3	375.2	59,300	57.6	379.4	55,700	175
180	51.6	366.1	60,300	54.0	371.6	56,800	56.2	376.1	53,300	180
185	50.2	362.0	57,800	52.6	367.8	54,400	54.8	372.6	51,000	185
190	48.7	357.6	55,500	51.1	363.8	52,200	53.5	368.9	48,900	190
195	47.2	353.0	53,300	49.7	359.6	50,100	52.0	365.0	46,900	195
200	45.6	348.2	51,200	48.2	355.1	48,100	50.6	360.9	45,000	200
205	44.0	343.0	49,300	46.6	350.4	46,200	49.1	356.6	43,200	205
210	42.3	337.6	47,400	45.0	345.5	44,400	47.6	352.1	41,500	210
215	40.6	331.8	45,600	43.4	340.2	42,700	46.1	347.3	39,900	215
220	38.8	325.7	43,900	41.7	334.7	41,100	44.5	342.2	38,300	220
225	37.0	319.1	42,300	40.0	328.8	39,600	42.8	336.9	36,800	225
230	35.1	312.1	40,700	38.2	322.5	38,100	41.1	331.2	35,400	230
235	33.0	304.5	39,300	36.3	315.8	36,700	39.4	325.2	34,000	235
240	30.9	296.3	37,800	34.4	308.6	35,300	37.6	318.8	32,700	240
250	26.1	277.5	35,100	30.1	292.4	32,700	33.7	304.5	30,300	250
260	20.3	253.5	32,600	25.2	272.8	30,300	29.3	287.8	28,000	260
270	11.9	217.4	30,300	19.1	247.5	28,100	24.2	267.4	25,900	270
280				9.7	206.9	26,000	17.8	240.6	23,900	280
290							6.7	192.2	22,000	290
300										300

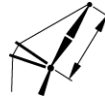


ANSI B30.5

16000 S-3



157.5 ft



255.9 ft

	75°		
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155			
160			
165			
170	62.4	387.1	52,100
175	61.1	384.3	49,700
180	59.8	381.4	47,500
185	58.5	378.4	45,400
190	57.2	375.2	43,500
195	55.8	371.8	41,600
200	54.4	368.2	39,900
205	53.0	364.5	38,200
210	51.6	360.5	36,600
215	50.2	356.4	35,100
220	48.7	352.0	33,700
225	47.1	347.4	32,300
230	45.6	342.5	31,000
235	44.0	337.4	29,700
240	42.3	331.9	28,500
250	38.8	320.0	26,300
260	35.1	306.4	24,200
270	30.9	290.7	22,300
280	26.1	271.8	20,400
290	20.3	247.8	18,700
300	11.9	211.7	17,100

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



157.5 ft



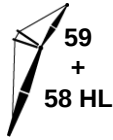
275.6 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
100	73.5	430.6	83,300 *							100
105	72.4	429.0	82,700 *							105
110	71.3	427.3	82,100 *							110
115	70.2	425.5	81,500 *							115
120	69.1	423.6	80,900 *	70.9	425.8	79,600 *				120
125	67.9	421.6	80,300 *	69.8	423.9	79,200 *				125
130	66.8	419.5	79,700 *	68.7	422.0	78,700 *				130
135	65.7	417.2	79,000 *	67.5	419.9	78,300 *				135
140	64.5	414.8	78,400 *	66.4	417.7	77,800 *				140
145	63.3	412.3	77,300 *	65.3	415.4	76,700	67.1	417.8	72,100	145
150	62.2	409.7	75,400 *	64.1	413.0	73,000	66.0	415.5	68,600	150
155	61.0	406.9	73,400 *	62.9	410.5	69,500	64.9	413.2	65,300	155
160	59.8	404.0	70,400	61.8	407.8	66,300	63.7	410.7	62,300	160
165	58.6	401.0	67,300	60.6	405.0	63,300	62.5	408.1	59,400	165
170	57.3	397.8	64,300	59.4	402.0	60,500	61.3	405.4	56,700	170
175	56.1	394.4	61,600	58.1	398.9	57,900	60.1	402.5	54,200	175
180	54.8	390.9	59,000	56.9	395.7	55,400	58.9	399.5	51,800	180
185	53.5	387.2	56,500	55.6	392.3	53,000	57.7	396.4	49,600	185
190	52.2	383.4	54,200	54.4	388.7	50,800	56.5	393.1	47,400	190
195	50.9	379.3	52,000	53.1	385.0	48,700	55.2	389.6	45,400	195
200	49.5	375.1	49,900	51.7	381.0	46,700	53.9	386.0	43,600	200
205	48.1	370.6	48,000	50.4	376.9	44,900	52.6	382.2	41,800	205
210	46.7	365.9	46,100	49.0	372.6	43,100	51.3	378.2	40,100	210
215	45.2	361.0	44,300	47.6	368.1	41,400	49.9	374.0	38,400	215
220	43.7	355.8	42,600	46.2	363.3	39,800	48.5	369.6	36,900	220
225	42.2	350.3	41,000	44.7	358.3	38,200	47.1	365.0	35,400	225
230	40.6	344.5	39,500	43.2	353.0	36,700	45.7	360.1	34,000	230
235	39.0	338.4	38,000	41.6	347.4	35,300	44.2	355.0	32,600	235
240	37.3	331.9	36,600	40.0	341.5	34,000	42.7	349.6	31,400	240
250	33.6	317.6	33,900	36.6	328.6	31,400	39.5	337.9	28,900	250
260	29.6	301.0	31,500	33.0	314.0	29,100	36.0	324.8	26,700	260
270	25.0	281.1	29,200	28.8	296.9	26,900	32.3	309.7	24,600	270
280	19.3	255.9	27,000	24.1	276.3	24,900	28.0	292.1	22,700	280
290	11.1	217.7	25,000	18.2	249.7	22,900	23.1	270.7	20,900	290
300				8.9	206.4	21,100	16.9	242.4	19,100	300
310							5.8	190.0	17,400	310



ANSI B30.5

16000 S-3



REFERENCE
ONLY!

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



78.7 ft

	86°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	73.7	261.7	391,400 *c							45
50	69.8	259.8	352,300 *c							50
55	65.9	257.6	315,400 b							55
60	61.7	254.9	280,900 b	69.3	258.5	269,200 c				60
65	57.4	251.8	252,900 b	65.3	256.2	242,300 b				65
70	52.9	248.1	229,700	61.2	253.5	220,100 b				70
75	48.1	243.6	210,200	56.8	250.2	201,500 b	64.7	254.3	192,600 b	75
80	42.8	238.4	193,600	52.2	246.4	185,500	60.5	251.5	177,400 b	80
85	36.9	232.0	179,100	47.3	241.9	171,700	56.1	248.1	164,200 b	85
90	29.9	223.8	166,500	42.0	236.5	159,700	51.5	244.2	152,700	90
95	20.7	212.3	155,200	36.0	229.9	149,000	46.5	239.6	142,500	95
100				28.8	221.4	139,500	41.1	234.0	133,500	100
105				19.1	209.0	130,900	34.9	227.2	125,400	105
110							27.5	218.3	118,100	110
115							17.1	204.9	111,300	115
120										120
125										125
130										130
135										135
140										140
145										145
150										150
155										155
160										160



ANSI B30.5

16000 S-3



332,000 lb
+
120,000 lb



177.2 ft



78.7 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	60.6	247.9	131,600 b							95
100	56.3	244.6	123,300 b							100
105	51.7	240.7	115,800							105
110	46.7	236.1	109,100							110
115	41.3	230.6	103,000	56.1	239.6	94,500 b				115
120	35.2	223.8	97,500	51.5	235.6	89,400				120
125	27.8	215.0	92,300	46.5	231.0	84,800				125
130	17.5	201.8	87,500	41.0	225.4	80,500				130
135				34.9	218.5	76,500	50.8	228.8	69,600	135
140				27.4	209.6	72,800	45.8	224.1	66,300	140
145				16.9	196.1	69,200	40.2	218.3	63,200	145
150							33.9	211.2	60,200	150
155							26.2	201.9	57,400	155
160							14.8	187.1	54,700	160

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



98.4 ft

	86°			83°			80°			
	ft	o	ft	lb	o	ft	lb	o	ft	
55	71.0	279.0	314,700 b							55
60	67.8	277.0	280,200 b							60
65	64.6	274.6	252,300 b	70.5	277.7	241,400 b				65
70	61.3	271.9	229,200	67.4	275.6	219,300 b				70
75	57.9	268.8	209,700	64.1	273.2	200,600 b				75
80	54.3	265.2	193,200	60.8	270.4	184,800	66.9	273.7	176,300 b	80
85	50.5	261.1	178,800	57.4	267.2	171,000	63.6	271.2	163,200 b	85
90	46.6	256.5	166,300	53.8	263.6	159,100	60.3	268.4	151,800	90
95	42.3	251.1	155,300	50.0	259.5	148,500	56.8	265.2	141,700	95
100	37.6	244.8	145,500	46.0	254.7	139,200	53.2	261.5	132,800	100
105	32.3	237.2	136,800	41.7	249.2	130,800	49.4	257.2	124,800	105
110	26.1	227.7	128,800	36.9	242.8	123,300	45.3	252.4	117,600	110
115	17.7	214.2	121,500	31.5	235.0	116,400	41.0	246.8	111,100	115
120				25.1	225.1	110,200	36.1	240.1	105,200	120
125				16.2	210.6	104,300	30.6	232.1	99,700	125
130							23.9	221.7	94,700	130
135							14.3	205.9	89,900	135
140										140
145										145
150										150
155										155
160										160
165										165
170										170
175										175
180										180



