

Liftcrane Boom Capacities With Luffing Jib Attached

Boom No. 76
Luffing Jib No. 135
168,000 lb Crane Counterweight
53,000 lb Carbody Counterweight
360 Degree Rating

14000 SERIES 2



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

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of main boom load. Weight of luffing jib and 2,825 lb suspended beneath luffing jib point sheaves have been included in capacity determination. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate on a firm uniformly supporting surface with gantry up and bearing turntable level within a tolerance of 1/2 in. in 10 ft, and properly supported. During operation, luffing jib must be maintained at proper boom to luffing jib angle shown in table. Refer to luffing jib assembly **No. A18387**, Wire Rope Specification chart **No. 8822-A**, Luffing Jib Raising Procedure chart **No. 8799-A**, and Wind Conditions chart **No. 8790-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 Maximum Allowable Travel Specification chart **No. 8809-A**.

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

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

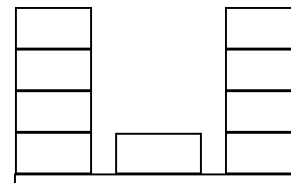
BOOM POINT ELEVATION: Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 27 ft 2 in. crawlers, 48 in. treads, 10 ft 3 in. retractable gantry, 27 ft live mast, 20 part boom hoist reeving, boom support straps, 8 part luffing jib hoist reeving, two 1-1/2 in. luffing jib pendants and backstays, 168,000 lb crane counterweight, and two 26,500 lb carbody counterweights.

Consult Chart **No. 8804-A** for main luffing jib capacities.

Fixed jib No. 138 must be removed before use of this chart.

Luffing Jib Position During Operation	
Luffing Jib Length Feet	Boom-to-Luffing Jib Angle Degrees
70	140
80 - 90	150
100 - 120	160
130 - 170	168

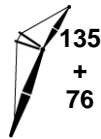


168,000 lb Crane Counterweight
8 Side Boxes - 1 Center Box

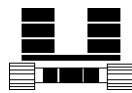
Boom Catwalks Deduct

Deduct 400 lb from capacities when boom catwalks are attached.

Explanation of Symbols



Luffing Jib No. 135
+
Boom No. 76



Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



Operating Radius
(see page 1)



Boom Angle
(see page 1)

Explanation of Symbols
(continued)



Boom Point Elevation
(see page 1)



Lifting Capacities
(see page 1)



Boom Length



Luffing Jib Length

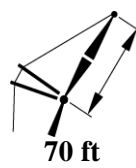
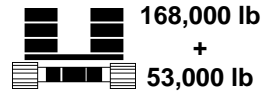
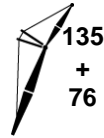


Boom-to-Luffing Jib Angle

REFERENCE ONLY!

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ft	°	ft	lb
 66 ft			
15	82.3	72.7	378,000*
16	81.4	72.5	355,200*
17	80.5	72.3	334,500*
18	79.7	72.1	315,900*
19	78.8	71.9	299,100*
20	77.8	71.7	283,800*
22	76.1	71.1	257,100*
24	74.2	70.5	234,500*
26	72.4	69.8	215,200*
28	70.5	69.1	198,000*

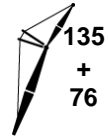
ft	°	ft	lb
 75 ft			
16	82.6	82.5	334,100*
17	81.8	82.3	329,800*
18	81.0	82.2	316,000*
19	80.2	82.0	299,200*
20	79.5	81.8	283,900*
22	77.9	81.3	257,200*
24	76.3	80.8	234,700*
26	74.8	80.2	215,300*
28	73.2	79.6	198,300*
30	71.6	78.9	182,900*

ft	°	ft	lb
 85 ft			
17	82.7	92.3	305,200*
18	82.1	92.2	301,200*
19	81.4	92.0	297,500*
20	80.7	91.8	284,200*
22	79.3	91.4	257,500*
24	77.9	90.9	234,900*
26	76.6	90.4	215,600*
28	75.2	89.9	198,700*
30	73.8	89.3	183,400*
32	72.3	88.6	169,800*
34	70.9	87.9	154,000