ANSI B30.5

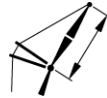
16000 S-3



332,000 lb
+
120,000 lb



177.2 ft



98.4 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105	60.4	264.9	114,800							105
110	56.9	261.7	108,100							110
115	53.3	258.0	102,100							115
120	49.5	253.8	96,700							120
125	45.5	248.9	91,700	56.8	256.6	83,600				125
130	41.1	243.3	87,100	53.2	252.9	79,400				130
135	36.3	236.7	82,800	49.4	248.6	75,500				135
140	30.8	228.8	78,900	45.3	243.8	72,000				140
145	24.1	218.5	75,200	40.9	238.1	68,600	52.6	246.1	62,000	145
150	14.7	203.0	71,700	36.1	231.5	65,500	48.8	241.8	59,200	150
155				30.5	223.4	62,600	44.7	236.8	56,500	155
160				23.8	213.0	59,800	40.3	231.1	54,100	160
165				14.1	197.1	57,100	35.3	224.3	51,700	165
170							29.7	215.9	49,500	170
175							22.7	205.1	47,400	175
180							12.1	187.5	45,200	180



177.2 ft



118.1 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
60	71.7	298.1	279,100 b							60
65	69.1	296.2	251,200 b							65
70	66.5	294.0	228,100							70
75	63.8	291.6	208,700	68.7	294.9	199,300 b				75
80	61.0	288.8	192,100	66.1	292.7	183,400				80
85	58.1	285.7	177,800	63.4	290.2	169,800				85
90	55.2	282.3	165,400	60.6	287.4	157,800	65.7	290.8	150,300	90
95	52.1	278.4	154,400	57.7	284.2	147,300	62.9	288.2	140,300	95
100	48.9	274.1	144,700	54.8	280.7	138,000	60.2	285.4	131,400	100
105	45.6	269.3	136,000	51.7	276.8	129,700	57.3	282.2	123,400	105
110	42.0	263.9	128,200	48.5	272.4	122,200	54.3	278.6	116,300	110
115	38.1	257.6	121,100	45.1	267.5	115,500	51.2	274.6	109,800	115
120	33.8	250.4	114,600	41.4	262.0	109,300	47.9	270.2	104,000	120
125	29.0	241.8	108,700	37.5	255.6	103,700	44.5	265.2	98,600	125
130	23.2	231.0	103,300	33.2	248.2	98,500	40.9	259.5	93,700	130
135	15.4	215.7	98,200	28.3	239.4	93,800	36.9	253.0	89,200	135
140				22.3	228.2	89,300	32.5	245.4	85,000	140
145				13.9	211.7	85,100	27.4	236.3	81,100	145
150							21.2	224.6	77,400	150
155							12.1	206.4	73,800	155
160										160
165										165
170										170
175										175
180										180
185										185
190										190
195										195
200										200



ANSI B30.5

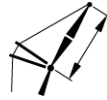
16000 S-3



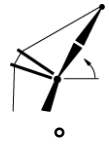
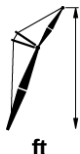
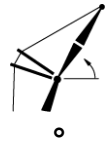
332,000 lb
+
120,000 lb



177.2 ft



118.1 ft

	 75°			 70°			 65°			
	 ft	 ft	 lb	 ft	 lb	 ft	 ft	 lb		
60									60	
65									65	
70									70	
75									75	
80									80	
85									85	
90									90	
95									95	
100									100	
105									105	
110									110	
115	60.2	281.8	100,500						115	
120	57.4	278.7	95,100						120	
125	54.4	275.1	90,100						125	
130	51.3	271.1	85,600						130	
135	48.1	266.7	81,500	57.2	273.6	73,800			135	
140	44.6	261.7	77,600	54.3	270.0	70,300			140	
145	41.0	256.1	74,000	51.2	266.0	67,000			145	
150	37.0	249.6	70,700	47.9	261.6	64,000			150	
155	32.6	242.1	67,600	44.5	256.6	61,100			155	
160	27.6	233.0	64,700	40.8	250.9	58,500	50.7	259.2	52,300	160
165	21.5	221.4	61,900	36.8	244.4	56,000	47.4	254.7	50,100	165
170	12.5	203.6	59,200	32.4	236.8	53,600	44.0	249.6	47,900	170
175				27.4	227.6	51,400	40.3	243.8	45,900	175
180				21.2	215.9	49,200	36.2	237.2	44,000	180
185				12.0	197.6	47,100	31.8	229.4	42,200	185
190							26.6	220.0	40,500	190
195							20.1	207.7	38,800	195
200							9.9	187.3	37,100	200

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



137.8 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
65	72.2	317.2	248,900 *b							65
70	70.0	315.4	227,100							70
75	67.8	313.4	207,700							75
80	65.5	311.1	191,200	69.7	314.1	182,300				80
85	63.1	308.6	176,900	67.4	312.0	168,600				85
90	60.8	305.8	164,500	65.1	309.7	156,700				90
95	58.3	302.7	153,500	62.8	307.1	146,300	67.1	310.1	139,000	95
100	55.8	299.3	143,800	60.4	304.3	137,000	64.8	307.8	130,200	100
105	53.2	295.6	135,100	58.0	301.2	128,700	62.4	305.2	122,300	105
110	50.5	291.6	127,400	55.5	297.8	121,300	60.1	302.3	115,200	110
115	47.8	287.1	120,300	52.9	294.0	114,500	57.6	299.2	108,700	115
120	44.8	282.1	113,900	50.2	289.9	108,400	55.1	295.7	102,900	120
125	41.7	276.6	108,100	47.4	285.4	102,800	52.5	291.9	97,600	125
130	38.4	270.4	102,700	44.4	280.3	97,700	49.7	287.7	92,700	130
135	34.9	263.4	97,800	41.3	274.7	93,000	46.9	283.1	88,200	135
140	30.9	255.4	93,200	37.9	268.4	88,700	43.9	278.0	84,100	140
145	26.4	245.8	89,000	34.3	261.3	84,600	40.8	272.3	80,200	145
150	21.0	233.8	85,000	30.3	253.1	80,900	37.4	265.9	76,700	150
155	13.6	216.6	81,200	25.7	243.2	77,300	33.7	258.6	73,300	155
160				20.1	230.8	74,000	29.7	250.1	70,200	160
165				12.1	212.2	70,800	24.9	240.0	67,200	165
170							19.1	226.9	64,400	170
175							10.3	206.3	61,700	175
180										180
185										185
190										190
195										195
200										200
205										205
210										210
215										215
220										220



ANSI B30.5

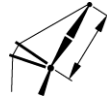
16000 S-3



332,000 lb
+
120,000 lb



177.2 ft



137.8 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120	62.5	301.6	93,800							120
125	60.1	298.8	88,900							125
130	57.7	295.6	84,400							130
135	55.1	292.2	80,300							135
140	52.5	288.4	76,400							140
145	49.8	284.2	72,900	57.6	290.6	65,700				145
150	47.0	279.6	69,600	55.0	287.1	62,700				150
155	44.0	274.5	66,600	52.4	283.3	59,900				155
160	40.9	268.8	63,700	49.7	279.1	57,300				160
165	37.5	262.5	61,000	46.9	274.5	54,800				165
170	33.9	255.2	58,500	43.9	269.3	52,500	52.1	276.5	46,600	170
175	29.8	246.8	56,100	40.7	263.6	50,300	49.3	272.3	44,600	175
180	25.1	236.7	53,800	37.4	257.2	48,300	46.5	267.6	42,800	180
185	19.3	223.8	51,600	33.7	249.9	46,300	43.5	262.4	41,000	185
190	10.7	203.7	49,500	29.6	241.5	44,500	40.3	256.6	39,300	190
195				24.9	231.3	42,700	36.9	250.1	37,800	195
200				19.1	218.2	41,000	33.2	242.6	36,200	200
205				10.2	197.4	39,300	29.0	234.0	34,800	205
210							24.2	223.5	33,400	210
215							18.1	209.8	32,000	215
220							8.1	186.3	30,600	220

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



157.5 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
70	72.6	336.3	213,200 *							70
75	70.7	334.6	205,700 *							75
80	68.7	332.6	190,000							80
85	66.7	330.5	175,700	70.4	333.2	167,200				85
90	64.7	328.1	163,300	68.4	331.3	155,300				90
95	62.7	325.5	152,300	66.5	329.1	144,900				95
100	60.6	322.7	142,600	64.4	326.7	135,600				100
105	58.5	319.7	134,000	62.4	324.1	127,300	66.2	327.2	120,700	105
110	56.3	316.4	126,200	60.3	321.3	119,900	64.1	324.8	113,600	110
115	54.0	312.8	119,200	58.2	318.2	113,200	62.1	322.1	107,200	115
120	51.7	308.9	112,800	56.0	314.8	107,100	60.0	319.3	101,400	120
125	49.3	304.6	107,000	53.7	311.2	101,600	57.8	316.1	96,100	125
130	46.9	300.0	101,700	51.4	307.2	96,500	55.6	312.7	91,300	130
135	44.3	294.9	96,800	49.0	302.9	91,800	53.4	309.0	86,800	135
140	41.6	289.3	92,200	46.5	298.2	87,500	51.0	305.0	82,700	140
145	38.7	283.2	88,000	43.9	293.1	83,500	48.6	300.7	78,900	145
150	35.6	276.4	84,100	41.2	287.5	79,800	46.1	295.9	75,400	150
155	32.3	268.7	80,500	38.3	281.2	76,300	43.5	290.7	72,100	155
160	28.6	259.8	77,100	35.1	274.3	73,000	40.7	285.0	69,000	160
165	24.3	249.3	73,900	31.8	266.4	70,000	37.8	278.7	66,100	165
170	19.2	236.2	70,800	28.0	257.4	67,100	34.6	271.6	63,400	170
175	12.0	217.1	67,900	23.7	246.6	64,400	31.2	263.6	60,800	175
180				18.4	233.0	61,800	27.4	254.3	58,400	180
185				10.6	212.2	59,300	22.9	243.2	56,100	185
190							17.4	228.9	53,800	190
195							8.8	205.7	51,600	195
200										200
205										205
210										210
215										215
220										220
225										225
230										230
235										235
240										240



ANSI B30.5

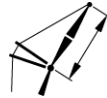
16000 S-3



332,000 lb
+
120,000 lb



177.2 ft



157.5 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130	62.1	318.6	82,700							130
135	60.0	315.7	78,600							135
140	57.9	312.6	74,800							140
145	55.7	309.2	71,300							145
150	53.4	305.5	68,100							150
155	51.1	301.5	65,000	57.8	307.5	58,100				155
160	48.7	297.2	62,200	55.6	304.1	55,500				160
165	46.2	292.5	59,600	53.3	300.5	53,100				165
170	43.6	287.3	57,100	51.0	296.4	50,800				170
175	40.8	281.6	54,700	48.6	292.1	48,700				175
180	37.9	275.3	52,500	46.1	287.3	46,700				180
185	34.7	268.2	50,400	43.5	282.1	44,800	50.7	289.6	39,300	185
190	31.3	260.2	48,400	40.7	276.4	43,000	48.3	285.2	37,600	190
195	27.5	251.0	46,500	37.8	270.0	41,300	45.7	280.4	36,100	195
200	23.1	240.0	44,700	34.6	263.0	39,600	43.1	275.1	34,600	200
205	17.6	225.8	43,000	31.2	254.9	38,100	40.3	269.3	33,200	205
210	9.2	203.2	41,200	27.3	245.7	36,600	37.3	262.9	31,900	210
215				22.9	234.5	35,200	34.1	255.7	30,600	215
220				17.4	220.1	33,800	30.7	247.5	29,400	220
225				8.6	196.7	32,300	26.8	238.0	28,200	225
230							22.2	226.6	27,000	230
235							16.4	211.5	25,900	235
240							6.4	184.5	24,700	240

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



177.2 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
75	72.9	355.4	183,600 *							75
80	71.2	353.7	178,100 *							80
85	69.5	351.8	172,100 *							85
90	67.7	349.8	162,200	71.0	352.4	154,100				90
95	66.0	347.5	151,300	69.2	350.5	143,700				95
100	64.2	345.1	141,600	67.5	348.4	134,400				100
105	62.3	342.5	132,900	65.7	346.2	126,200				105
110	60.5	339.7	125,200	63.9	343.7	118,800	67.2	346.5	112,400	110
115	58.6	336.6	118,200	62.1	341.1	112,100	65.4	344.3	106,000	115
120	56.7	333.4	111,800	60.2	338.2	106,000	63.6	341.8	100,200	120
125	54.7	329.9	106,000	58.3	335.1	100,400	61.8	339.1	94,900	125
130	52.6	326.1	100,700	56.4	331.8	95,400	59.9	336.2	90,100	130
135	50.6	322.0	95,800	54.4	328.3	90,700	58.0	333.1	85,600	135
140	48.4	317.6	91,300	52.4	324.5	86,400	56.1	329.8	81,500	140
145	46.2	312.8	87,100	50.3	320.3	82,400	54.1	326.2	77,700	145
150	43.9	307.7	83,200	48.1	315.9	78,700	52.0	322.3	74,200	150
155	41.4	302.1	79,600	45.9	311.1	75,300	49.9	318.1	70,900	155
160	38.9	296.0	76,200	43.5	305.9	72,000	47.8	313.6	67,900	160
165	36.2	289.3	73,100	41.1	300.2	69,000	45.5	308.7	65,000	165
170	33.3	281.8	70,100	38.5	294.0	66,200	43.1	303.5	62,300	170
175	30.1	273.4	67,300	35.8	287.2	63,500	40.7	297.7	59,800	175
180	26.6	263.9	64,600	32.8	279.6	61,000	38.1	291.5	57,400	180
185	22.6	252.5	62,100	29.6	271.1	58,600	35.3	284.6	55,100	185
190	17.7	238.2	59,700	26.1	261.3	56,400	32.4	276.9	53,000	190
195	10.7	217.2	57,400	22.0	249.6	54,200	29.1	268.2	51,000	195
200				16.9	234.8	52,200	25.5	258.1	49,000	200
205				9.3	211.8	50,100	21.3	246.1	47,200	205
210							16.0	230.5	45,400	210
215							7.4	204.4	43,600	215
220										220
225										225
230										230
235										235
240										240
250										250
260										260



ANSI B30.5

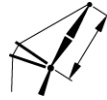
16000 S-3



332,000 lb
+
120,000 lb



177.2 ft



177.2 ft

	75°			70°			65°			
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135										135
140	61.8	335.6	73,500							140
145	60.0	332.7	70,000							145
150	58.1	329.6	66,800							150
155	56.1	326.3	63,700							155
160	54.1	322.7	60,900							160
165	52.1	318.8	58,300							165
170	50.0	314.6	55,800	56.1	321.2	49,500				170
175	47.8	310.1	53,500	54.1	317.6	47,300				175
180	45.6	305.3	51,300	52.0	313.7	45,400				180
185	43.2	300.0	49,300	49.9	309.5	43,500				185
190	40.8	294.3	47,300	47.7	305.0	41,700				190
195	38.2	288.1	45,500	45.5	300.1	40,000	51.7	306.9	34,700	195
200	35.4	281.2	43,700	43.1	294.9	38,400	49.6	302.7	33,200	200
205	32.5	273.5	42,000	40.7	289.1	36,900	47.4	298.1	31,900	205
210	29.2	264.8	40,400	38.1	282.8	35,400	45.2	293.2	30,500	210
215	25.6	254.9	38,900	35.3	275.9	34,100	42.8	287.9	29,300	215
220	21.4	242.9	37,400	32.3	268.2	32,700	40.3	282.1	28,100	220
225	16.2	227.5	36,000	29.1	259.5	31,500	37.7	275.7	27,000	225
230	7.8	202.1	34,500	25.5	249.4	30,200	34.9	268.7	25,900	230
235				21.2	237.4	29,000	31.9	260.9	24,800	235
240				15.9	221.7	27,900	28.6	252.0	23,800	240
250							20.6	229.3	21,800	250
260							4.7	181.4	19,800	260