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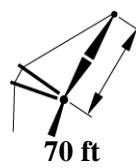
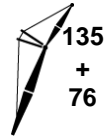
ft	°	ft	lb
95 ft			
18	82.9	102.1	293,800*
19	82.3	102.0	290,200*
20	81.7	101.8	284,100*
22	80.4	101.4	257,400*
24	79.2	101.0	234,800*
26	78.0	100.6	215,500*
28	76.7	100.1	198,600*
30	75.5	99.5	183,200*
32	74.2	98.9	169,700*
34	73.0	98.3	154,600
36	71.7	97.6	140,300
38	70.4	96.9	128,100

ft	°	ft	lb
105 ft			
20	82.5	111.8	266,700*
22	81.3	111.4	257,000*
24	80.2	111.1	235,100*
26	79.1	110.7	215,800*
28	78.0	110.2	199,000*
30	76.9	109.7	183,600*
32	75.8	109.2	170,100*
34	74.6	108.6	155,200
36	73.5	108.0	140,900
38	72.3	107.3	128,600
40	71.2	106.6	118,000

ft	°	ft	lb
115 ft			
22	82.1	121.4	250,200*
24	81.1	121.1	234,800*
26	80.1	120.7	215,500*
28	79.1	120.3	198,600*
30	78.0	119.8	183,300*
32	77.0	119.4	169,800*
34	76.0	118.8	155,500
36	74.9	118.3	141,200
38	73.9	117.7	128,900
40	72.8	117.1	118,200
45	70.2	115.3	96,700

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ft	°	ft	lb
 125 ft			
22	82.7	131.4	234,300*
24	81.8	131.1	225,300*
26	80.9	130.7	215,400*
28	79.9	130.3	198,400*
30	79.0	129.9	183,100*
32	78.1	129.5	169,600*
34	77.1	129.0	155,700
36	76.2	128.5	141,400
38	75.2	127.9	129,100
40	74.2	127.4	118,300
45	71.8	125.7	96,900

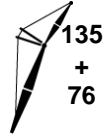
ft	°	ft	lb
 135 ft			
24	82.4	141.0	217,800*
26	81.5	140.7	209,500*
28	80.7	140.4	198,000*
30	79.8	140.0	182,600*
32	78.9	139.6	169,100*
34	78.1	139.1	155,900
36	77.2	138.7	141,500
38	76.3	138.1	129,100
40	75.4	137.6	118,400
45	73.2	136.1	96,900
50	71.0	134.4	80,600

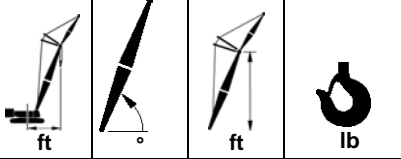

ft	°	ft	lb
 144 ft			
24	82.9	151.0	196,600*
26	82.1	150.7	189,800*
28	81.3	150.4	183,200*
30	80.5	150.0	177,000*
32	79.7	149.6	169,200*
34	78.9	149.2	156,000
36	78.1	148.8	141,700
38	77.3	148.3	129,300
40	76.4	147.8	118,600
45	74.4	146.4	97,000
50	72.3	144.8	80,800
55	70.2	143.1	68,100

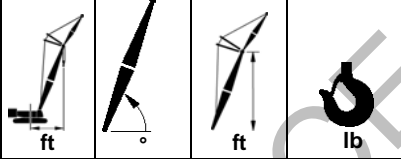



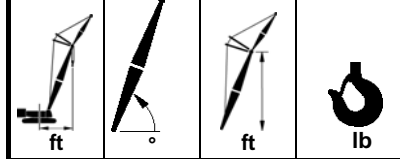

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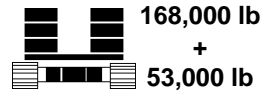
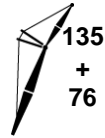
			
ft	°	ft	lb
 154 ft			
26	82.6	160.6	181,900*
28	81.9	160.3	175,600*
30	81.1	160.0	169,600*
32	80.4	159.6	163,800*
34	79.6	159.2	156,100
36	78.9	158.8	141,700
38	78.1	158.4	129,300
40	77.3	157.9	118,600
45	75.4	156.6	97,000
50	73.5	155.2	80,700
55	71.5	153.5	68,000

			
ft	°	ft	lb
 164 ft			
28	82.4	170.3	168,600*
30	81.7	170.0	163,400*
32	80.9	169.6	158,300*
34	80.2	169.3	153,500*
36	79.5	168.9	141,700
38	78.8	168.5	129,300
40	78.1	168.0	118,500
45	76.3	166.8	96,900
50	74.5	165.5	80,600
55	72.7	163.9	67,900
60	70.8	162.2	57,700

			
ft	°	ft	lb
 174 ft			
28	82.8	180.2	162,500*
30	82.1	179.9	157,500*
32	81.5	179.6	152,600*
34	80.8	179.3	147,900*
36	80.1	178.9	141,700
38	79.5	178.5	129,300
40	78.8	178.1	118,500
45	77.1	177.0	96,800
50	75.4	175.7	80,400
55	73.7	174.2	67,700
60	71.9	172.6	57,500
65	70.2	170.8	49,100

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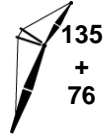



	ft	°	ft	lb
 184 ft				
30	82.6	189.9	142,500*	
32	81.9	189.6	138,400*	
34	81.3	189.3	134,500*	
36	80.7	188.9	130,700*	
38	80.0	188.6	127,000*	
40	79.4	188.2	118,400	
45	77.8	187.1	96,700	
50	76.2	185.9	80,300	
55	74.6	184.5	67,600	
60	72.9	183.0	57,300	
65	71.3	181.3	49,000	





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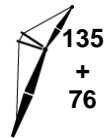
ft	ft	ft	lb
 66 ft			
15	82.3	72.7	378,000*
16	81.4	72.5	355,200*
17	80.5	72.3	334,400*
18	79.7	72.1	315,600*
19	78.8	71.9	298,700*
20	77.8	71.7	283,300*
22	76.1	71.1	256,500*
24	74.2	70.5	233,700*
26	72.4	69.8	214,200*
28	70.5	69.1	196,700*
30	68.6	68.3	181,200*
32	66.7	67.4	167,300
34	64.8	66.4	150,600


ft	ft	ft	lb
 75 ft			
16	82.6	82.5	333,900*
17	81.8	82.3	329,500*
18	81.0	82.2	315,900*
19	80.2	82.0	299,000*
20	79.5	81.8	283,600*
22	77.9	81.3	256,800*
24	76.3	80.8	234,100*
26	74.8	80.2	214,600*
28	73.2	79.6	197,200*
30	71.6	78.9	181,700*
32	69.9	78.1	168,100*
34	68.3	77.3	151,900
36	66.6	76.4	137,600
38	64.9	75.4	125,400


ft	ft	ft	lb
 85 ft			
17	82.7	92.3	305,000*
18	82.1	92.2	301,000*
19	81.4	92.0	297,100*
20	80.7	91.8	284,000*
22	79.3	91.4	257,200*
24	77.9	90.9	234,500*
26	76.6	90.4	215,000*
28	75.2	89.9	197,800*
30	73.8	89.3	182,300*
32	72.3	88.6	168,700*
34	70.9	87.9	153,000
36	69.5	87.1	138,700
38	68.0	86.2	126,400
40	66.6	85.3	115,700


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 95 ft			
18	82.9	102.1	293,500*
19	82.3	102.0	289,900*
20	81.7	101.8	284,000*
22	80.4	101.4	257,100*
24	79.2	101.0	234,500*
26	78.0	100.6	215,000*
28	76.7	100.1	197,800*
30	75.5	99.5	182,400*
32	74.2	98.9	168,700*
34	73.0	98.3	153,700
36	71.7	97.6	139,400
38	70.4	96.9	127,100
40	69.1	96.1	116,400
45	65.8	93.9	94,900