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



196.9 ft

	86°			83°			80°			
	ft	ft	lb	ft	lb	ft	lb	ft	ft	
80	73.1	374.5	155,900 *							80
85	71.6	372.8	154,400 *							85
90	70.1	371.0	150,000 *							90
95	68.5	369.0	145,200 *							95
100	66.9	366.9	140,300	69.8	369.7	133,000				100
105	65.3	364.6	131,700	68.3	367.7	124,700				105
110	63.7	362.1	123,900	66.7	365.5	117,300				110
115	62.0	359.5	116,900	65.1	363.2	110,700				115
120	60.4	356.6	110,500	63.5	360.7	104,600	66.4	363.6	98,600	120
125	58.7	353.6	104,700	61.8	358.0	99,100	64.8	361.3	93,400	125
130	56.9	350.4	99,400	60.1	355.2	94,000	63.2	358.8	88,600	130
135	55.2	346.9	94,600	58.4	352.1	89,300	61.6	356.1	84,100	135
140	53.4	343.2	90,100	56.7	348.9	85,000	59.9	353.2	80,000	140
145	51.5	339.3	85,900	54.9	345.4	81,100	58.2	350.1	76,300	145
150	49.6	335.0	82,000	53.1	341.6	77,400	56.4	346.8	72,800	150
155	47.6	330.5	78,400	51.2	337.6	74,000	54.6	343.2	69,500	155
160	45.6	325.7	75,100	49.3	333.4	70,700	52.8	339.5	66,400	160
165	43.5	320.5	71,900	47.4	328.8	67,800	50.9	335.5	63,600	165
170	41.3	314.8	69,000	45.3	323.9	64,900	49.0	331.1	60,900	170
175	39.0	308.7	66,200	43.2	318.6	62,300	47.0	326.5	58,400	175
180	36.6	302.1	63,600	41.0	313.0	59,800	45.0	321.6	56,000	180
185	34.0	294.9	61,100	38.7	306.8	57,500	42.9	316.2	53,800	185
190	31.3	286.8	58,800	36.3	300.1	55,200	40.7	310.5	51,700	190
195	28.3	277.8	56,500	33.7	292.7	53,100	38.3	304.3	49,700	195
200	25.0	267.5	54,400	30.9	284.6	51,100	35.9	297.5	47,800	200
205	21.1	255.3	52,400	27.8	275.4	49,200	33.3	290.0	46,000	205
210	16.4	239.9	50,500	24.5	264.9	47,400	30.4	281.7	44,300	210
215	9.5	216.9	48,500	20.5	252.4	45,600	27.4	272.4	42,600	215
220				15.6	236.3	43,900	23.9	261.6	41,000	220
225				8.1	210.9	42,200	19.9	248.6	39,500	225
230							14.7	231.8	38,000	230
235							6.0	202.3	36,500	235
240										240
250										250
260										260



ANSI B30.5

16000 S-3



332,000 lb
+
120,000 lb



177.2 ft



196.9 ft

	75°			70°			
80							80
85							85
90							90
95							95
100							100
105							105
110							110
115							115
120							120
125							125
130							130
135							135
140							140
145							145
150	61.6	352.5	65,100				150
155	59.9	349.6	62,100				155
160	58.2	346.6	59,300				160
165	56.5	343.3	56,700				165
170	54.7	339.7	54,300				170
175	52.9	336.0	52,000				175
180	51.0	332.0	49,800	56.4	338.2	43,600	180
185	49.1	327.7	47,700	54.6	334.6	41,800	185
190	47.1	323.0	45,800	52.8	330.9	40,000	190
195	45.1	318.1	44,000	50.9	326.9	38,400	195
200	42.9	312.8	42,200	49.0	322.5	36,800	200
205	40.7	307.1	40,600	47.0	317.9	35,300	205
210	38.4	300.8	39,000	45.0	313.0	33,900	210
215	36.0	294.1	37,500	42.8	307.6	32,500	215
220	33.3	286.6	36,100	40.6	301.9	31,200	220
225	30.5	278.4	34,700	38.3	295.6	30,000	225
230	27.5	269.0	33,400	35.8	288.8	28,800	230
235	24.0	258.3	32,100	33.2	281.4	27,600	235
240	20.0	245.5	30,900	30.4	273.0	26,500	240
250	6.5	200.4	28,400	23.9	252.9	24,400	250
260				14.7	223.0	22,400	260

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



216.5 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
85	73.3	393.5	131,200 *							85
90	71.9	391.9	130,800 *							90
95	70.5	390.1	130,400 *							95
100	69.1	388.2	127,000 *							100
105	67.7	386.2	123,400 *	70.3	388.8	123,200				105
110	66.3	384.0	119,500 *	68.9	386.9	115,800				110
115	64.8	381.6	115,500	67.5	384.8	109,200				115
120	63.3	379.1	109,200	66.1	382.6	103,100				120
125	61.8	376.4	103,400	64.6	380.2	97,600	67.3	382.9	91,800	125
130	60.3	373.6	98,100	63.1	377.7	92,500	65.8	380.7	87,000	130
135	58.7	370.6	93,200	61.6	375.0	87,900	64.4	378.3	82,600	135
140	57.2	367.4	88,700	60.1	372.1	83,600	62.9	375.7	78,500	140
145	55.6	364.0	84,500	58.5	369.1	79,600	61.4	373.0	74,700	145
150	53.9	360.3	80,600	57.0	365.8	75,900	59.8	370.1	71,200	150
155	52.3	356.5	77,100	55.3	362.4	72,500	58.3	367.1	68,000	155
160	50.6	352.4	73,700	53.7	358.7	69,300	56.7	363.8	64,900	160
165	48.8	348.0	70,600	52.0	354.9	66,300	55.1	360.3	62,100	165
170	47.0	343.4	67,600	50.3	350.7	63,500	53.5	356.6	59,400	170
175	45.1	338.5	64,900	48.6	346.4	60,900	51.8	352.7	56,900	175
180	43.2	333.2	62,300	46.7	341.7	58,400	50.0	348.5	54,500	180
185	41.2	327.6	59,800	44.9	336.7	56,100	48.3	344.1	52,300	185
190	39.2	321.5	57,500	42.9	331.4	53,900	46.5	339.4	50,200	190
195	37.0	315.0	55,300	40.9	325.7	51,800	44.6	334.4	48,200	195
200	34.7	307.9	53,200	38.8	319.6	49,800	42.6	329.0	46,400	200
205	32.2	300.1	51,200	36.7	312.9	47,900	40.6	323.2	44,600	205
210	29.6	291.5	49,300	34.3	305.7	46,100	38.5	317.0	42,900	210
215	26.7	281.9	47,500	31.9	297.9	44,400	36.3	310.3	41,200	215
220	23.5	270.9	45,800	29.2	289.2	42,700	34.0	303.0	39,700	220
225	19.8	257.9	44,100	26.3	279.4	41,200	31.5	295.1	38,200	225
230	15.3	241.4	42,500	23.1	268.1	39,700	28.8	286.2	36,800	230
235	8.5	216.1	40,900	19.3	254.8	38,200	25.8	276.2	35,400	235
240				14.5	237.6	36,800	22.5	264.7	34,100	240
250							13.6	232.8	31,500	250
260										260
270										270

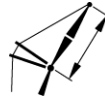


ANSI B30.5

16000 S-3



177.2 ft



216.5 ft

	75°		
	ft	ft	lb
85			
90			
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155	62.9	372.2	60,400
160	61.4	369.5	57,700
165	59.9	366.6	55,100
170	58.3	363.5	52,600
175	56.8	360.3	50,300
180	55.1	356.8	48,200
185	53.5	353.1	46,100
190	51.8	349.2	44,200
195	50.1	345.0	42,400
200	48.3	340.6	40,700
205	46.5	335.9	39,000
210	44.6	330.9	37,500
215	42.7	325.5	36,000
220	40.7	319.8	34,600
225	38.6	313.6	33,200
230	36.4	306.9	31,900
235	34.0	299.7	30,700
240	31.6	291.7	29,500
250	25.9	272.9	27,300
260	18.8	247.7	25,100
270	5.2	197.7	23,000

16000 S-3

ANSI B30.5



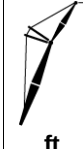
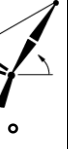
332,000 lb
+
120,000 lb



177.2 ft

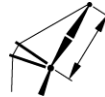


236.2 ft

	86°			83°			80°			
										
	ft	o	ft	lb	o	ft	lb	o	ft	lb
90		73.5	412.6	111,500 *						90
95		72.2	411.0	111,100 *						95
100		70.9	409.2	110,600 *						100
105		69.7	407.4	110,100 *						105
110		68.4	405.4	108,200 *						110
115		67.0	403.3	105,300 *	70.8	407.9	107,500 *			115
120		65.7	401.0	102,300 *	69.5	406.1	107,300 *			120
125		64.4	398.6	99,200 *	68.2	404.1	101,700			125
130		63.0	396.1	96,100 *	66.8	401.9	96,200			130
135		61.6	393.4	91,900	65.5	399.7	91,100	68.0	402.2	85,500
140		60.2	390.5	87,400	64.2	397.2	86,500	66.6	400.0	81,100
145		58.8	387.5	83,300	62.8	394.7	82,200	65.3	397.8	77,000
150		57.4	384.3	79,400	61.4	392.0	78,300	64.0	395.3	73,200
155		55.9	381.0	75,800	60.0	389.1	74,600	62.6	392.7	69,800
160		54.4	377.4	72,500	58.6	386.0	71,200	61.2	390.0	66,500
165		52.9	373.6	69,400	57.2	382.8	68,000	59.8	387.1	63,500
170		51.4	369.7	66,400	55.7	379.4	65,000	58.4	384.0	60,700
175		49.8	365.5	63,700	54.2	375.8	62,200	56.9	380.8	58,000
180		48.1	361.0	61,100	52.7	372.0	59,600	55.5	377.4	55,500
185		46.5	356.3	58,600	51.1	368.0	57,100	54.0	373.7	53,200
190		44.8	351.3	56,300	49.5	363.8	54,800	52.4	369.9	51,000
195		43.0	346.0	54,100	47.9	359.3	52,600	50.9	365.9	48,900
200		41.2	340.3	52,100	46.2	354.6	50,500	49.3	361.6	46,900
205		39.3	334.3	50,100	44.5	349.5	48,500	47.7	357.1	45,000
210		37.3	327.8	48,200	42.7	344.1	46,700	46.0	352.3	43,200
215		35.2	320.8	46,400	40.9	338.4	44,900	44.2	347.2	41,500
220		33.0	313.2	44,700	39.0	332.3	43,200	42.5	341.8	39,900
225		30.6	305.0	43,100	37.0	325.8	41,600	40.6	336.0	38,400
230		28.1	295.9	41,500	34.9	318.7	40,000	38.7	329.8	36,900
235		25.4	285.7	40,000	32.7	311.1	38,500	36.7	323.2	35,500
240		22.3	274.0	38,600	30.3	302.7	37,100	34.5	316.0	34,200
250		14.3	242.6	35,800	27.7	293.4	35,700	32.3	308.3	32,900
260					21.8	271.1	33,200	27.3	290.4	30,500
270					13.5	238.5	30,700	21.3	267.6	28,200
280								12.7	233.5	26,000
290										290