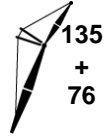
 105 ft			
20	82.5	111.8	266,400*
22	81.3	111.4	257,100*
24	80.2	111.1	234,800*
26	79.1	110.7	215,400*
28	78.0	110.2	198,300*
30	76.9	109.7	182,900*
32	75.8	109.2	169,300*
34	74.6	108.6	154,400
36	73.5	108.0	140,100
38	72.3	107.3	127,700
40	71.2	106.6	117,000
45	68.2	104.7	95,500
50	65.2	102.4	79,300


 115 ft			
22	82.1	121.4	250,300*
24	81.1	121.1	234,600*
26	80.1	120.7	215,200*
28	79.1	120.3	198,000*
30	78.0	119.8	182,600*
32	77.0	119.4	169,000*
34	76.0	118.8	154,900
36	74.9	118.3	140,500
38	73.9	117.7	128,100
40	72.8	117.1	117,300
45	70.2	115.3	95,800
50	67.5	113.2	79,500
55	64.8	110.9	66,800





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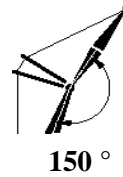
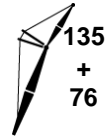
ft	ft	ft	lb
 125 ft			
22	82.7	131.4	234,500*
24	81.8	131.1	225,400*
26	80.9	130.7	215,100*
28	79.9	130.3	198,000*
30	79.0	129.9	182,500*
32	78.1	129.5	168,900*
34	77.1	129.0	155,200
36	76.2	128.5	140,800
38	75.2	127.9	128,400
40	74.2	127.4	117,600
45	71.8	125.7	96,000
50	69.4	123.9	79,700
55	66.9	121.8	67,000
60	64.3	119.4	56,800






ft	ft	ft	lb
 135 ft			
24	82.4	141.0	217,800*
26	81.5	140.7	209,400*
28	80.7	140.4	197,500*
30	79.8	140.0	182,100*
32	78.9	139.6	168,500*
34	78.1	139.1	155,400
36	77.2	138.7	141,000
38	76.3	138.1	128,600
40	75.4	137.6	117,800
45	73.2	136.1	96,100
50	71.0	134.4	79,800
55	68.7	132.5	67,000
60	66.3	130.3	56,800






ft	ft	ft	lb
 144 ft			
24	82.9	151.0	196,600*
26	82.1	150.7	189,700*
28	81.3	150.4	183,100*
30	80.5	150.0	176,800*
32	79.7	149.6	168,700*
34	78.9	149.2	155,700
36	78.1	148.8	141,200
38	77.3	148.3	128,800
40	76.4	147.8	118,000
45	74.4	146.4	96,300
50	72.3	144.8	80,000
55	70.2	143.1	67,200
60	68.1	141.1	57,000
65	65.9	138.8	48,600






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 <p>154 ft</p>			
26	82.6	160.6	181,900*
28	81.9	160.3	175,500*
30	81.1	160.0	169,400*
32	80.4	159.6	163,600*
34	79.6	159.2	155,800
36	78.9	158.8	141,300
38	78.1	158.4	128,900
40	77.3	157.9	118,000
45	75.4	156.6	96,300
50	73.5	155.2	79,900
55	71.5	153.5	67,200
60	69.5	151.7	56,900
65	67.5	149.6	48,500
70	65.5	147.4	41,500

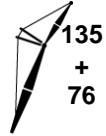
   			
 <p>164 ft</p>			
28	82.4	170.3	168,400*
30	81.7	170.0	163,200*
32	80.9	169.6	158,100*
34	80.2	169.3	153,200*
36	79.5	168.9	141,400
38	78.8	168.5	128,900
40	78.1	168.0	118,100
45	76.3	166.8	96,300
50	74.5	165.5	79,900
55	72.7	163.9	67,100
60	70.8	162.2	56,800
65	68.9	160.3	48,400
70	67.1	158.2	41,400
75	65.1	155.9	35,500