177.2 ft



236.2 ft

	75°		
	ft	ft	lb
90			
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155			
160			
165	62.6	389.2	53,500
170	61.3	386.5	51,000
175	59.9	383.6	48,800
180	58.4	380.5	46,600
185	57.0	377.3	44,600
190	55.5	373.8	42,700
195	54.0	370.2	40,900
200	52.5	366.4	39,200
205	50.9	362.4	37,600
210	49.3	358.1	36,000
215	47.7	353.6	34,600
220	46.0	348.8	33,200
225	44.3	343.7	31,800
230	42.5	338.3	30,500
235	40.7	332.5	29,300
240	38.7	326.4	28,100
250	34.6	312.6	25,900
260	30.0	296.5	23,900
270	24.6	276.5	22,000
280	17.7	249.8	20,200
290	3.8	193.7	18,300

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



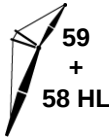
255.9 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
95	73.6	431.6	95,000 *							95
100	72.5	430.0	94,600 *							100
105	71.3	428.4	94,100 *							105
110	70.1	426.5	93,600 *							110
115	68.9	424.6	93,100 *							115
120	67.7	422.6	92,500 *	69.9	425.2	91,000 *				120
125	66.5	420.4	90,400 *	68.7	423.3	90,700 *				125
130	65.2	418.1	88,000 *	67.5	421.2	89,900				130
135	64.0	415.6	85,600 *	66.3	419.0	85,200				135
140	62.7	413.1	83,100 *	65.1	416.7	81,000	67.3	419.4	75,700	140
145	61.5	410.4	80,600 *	63.8	414.2	77,000	66.1	417.1	71,900	145
150	60.2	407.5	78,100 *	62.6	411.6	73,400	64.9	414.8	68,400	150
155	58.9	404.5	74,700	61.3	408.9	69,900	63.6	412.3	65,200	155
160	57.5	401.3	71,300	60.0	406.0	66,800	62.4	409.7	62,200	160
165	56.2	398.0	68,200	58.7	403.0	63,800	61.1	407.0	59,400	165
170	54.8	394.5	65,300	57.3	399.8	61,000	59.8	404.0	56,700	170
175	53.4	390.8	62,500	56.0	396.5	58,400	58.5	401.0	54,200	175
180	52.0	386.9	59,900	54.6	392.9	55,900	57.1	397.8	51,900	180
185	50.6	382.8	57,500	53.2	389.2	53,600	55.8	394.4	49,700	185
190	49.1	378.5	55,200	51.8	385.3	51,400	54.4	390.8	47,600	190
195	47.6	374.0	53,000	50.4	381.2	49,300	53.0	387.1	45,600	195
200	46.0	369.2	50,900	48.9	376.8	47,400	51.6	383.1	43,800	200
205	44.4	364.1	49,000	47.4	372.2	45,500	50.1	379.0	42,000	205
210	42.8	358.7	47,100	45.8	367.4	43,700	48.6	374.6	40,300	210
215	41.1	353.1	45,300	44.2	362.3	42,000	47.1	370.0	38,700	215
220	39.3	347.0	43,600	42.6	356.9	40,400	45.6	365.1	37,200	220
225	37.5	340.6	42,000	40.9	351.2	38,900	44.0	360.0	35,700	225
230	35.6	333.7	40,500	39.1	345.1	37,400	42.3	354.5	34,300	230
235	33.6	326.3	39,000	37.3	338.6	36,000	40.6	348.7	33,000	235
240	31.5	318.3	37,600	35.3	331.6	34,700	38.8	342.6	31,700	240
250	26.8	299.9	34,900	31.2	316.1	32,100	35.0	329.0	29,300	250
260	21.2	276.8	32,400	26.5	297.4	29,800	30.8	313.2	27,100	260
270	13.4	243.5	30,100	20.7	273.9	27,600	26.1	294.3	25,000	270
280				12.6	239.3	25,500	20.2	270.2	23,100	280
290							11.8	234.0	21,200	290



ANSI B30.5

16000 S-3



REFERENCE
ONLY!

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



177.2 ft



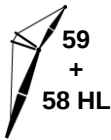
275.6 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
100	73.8	450.7	81,100 *							100
105	72.7	449.1	80,600 *							105
110	71.6	447.5	80,100 *							110
115	70.5	445.7	79,500 *							115
120	69.4	443.8	79,000 *							120
125	68.2	441.8	78,500 *	70.3	444.4	77,300 *				125
130	67.1	439.7	77,900 *	69.2	442.5	77,000 *				130
135	66.0	437.5	77,300 *	68.1	440.5	76,600 *				135
140	64.8	435.1	75,800 *	67.0	438.3	76,200 *				140
145	63.7	432.7	73,900 *	65.8	436.1	75,500	67.9	438.6	70,300	145
150	62.5	430.1	72,000 *	64.7	433.7	71,900	66.8	436.5	66,900	150
155	61.3	427.3	70,000 *	63.5	431.2	68,500	65.6	434.2	63,600	155
160	60.1	424.5	68,000 *	62.3	428.6	65,300	64.5	431.8	60,600	160
165	58.9	421.5	66,100 *	61.1	425.9	62,300	63.3	429.3	57,800	165
170	57.7	418.3	64,000	59.9	423.0	59,600	62.2	426.7	55,200	170
175	56.4	415.0	61,200	58.7	420.0	56,900	61.0	423.9	52,700	175
180	55.2	411.5	58,600	57.5	416.8	54,500	59.8	421.0	50,400	180
185	53.9	407.9	56,200	56.3	413.5	52,200	58.5	418.0	48,200	185
190	52.6	404.1	53,900	55.0	410.0	50,000	57.3	414.7	46,100	190
195	51.2	400.1	51,700	53.7	406.3	47,900	56.1	411.4	44,100	195
200	49.9	395.9	49,600	52.4	402.5	46,000	54.8	407.9	42,300	200
205	48.5	391.5	47,700	51.1	398.5	44,100	53.5	404.2	40,500	205
210	47.1	386.9	45,800	49.7	394.2	42,300	52.2	400.3	38,800	210
215	45.6	382.0	44,000	48.3	389.8	40,600	50.8	396.3	37,200	215
220	44.1	376.9	42,400	46.9	385.1	39,000	49.5	392.0	35,700	220
225	42.6	371.5	40,700	45.4	380.2	37,500	48.1	387.6	34,300	225
230	41.0	365.8	39,200	43.9	375.1	36,000	46.7	382.9	32,900	230
235	39.4	359.8	37,700	42.4	369.7	34,700	45.2	377.9	31,600	235
240	37.7	353.4	36,300	40.8	363.9	33,300	43.7	372.7	30,300	240
250	34.1	339.3	33,700	37.5	351.4	30,800	40.6	361.5	27,900	250
260	30.2	323.1	31,200	33.9	337.2	28,500	37.2	348.8	25,700	260
270	25.6	303.8	29,000	29.9	320.8	26,300	33.6	334.5	23,700	270
280	20.2	279.5	26,800	25.3	301.2	24,300	29.5	317.9	21,800	280
290	12.6	244.2	24,800	19.7	276.4	22,400	24.9	298.0	20,000	290
300				11.8	239.7	20,600	19.3	272.6	18,300	300
310							11.0	234.2	16,700	310



ANSI B30.5

16000 S-3



REFERENCE
ONLY!