   			
 <p>174 ft</p>			
28	82.8	180.2	162,400*
30	82.1	179.9	157,300*
32	81.5	179.6	152,400*
34	80.8	179.3	147,700*
36	80.1	178.9	141,400
38	79.5	178.5	128,900
40	78.8	178.1	118,100
45	77.1	177.0	96,200
50	75.4	175.7	79,800
55	73.7	174.2	67,000
60	71.9	172.6	56,700
65	70.2	170.8	48,200
70	68.4	168.9	41,200
75	66.6	166.7	35,200
80	64.8	164.4	30,100



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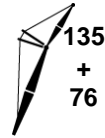
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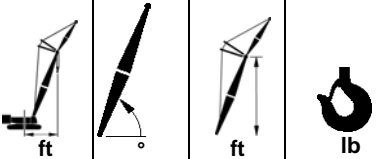



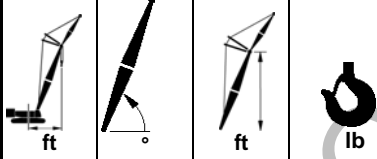
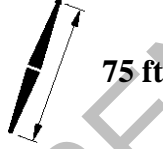
ft		lb	
<p>184 ft</p>			
30	82.6	189.9	142,300*
32	81.9	189.6	138,200*
34	81.3	189.3	134,300*
36	80.7	188.9	130,400*
38	80.0	188.6	126,700*
40	79.4	188.2	118,000
45	77.8	187.1	96,200
50	76.2	185.9	79,700
55	74.6	184.5	66,900
60	72.9	183.0	56,600
65	71.3	181.3	48,200
70	69.7	179.5	41,100
75	68.0	177.4	35,200
80	66.3	175.3	30,000
85	64.5	172.9	25,600

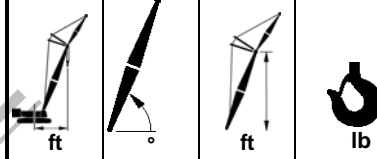
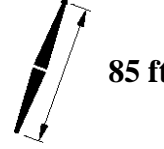
14000 S-2

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ft	°	ft	lb
 66 ft			
15	82.3	72.7	375,000*
16	81.4	72.5	351,800*
17	80.5	72.3	331,100*
18	79.7	72.1	312,500*
19	78.8	71.9	295,600*
20	77.8	71.7	280,300*
22	76.1	71.1	253,600*
24	74.2	70.5	231,000*
26	72.4	69.8	210,800*
28	70.5	69.1	193,300*
30	68.6	68.3	177,900*
32	66.7	67.4	163,900
34	64.8	66.4	147,300

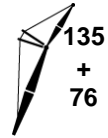
			
ft	°	ft	lb
 75 ft			
16	82.6	82.5	331,200*
17	81.8	82.3	326,800*
18	81.0	82.2	312,800*
19	80.2	82.0	296,000*
20	79.5	81.8	280,700*
22	77.9	81.3	254,000*
24	76.3	80.8	231,400*
26	74.8	80.2	211,400*
28	73.2	79.6	193,900*
30	71.6	78.9	178,500*
32	69.9	78.1	165,000*
34	68.3	77.3	148,800
36	66.6	76.4	134,700
38	64.9	75.4	122,500


			
ft	°	ft	lb
 85 ft			
17	82.7	92.3	302,500*
18	82.1	92.2	298,500*
19	81.4	92.0	294,600*
20	80.7	91.8	281,100*
22	79.3	91.4	254,400*
24	77.9	90.9	231,900*
26	76.6	90.4	212,100*
28	75.2	89.9	194,600*
30	73.8	89.3	179,200*
32	72.3	88.6	165,700*
34	70.9	87.9	150,000
36	69.5	87.1	135,800
38	68.0	86.2	123,700
40	66.6	85.3	113,100





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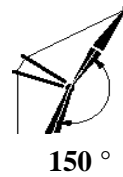
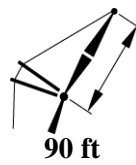
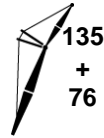
ft	°	ft	lb
 95 ft			
18	82.9	102.1	291,200*
19	82.3	102.0	287,600*
20	81.7	101.8	281,200*
22	80.4	101.4	254,500*
24	79.2	101.0	231,900*
26	78.0	100.6	212,200*
28	76.7	100.1	194,700*
30	75.5	99.5	179,300*
32	74.2	98.9	165,800*
34	73.0	98.3	150,800
36	71.7	97.6	136,600
38	70.4	96.9	124,400
40	69.1	96.1	113,800
45	65.8	93.9	92,500

ft	°	ft	lb
 105 ft			
20	82.5	111.8	264,300*
22	81.3	111.4	254,400*
24	80.2	111.1	232,300*
26	79.1	110.7	212,700*
28	78.0	110.2	195,200*
30	76.9	109.7	179,900*
32	75.8	109.2	166,400*
34	74.6	108.6	151,600
36	73.5	108.0	137,400
38	72.3	107.3	125,100
40	71.2	106.6	114,500
45	68.2	104.7	93,200
50	65.2	102.4	77,200

ft	°	ft	lb
 115 ft			
22	82.1	121.4	247,700*
24	81.1	121.1	232,100*
26	80.1	120.7	212,500*
28	79.1	120.3	195,000*
30	78.0	119.8	179,700*
32	77.0	119.4	166,200*
34	76.0	118.8	152,000
36	74.9	118.3	137,800
38	73.9	117.7	125,500
40	72.8	117.1	114,900
45	70.2	115.3	93,500
50	67.5	113.2	77,400
55	64.8	110.9	64,900

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ft	°	ft	lb
 125 ft			
22	82.7	131.4	232,000*
24	81.8	131.1	222,900*
26	80.9	130.7	212,500*
28	79.9	130.3	195,000*
30	79.0	129.9	179,700*
32	78.1	129.5	166,200*
34	77.1	129.0	152,400
36	76.2	128.5	138,200
38	75.2	127.9	125,900
40	74.2	127.4	115,200
45	71.8	125.7	93,800
50	69.4	123.9	77,700
55	66.9	121.8	65,100
60	64.3	119.4	55,000

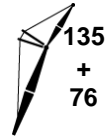
ft	°	ft	lb
 135 ft			
24	82.4	141.0	215,500*
26	81.5	140.7	207,100*
28	80.7	140.4	194,600*
30	79.8	140.0	179,300*
32	78.9	139.6	165,800*
34	78.1	139.1	152,700
36	77.2	138.7	138,400
38	76.3	138.1	126,100
40	75.4	137.6	115,400
45	73.2	136.1	93,900
50	71.0	134.4	77,800
55	68.7	132.5	65,200
60	66.3	130.3	55,000

ft	°	ft	lb
 144 ft			
24	82.9	151.0	194,400*
26	82.1	150.7	187,500*
28	81.3	150.4	180,900*
30	80.5	150.0	174,600*
32	79.7	149.6	166,000*
34	78.9	149.2	153,000
36	78.1	148.8	138,700
38	77.3	148.3	126,400
40	76.4	147.8	115,700
45	74.4	146.4	94,200
50	72.3	144.8	78,000
55	70.2	143.1	65,400
60	68.1	141.1	55,300
65	65.9	138.8	47,000



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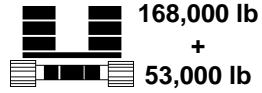
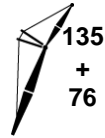
ft	°	ft	lb
154 ft			
26	82.6	160.6	179,700*
28	81.9	160.3	173,400*
30	81.1	160.0	167,300*
32	80.4	159.6	161,500*
34	79.6	159.2	153,200
36	78.9	158.8	138,800
38	78.1	158.4	126,500
40	77.3	157.9	115,800
45	75.4	156.6	94,200
50	73.5	155.2	78,000
55	71.5	153.5	65,400
60	69.5	151.7	55,200
65	67.5	149.6	46,900
70	65.5	147.4	40,000