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



196.9 ft



78.7 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
50	70.9	280.0	339,600 *c							50
55	67.0	277.9	307,600 *b							55
60	62.9	275.4	279,900 b							60
65	58.6	272.3	252,000 b	67.2	276.9	239,900 c				65
70	54.2	268.8	229,000 b	63.2	274.4	217,900 b				70
75	49.4	264.6	209,500	58.9	271.4	199,400 b	67.4	275.3	189,300 c	75
80	44.3	259.6	192,900	54.5	267.9	183,700 b	63.4	272.8	174,300 b	80
85	38.6	253.5	178,600	49.7	263.7	170,000	59.1	269.9	161,300 b	85
90	31.9	245.9	166,000	44.6	258.8	158,100	54.7	266.4	150,000 b	90
95	23.6	235.6	154,800	39.0	252.8	147,500	50.0	262.2	140,100	95
100	8.9	216.1	144,500	32.4	245.3	138,200	44.9	257.3	131,200	100
105				24.2	235.2	129,700	39.3	251.4	123,300	105
110				10.7	217.3	121,800	32.8	244.0	116,100	110
115							24.7	234.2	109,500	115
120							11.8	217.1	103,300	120
125										125
130										130
135										135
140										140
145										145
150										150
155										155
160										160
165										165
170										170



ANSI B30.5

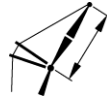
16000 S-3



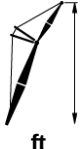
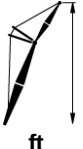
332,000 lb
+
120,000 lb



196.9 ft



78.7 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	lb	ft	lb	ft	ft	
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	60.7	267.0	119,400 b							100
105	56.4	263.7	112,200 b							105
110	51.8	259.8	105,700							110
115	46.8	255.2	99,800							115
120	41.4	249.7	94,400	57.6	259.3	85,000 b				120
125	35.3	243.0	89,500	53.1	255.6	80,600 b				125
130	27.9	234.2	84,900	48.3	251.2	76,500				130
135	17.8	221.2	80,500	43.0	246.0	72,800				135
140				37.1	239.6	69,200				140
145				30.2	231.5	66,000	49.1	245.1	58,700	145
150				21.2	220.2	62,800	44.0	240.1	56,000	150
155							38.2	234.0	53,500	155
160							31.5	226.3	51,000	160
165							23.1	215.7	48,700	165
170							7.0	194.4	46,200	170

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



196.9 ft



98.4 ft

	86°			83°			80°			
	ft	o	ft	lb	o	ft	lb	o	ft	lb
55	71.8	299.1	302,800 *c						55	
60	68.7	297.2	278,100 *b						60	
65	65.5	294.9	251,400 b						65	
70	62.2	292.3	228,400 b	68.9	296.2	217,000 b			70	
75	58.8	289.3	209,000	65.7	293.9	198,600 b			75	
80	55.3	285.9	192,500	62.4	291.3	182,800 b			80	
85	51.6	282.0	178,200	59.0	288.4	169,200	65.9	292.4	160,300 b	85
90	47.7	277.5	165,700	55.5	285.0	157,400	62.6	289.8	149,000 b	90
95	43.5	272.3	154,800	51.8	281.1	147,000	59.2	286.8	139,100	95
100	38.9	266.3	145,000	47.9	276.6	137,700	55.7	283.4	130,400	100
105	33.9	259.1	136,300	43.8	271.5	129,400	52.0	279.6	122,500	105
110	27.9	250.2	128,400	39.2	265.5	122,000	48.1	275.2	115,500	110
115	20.3	238.2	121,200	34.2	258.5	115,200	44.0	270.1	109,100	115
120	5.8	213.8	114,300	28.3	249.7	109,000	39.5	264.2	103,200	120
125				20.9	238.0	103,300	34.5	257.2	97,900	125
130				7.8	216.1	97,800	28.7	248.5	93,000	130
135							21.3	237.0	88,400	135
140							9.0	216.5	83,900	140
145										145
150										150
155										155
160										160
165										165
170										170
175										175
180										180
185										185



ANSI B30.5

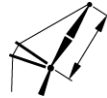
16000 S-3



332,000 lb
+
120,000 lb



196.9 ft



98.4 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110	60.5	284.0	104,500							110
115	57.0	280.7	98,700							115
120	53.4	277.1	93,400							120
125	49.6	272.9	88,600							125
130	45.5	268.0	84,200							130
135	41.2	262.5	80,100	54.4	272.7	71,600				135
140	36.4	255.9	76,300	50.7	268.7	68,200				140
145	30.9	247.9	72,700	46.7	264.0	65,000				145
150	24.3	237.7	69,400	42.5	258.7	62,100				150
155	14.9	222.4	66,200	37.8	252.4	59,300	51.4	262.6	52,300	155
160				32.6	244.9	56,700	47.5	258.0	50,000	160
165				26.3	235.5	54,200	43.3	252.8	47,800	165
170				18.1	222.3	51,800	38.7	246.8	45,700	170
175							33.5	239.5	43,800	175
180							27.5	230.5	41,900	180
185							19.8	218.2	40,100	185

16000 S-3

ANSI B30.5



196.9 ft



118.1 ft

	86°			83°			80°			
	ft	o	ft	lb	o	ft	lb	o	ft	
60	72.4	318.2	258,000 *b							60
65	69.8	316.4	246,900 *b							65
70	67.2	314.3	227,200 b							70
75	64.5	311.9	207,900	70.0	315.4	197,100 b				75
80	61.8	309.3	191,400	67.4	313.3	181,400 b				80
85	58.9	306.3	177,200	64.7	310.9	167,900				85
90	56.0	302.9	164,700	61.9	308.3	156,100	67.5	311.7	147,400 b	90
95	53.0	299.2	153,800	59.1	305.3	145,700	64.8	309.4	137,600	95
100	49.8	295.0	144,100	56.2	302.0	136,500	62.1	306.7	128,900	100
105	46.5	290.3	135,500	53.2	298.3	128,300	59.3	303.8	121,100	105
110	43.0	285.1	127,700	50.0	294.1	120,900	56.3	300.5	114,000	110
115	39.2	279.1	120,600	46.7	289.5	114,200	53.3	296.8	107,700	115
120	35.0	272.1	114,200	43.2	284.3	108,100	50.2	292.7	102,000	120
125	30.4	264.0	108,300	39.4	278.3	102,500	46.9	288.0	96,700	125
130	24.9	253.9	102,900	35.3	271.5	97,400	43.4	282.9	91,900	130
135	17.9	240.3	97,900	30.7	263.4	92,700	39.6	276.9	87,400	135
140				25.3	253.5	88,300	35.5	270.1	83,300	140
145				18.4	240.2	84,200	31.0	262.1	79,500	145
150				5.2	213.4	80,100	25.6	252.3	75,900	150
155							18.8	239.3	72,500	155
160							6.7	214.7	69,100	160
165										165
170										170
175										175
180										180
185										185
190										190
195										195
200										200
205										205



ANSI B30.5

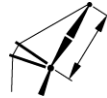
16000 S-3



332,000 lb
+
120,000 lb



196.9 ft



118.1 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120	60.3	300.9	91,700							120
125	57.4	297.7	87,000							125
130	54.5	294.2	82,600							130
135	51.4	290.2	78,500							135
140	48.1	285.8	74,800							140
145	44.7	280.8	71,400	55.3	289.8	63,300				145
150	41.0	275.2	68,200	52.3	286.0	60,400				150
155	37.1	268.8	65,100	49.1	281.7	57,700				155
160	32.7	261.2	62,300	45.7	276.9	55,200				160
165	27.7	252.2	59,700	42.1	271.4	52,800	52.8	279.8	46,000	165
170	21.6	240.6	57,100	38.3	265.2	50,600	49.6	275.6	44,000	170
175	12.7	223.1	54,600	34.0	258.1	48,400	46.3	270.9	42,100	175
180				29.2	249.5	46,400	42.8	265.6	40,300	180
185				23.5	238.9	44,500	39.0	259.5	38,700	185
190				15.8	223.8	42,600	34.8	252.6	37,000	190
195							30.1	244.3	35,500	195
200							24.6	234.1	34,000	200
205							17.4	220.2	32,600	205

16000 S-3

ANSI B30.5



196.9 ft



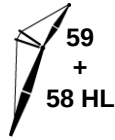
137.8 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
65	72.8	337.3	221,400 *b							65
70	70.6	335.6	213,100 *b							70
75	68.4	333.6	204,000 *							75
80	66.1	331.4	190,400	70.8	334.5	180,200 b				80
85	63.8	328.9	176,200	68.5	332.6	166,700				85
90	61.4	326.2	163,800	66.3	330.4	155,000				90
95	59.0	323.2	152,900	63.9	327.9	144,600				95
100	56.5	319.9	143,200	61.6	325.2	135,400	66.4	328.8	127,600	100
105	54.0	316.3	134,600	59.2	322.3	127,200	64.1	326.4	119,800	105
110	51.3	312.4	126,800	56.7	319.0	119,800	61.7	323.7	112,900	110
115	48.5	308.0	119,800	54.1	315.4	113,200	59.3	320.7	106,600	115
120	45.6	303.2	113,500	51.5	311.5	107,100	56.8	317.5	100,800	120
125	42.6	297.8	107,600	48.7	307.1	101,600	54.2	313.9	95,600	125
130	39.4	291.8	102,300	45.8	302.3	96,600	51.6	310.0	90,800	130
135	35.9	285.1	97,400	42.8	297.0	91,900	48.9	305.7	86,400	135
140	32.0	277.3	92,800	39.6	291.1	87,600	46.0	300.9	82,300	140
145	27.7	268.2	88,600	36.1	284.4	83,600	43.0	295.6	78,600	145
150	22.6	257.1	84,700	32.3	276.7	79,900	39.7	289.7	75,100	150
155	16.0	241.9	80,900	28.0	267.7	76,400	36.3	283.0	71,800	155
160				23.0	256.7	73,100	32.5	275.4	68,700	160
165				16.5	241.9	70,000	28.2	266.5	65,800	165
170							23.3	255.6	63,100	170
175							16.9	241.1	60,500	175
180							4.2	211.1	57,800	180
185										185
190										190
195										195
200										200
205										205
210										210
215										215
220										220
225										225



ANSI B30.5

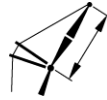
16000 S-3



332,000 lb
+
120,000 lb



196.9 ft



137.8 ft

	75°			70°			65°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125	62.6	320.7	85,600							125
130	60.2	317.9	81,300							130
135	57.7	314.7	77,300							135
140	55.2	311.3	73,600							140
145	52.6	307.5	70,200							145
150	49.9	303.3	67,000							150
155	47.1	298.7	64,000	55.9	306.8	56,300				155
160	44.1	293.6	61,300	53.3	303.1	53,800				160
165	40.9	288.0	58,700	50.7	299.1	51,500				165
170	37.6	281.6	56,200	47.9	294.6	49,300				170
175	33.9	274.4	53,900	45.0	289.7	47,300				175
180	29.9	266.0	51,700	41.9	284.2	45,300	51.1	293.0	39,000	180
185	25.2	255.9	49,600	38.6	278.0	43,500	48.4	288.6	37,300	185
190	19.5	243.1	47,600	35.0	271.1	41,700	45.5	283.7	35,800	190
195	11.0	223.2	45,700	31.1	263.1	40,000	42.4	278.3	34,300	195
200				26.6	253.6	38,400	39.2	272.3	32,900	200
205				21.3	241.7	36,900	35.7	265.5	31,600	205
210				14.0	224.9	35,400	31.8	257.7	30,300	210
215							27.5	248.5	29,000	215
220							22.3	237.2	27,800	220
225							15.5	221.7	26,600	225

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



196.9 ft



157.5 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
70	73.1	356.4	190,800 *							70
75	71.2	354.7	184,500 *							75
80	69.3	352.8	177,800 *							80
85	67.3	350.7	170,700 *							85
90	65.3	348.4	162,600	69.4	351.8	153,500				90
95	63.3	345.9	151,700	67.4	349.7	143,100				95
100	61.2	343.2	142,000	65.4	347.4	134,000				100
105	59.1	340.2	133,400	63.4	344.9	125,800	67.5	348.1	118,200	105
110	56.9	336.9	125,700	61.3	342.2	118,500	65.5	345.9	111,300	110
115	54.7	333.4	118,700	59.2	339.2	111,800	63.5	343.4	105,000	115
120	52.4	329.6	112,300	57.0	336.0	105,800	61.4	340.6	99,300	120
125	50.0	325.4	106,500	54.8	332.5	100,300	59.3	337.7	94,100	125
130	47.6	320.9	101,200	52.5	328.7	95,300	57.1	334.5	89,300	130
135	45.0	316.0	96,300	50.2	324.6	90,600	54.9	331.0	85,000	135
140	42.3	310.5	91,800	47.7	320.1	86,400	52.6	327.2	80,900	140
145	39.5	304.6	87,600	45.2	315.1	82,400	50.3	323.1	77,200	145
150	36.5	298.0	83,800	42.5	309.8	78,700	47.8	318.6	73,700	150
155	33.2	290.5	80,100	39.7	303.8	75,300	45.3	313.7	70,500	155
160	29.6	282.0	76,700	36.7	297.3	72,100	42.6	308.4	67,400	160
165	25.6	272.0	73,500	33.4	289.9	69,100	39.8	302.5	64,600	165
170	20.7	259.8	70,500	29.9	281.5	66,300	36.8	295.9	61,900	170
175	14.4	243.1	67,600	25.8	271.6	63,600	33.6	288.6	59,400	175
180				21.1	259.5	61,000	30.0	280.2	57,000	180
185				14.9	243.2	58,600	26.1	270.4	54,800	185
190							21.4	258.5	52,600	190
195							15.3	242.5	50,600	195
200										200
205										205
210										210
215										215
220										220
225										225
230										230
235										235
240										240



ANSI B30.5

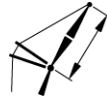
16000 S-3



332,000 lb
+
120,000 lb



196.9 ft



157.5 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110
115										115
120										120
125										125
130										130
135	62.2	337.7	75,500							135
140	60.1	334.8	71,900							140
145	57.9	331.7	68,500							145
150	55.7	328.3	65,300							150
155	53.5	324.6	62,400							155
160	51.2	320.6	59,700							160
165	48.8	316.3	57,100	56.4	323.9	49,700				165
170	46.2	311.6	54,700	54.1	320.3	47,600				170
175	43.6	306.4	52,400	51.8	316.4	45,500				175
180	40.9	300.7	50,300	49.4	312.1	43,600				180
185	37.9	294.4	48,300	47.0	307.5	41,800				185
190	34.8	287.4	46,400	44.4	302.5	40,100	52.2	310.2	33,900	190
195	31.4	279.4	44,600	41.7	296.9	38,500	49.9	306.0	32,500	195
200	27.6	270.2	42,800	38.8	290.8	36,900	47.4	301.5	31,100	200
205	23.2	259.2	41,100	35.7	284.0	35,500	44.9	296.5	29,800	205
210	17.7	245.1	39,500	32.4	276.4	34,100	42.2	291.1	28,600	210
215	9.4	222.9	37,900	28.7	267.5	32,700	39.3	285.1	27,400	215
220				24.5	257.1	31,400	36.3	278.4	26,300	220
225				19.5	244.2	30,100	33.0	270.9	25,200	225
230				12.4	225.5	28,900	29.4	262.4	24,100	230
235							25.3	252.3	23,100	235
240							20.4	239.9	22,100	240

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



196.9 ft



177.2 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
75	73.4	375.5	165,200 *							75
80	71.7	373.8	160,500 *							80
85	69.9	372.0	155,400 *							85
90	68.2	370.0	150,000 *							90
95	66.4	367.8	144,300 *	70.1	371.0	141,900				95
100	64.7	365.4	138,500 *	68.3	369.0	132,800				100
105	62.8	362.9	132,300	66.6	366.8	124,600				105
110	61.0	360.1	124,600	64.8	364.5	117,300				110
115	59.1	357.1	117,600	63.0	361.9	110,600	66.6	365.2	103,700	115
120	57.2	353.9	111,300	61.1	359.2	104,600	64.9	362.9	98,000	120
125	55.2	350.5	105,500	59.2	356.2	99,100	63.0	360.4	92,800	125
130	53.2	346.8	100,200	57.3	353.0	94,100	61.2	357.6	88,100	130
135	51.1	342.8	95,300	55.3	349.6	89,500	59.3	354.6	83,700	135
140	49.0	338.5	90,800	53.3	345.9	85,300	57.4	351.5	79,700	140
145	46.8	333.8	86,700	51.3	341.9	81,300	55.4	348.0	76,000	145
150	44.5	328.8	82,800	49.1	337.6	77,700	53.4	344.4	72,500	150
155	42.1	323.3	79,200	46.9	333.0	74,300	51.4	340.4	69,300	155
160	39.6	317.3	75,900	44.6	328.0	71,100	49.2	336.1	66,300	160
165	36.9	310.8	72,700	42.3	322.5	68,100	47.0	331.5	63,500	165
170	34.1	303.6	69,800	39.8	316.6	65,300	44.8	326.5	60,800	170
175	31.0	295.5	67,000	37.1	310.1	62,700	42.4	321.1	58,300	175
180	27.6	286.3	64,300	34.3	302.9	60,200	39.9	315.2	56,000	180
185	23.8	275.5	61,800	31.2	294.9	57,800	37.2	308.7	53,800	185
190	19.2	262.2	59,500	27.8	285.7	55,600	34.4	301.6	51,700	190
195	13.0	243.9	57,100	24.0	275.1	53,500	31.4	293.6	49,700	195
200				19.5	262.0	51,400	28.0	284.5	47,800	200
205				13.5	244.2	49,500	24.2	274.0	46,000	205
210							19.8	261.0	44,300	210
215							13.9	243.6	42,600	215
220										220
225										225
230										230
235										235
240										240
250										250