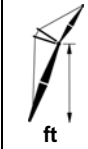


ft	°	ft	lb
164 ft			
28	82.4	170.3	166,400*
30	81.7	170.0	161,200*
32	80.9	169.6	156,100*
34	80.2	169.3	151,200*
36	79.5	168.9	138,900
38	78.8	168.5	126,600
40	78.1	168.0	115,800
45	76.3	166.8	94,200
50	74.5	165.5	78,000
55	72.7	163.9	65,300
60	70.8	162.2	55,200
65	68.9	160.3	46,800
70	67.1	158.2	39,900
75	65.1	155.9	34,000

ft	°	ft	lb
174 ft			
28	82.8	180.2	160,400*
30	82.1	179.9	155,400*
32	81.5	179.6	150,500*
34	80.8	179.3	145,700*
36	80.1	178.9	139,000
38	79.5	178.5	126,600
40	78.8	178.1	115,800
45	77.1	177.0	94,200
50	75.4	175.7	77,900
55	73.7	174.2	65,200
60	71.9	172.6	55,000
65	70.2	170.8	46,700
70	68.4	168.9	39,700
75	66.6	166.7	33,800
80	64.8	164.4	28,700

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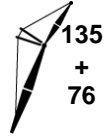


	 ft	 °	 ft	 lb
	 184 ft			
30	82.6	189.9	140,400*	
32	81.9	189.6	136,400*	
34	81.3	189.3	132,400*	
36	80.7	188.9	128,600*	
38	80.0	188.6	124,800*	
40	79.4	188.2	115,800	
45	77.8	187.1	94,200	
50	76.2	185.9	77,900	
55	74.6	184.5	65,200	
60	72.9	183.0	55,000	
65	71.3	181.3	46,600	
70	69.7	179.5	39,600	
75	68.0	177.4	33,700	
80	66.3	175.3	28,700	
85	64.5	172.9	24,300	



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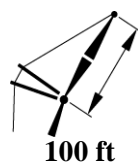
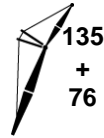
ft	°	ft	lb
66 ft			
15	82.3	72.7	377,500*
16	81.4	72.5	354,100*
17	80.5	72.3	333,100*
18	79.7	72.1	314,200*
19	78.8	71.9	297,200*
20	77.8	71.7	281,700*
22	76.1	71.1	254,600*
24	74.2	70.5	231,600*
26	72.4	69.8	211,400*
28	70.5	69.1	193,500*
30	68.6	68.3	177,800*
32	66.7	67.4	163,900
34	64.8	66.4	147,100
36	62.8	65.3	132,800
38	60.8	64.2	120,600
40	58.7	62.9	109,900


ft	°	ft	lb
75 ft			
16	82.6	82.5	333,000*
17	81.8	82.3	328,500*
18	81.0	82.2	314,700*
19	80.2	82.0	297,700*
20	79.5	81.8	282,200*
22	77.9	81.3	255,200*
24	76.3	80.8	232,300*
26	74.8	80.2	212,300*
28	73.2	79.6	194,400*
30	71.6	78.9	178,800*
32	69.9	78.1	165,000*
34	68.3	77.3	148,900
36	66.6	76.4	134,600
38	64.9	75.4	122,300
40	63.2	74.3	111,600
45	58.8	71.4	90,100


ft	°	ft	lb
85 ft			
17	82.7	92.3	304,200*
18	82.1	92.2	300,000*
19	81.4	92.0	296,100*
20	80.7	91.8	282,800*
22	79.3	91.4	255,800*
24	77.9	90.9	232,900*
26	76.6	90.4	213,200*
28	75.2	89.9	195,300*
30	73.8	89.3	179,700*
32	72.3	88.6	166,000*
34	70.9	87.9	150,400
36	69.5	87.1	136,000
38	68.0	86.2	123,700
40	66.6	85.3	112,900
45	62.8	82.8	91,400
50	58.9	79.8	75,100