ANSI B30.5

16000 S-3



196.9 ft



177.2 ft

	 75°			 70°			
	 ft	 ft	 lb	 ft	 ft	 lb	
75							75
80							80
85							85
90							90
95							95
100							100
105							105
110							110
115							115
120							120
125							125
130							130
135							135
140							140
145	61.9	354.6	67,100				145
150	60.0	351.8	64,000				150
155	58.1	348.7	61,100				155
160	56.2	345.3	58,400				160
165	54.2	341.7	55,800				165
170	52.1	337.9	53,400				170
175	50.0	333.7	51,200	56.7	340.9	44,100	175
180	47.9	329.2	49,100	54.8	337.4	42,200	180
185	45.6	324.4	47,100	52.7	333.6	40,400	185
190	43.3	319.1	45,200	50.6	329.5	38,800	190
195	40.8	313.4	43,400	48.5	325.1	37,200	195
200	38.2	307.2	41,700	46.3	320.4	35,600	200
205	35.5	300.3	40,100	43.9	315.2	34,200	205
210	32.5	292.7	38,500	41.5	309.7	32,800	210
215	29.3	284.0	37,100	39.0	303.6	31,500	215
220	25.7	274.1	35,600	36.3	296.9	30,200	220
225	21.5	262.1	34,300	33.4	289.5	29,000	225
230	16.3	246.8	32,900	30.2	281.2	27,900	230
235	8.1	221.9	31,600	26.8	271.6	26,800	235
240				22.8	260.4	25,700	240
250				11.1	225.7	23,500	250

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



196.9 ft



196.9 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
80	73.6	394.5	141,900 *							80
85	72.0	392.9	139,800 *							85
90	70.5	391.1	136,000 *							90
95	68.9	389.2	131,900 *							95
100	67.4	387.1	127,600 *	70.6	390.1	131,300				100
105	65.8	384.9	123,200 *	69.0	388.2	123,100				105
110	64.1	382.5	118,700 *	67.5	386.1	115,800				110
115	62.5	379.9	114,100 *	65.9	383.9	109,200				115
120	60.8	377.1	109,500 *	64.2	381.5	103,200	67.5	384.5	96,400	120
125	59.1	374.1	104,200	62.6	378.9	97,700	65.9	382.3	91,200	125
130	57.4	370.9	98,900	60.9	376.1	92,700	64.3	379.9	86,500	130
135	55.7	367.5	94,100	59.3	373.1	88,100	62.7	377.3	82,200	135
140	53.9	363.9	89,600	57.5	370.0	83,900	61.0	374.6	78,200	140
145	52.0	360.0	85,500	55.8	366.6	79,900	59.3	371.6	74,400	145
150	50.1	355.9	81,600	54.0	363.0	76,300	57.6	368.5	71,000	150
155	48.2	351.4	78,000	52.1	359.1	72,900	55.9	365.1	67,800	155
160	46.2	346.7	74,700	50.3	355.0	69,700	54.1	361.5	64,800	160
165	44.1	341.5	71,500	48.3	350.6	66,800	52.2	357.6	62,000	165
170	41.9	336.0	68,600	46.3	345.8	64,000	50.3	353.5	59,400	170
175	39.7	330.1	65,800	44.2	340.7	61,400	48.4	349.1	56,900	175
180	37.3	323.6	63,200	42.1	335.3	58,900	46.4	344.4	54,600	180
185	34.8	316.6	60,800	39.8	329.4	56,600	44.3	339.3	52,400	185
190	32.1	308.8	58,500	37.4	322.9	54,400	42.2	333.9	50,400	190
195	29.1	300.1	56,200	34.9	315.9	52,300	39.9	328.0	48,400	195
200	25.9	290.1	54,100	32.3	308.1	50,300	37.6	321.6	46,500	200
205	22.2	278.5	52,100	29.3	299.5	48,500	35.1	314.6	44,800	205
210	17.8	264.3	50,200	26.1	289.7	46,700	32.4	306.9	43,100	210
215	11.9	244.3	48,300	22.5	278.2	44,900	29.5	298.3	41,400	215
220				18.2	264.1	43,300	26.3	288.5	39,900	220
225				12.3	244.8	41,600	22.7	277.1	38,400	225
230							18.4	263.2	37,000	230
235							12.7	244.3	35,600	235
240										240
250										250



ANSI B30.5

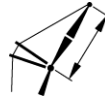
16000 S-3



332,000 lb
+
120,000 lb



196.9 ft



196.9 ft

	75°		
80			
85			
90			
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155	61.6	371.6	59,400
160	60.0	368.7	56,700
165	58.3	365.6	54,100
170	56.5	362.4	51,800
175	54.7	358.8	49,600
180	52.9	355.1	47,500
185	51.0	351.0	45,500
190	49.1	346.8	43,600
195	47.1	342.2	41,900
200	45.1	337.2	40,200
205	43.0	331.9	38,600
210	40.8	326.2	37,100
215	38.4	320.0	35,600
220	36.0	313.2	34,200
225	33.4	305.8	32,900
230	30.6	297.5	31,700
235	27.5	288.2	30,400
240	24.1	277.5	29,200
250	15.0	248.2	27,000

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



196.9 ft



216.5 ft

	86°			83°			80°			
ft	o	ft	lb	o	ft	lb	o	ft	lb	ft
85	73.7	413.6	121,100 *							85
90	72.3	412.0	120,800 *							90
95	70.9	410.2	118,900 *							95
100	69.5	408.4	115,800 *							100
105	68.1	406.4	112,500 *							105
110	66.7	404.2	109,000 *	69.6	407.4	114,300				110
115	65.2	401.9	105,600 *	68.2	405.4	107,700				115
120	63.7	399.5	102,000 *	66.7	403.2	101,700				120
125	62.2	396.8	98,400 *	65.3	400.9	96,200				125
130	60.7	394.0	94,900 *	63.8	398.5	91,200	66.8	401.6	84,900	130
135	59.2	391.1	91,300 *	62.3	395.9	86,600	65.4	399.4	80,600	135
140	57.6	387.9	87,800 *	60.8	393.1	82,400	63.9	396.9	76,600	140
145	56.0	384.5	84,100	59.3	390.1	78,500	62.4	394.3	72,900	145
150	54.4	381.0	80,200	57.7	387.0	74,800	60.9	391.5	69,400	150
155	52.7	377.2	76,600	56.1	383.6	71,400	59.4	388.6	66,200	155
160	51.0	373.2	73,300	54.5	380.1	68,300	57.8	385.4	63,300	160
165	49.3	368.9	70,200	52.8	376.3	65,300	56.2	382.1	60,500	165
170	47.5	364.4	67,300	51.1	372.3	62,600	54.6	378.6	57,900	170
175	45.7	359.5	64,500	49.4	368.0	59,900	52.9	374.8	55,400	175
180	43.8	354.3	61,900	47.6	363.5	57,500	51.2	370.8	53,100	180
185	41.8	348.8	59,500	45.8	358.7	55,200	49.5	366.6	50,900	185
190	39.7	342.9	57,200	43.9	353.5	53,000	47.7	362.0	48,900	190
195	37.6	336.5	55,000	41.9	348.0	50,900	45.9	357.2	46,900	195
200	35.3	329.5	52,900	39.9	342.1	49,000	44.0	352.1	45,100	200
205	32.9	321.9	50,900	37.7	335.7	47,100	42.0	346.6	43,300	205
210	30.3	313.6	49,000	35.5	328.8	45,300	40.0	340.7	41,600	210
215	27.5	304.3	47,200	33.1	321.3	43,600	37.8	334.4	40,000	215
220	24.5	293.7	45,500	30.5	313.0	42,000	35.6	327.5	38,500	220
225	20.9	281.3	43,800	27.7	303.8	40,500	33.2	320.0	37,100	225
230	16.7	266.0	42,200	24.7	293.3	39,000	30.6	311.7	35,700	230
235	10.8	244.5	40,700	21.2	281.1	37,500	27.9	302.6	34,300	235
240				17.0	266.0	36,200	24.8	292.2	33,000	240
250							17.2	265.2	30,600	250
260										260
270										270



ANSI B30.5

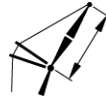
16000 S-3



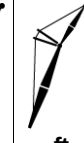
332,000 lb
+
120,000 lb



196.9 ft



216.5 ft

	75°		
			
	ft	ft	lb
85			
90			
95			
100			
105			
110			
115			
120			
125			
130			
135			
140			
145			
150			
155			
160	63.0	391.3	55,000
165	61.4	388.6	52,500
170	59.9	385.7	50,100
175	58.4	382.6	47,900
180	56.8	379.3	45,800
185	55.2	375.9	43,900
190	53.5	372.2	42,000
195	51.9	368.3	40,200
200	50.1	364.1	38,600
205	48.4	359.7	37,000
210	46.6	355.0	35,500
215	44.7	350.0	34,100
220	42.7	344.7	32,700
225	40.7	338.9	31,400
230	38.6	332.7	30,200
235	36.4	326.1	29,000
240	34.1	318.8	27,800
250	28.9	302.1	25,600
260	22.7	280.7	23,600
270	13.9	249.3	21,700