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 95 ft			
18	82.9	102.1	292,600*
19	82.3	102.0	288,900*
20	81.7	101.8	282,900*
22	80.4	101.4	255,900*
24	79.2	101.0	233,100*
26	78.0	100.6	213,400*
28	76.7	100.1	195,600*
30	75.5	99.5	180,000*
32	74.2	98.9	166,300*
34	73.0	98.3	151,400
36	71.7	97.6	137,000
38	70.4	96.9	124,600
40	69.1	96.1	113,900
45	65.8	93.9	92,200
50	62.5	91.3	76,000
55	59.0	88.3	63,200

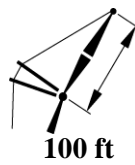
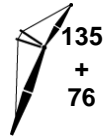
 105 ft			
20	82.5	111.8	265,500*
22	81.3	111.4	256,400*
24	80.2	111.1	233,600*
26	79.1	110.7	214,000*
28	78.0	110.2	196,300*
30	76.9	109.7	180,700*
32	75.8	109.2	167,000*
34	74.6	108.6	152,400
36	73.5	108.0	138,000
38	72.3	107.3	125,500
40	71.2	106.6	114,800
45	68.2	104.7	93,100
50	65.2	102.4	76,800
55	62.2	99.8	64,100
60	59.0	96.8	53,900

 115 ft			
22	82.1	121.4	249,700*
24	81.1	121.1	233,500*
26	80.1	120.7	214,000*
28	79.1	120.3	196,200*
30	78.0	119.8	180,700*
32	77.0	119.4	166,900*
34	76.0	118.8	153,000
36	74.9	118.3	138,500
38	73.9	117.7	126,100
40	72.8	117.1	115,300
45	70.2	115.3	93,600
50	67.5	113.2	77,200
55	64.8	110.9	64,500
60	61.9	108.3	54,200
65	59.0	105.3	45,800



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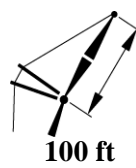
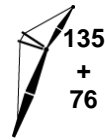
ft	°	ft	lb
125 ft			
22	82.7	131.4	233,900*
24	81.8	131.1	224,700*
26	80.9	130.7	214,000*
28	79.9	130.3	196,300*
30	79.0	129.9	180,700*
32	78.1	129.5	167,000*
34	77.1	129.0	153,500
36	76.2	128.5	139,000
38	75.2	127.9	126,600
40	74.2	127.4	115,700
45	71.8	125.7	94,000
50	69.4	123.9	77,600
55	66.9	121.8	64,800
60	64.3	119.4	54,600
65	61.7	116.7	46,200
70	59.1	113.8	39,100

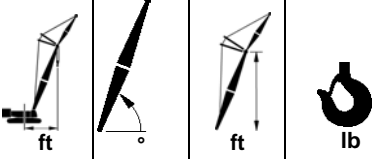
ft	°	ft	lb
135 ft			
24	82.4	141.0	217,200*
26	81.5	140.7	208,700*
28	80.7	140.4	196,000*
30	79.8	140.0	180,500*
32	78.9	139.6	166,800*
34	78.1	139.1	153,900
36	77.2	138.7	139,400
38	76.3	138.1	126,900
40	75.4	137.6	116,000
45	73.2	136.1	94,200
50	71.0	134.4	77,800
55	68.7	132.5	65,000
60	66.3	130.3	54,700
65	64.0	127.9	46,300
70	61.6	125.2	39,200
75	59.1	122.3	33,300

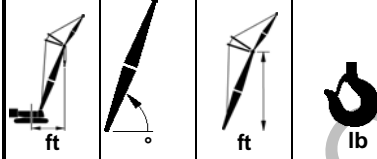
ft	°	ft	lb
144 ft			
24	82.9	151.0	196,000*
26	82.1	150.7	189,000*
28	81.3	150.4	182,300*
30	80.5	150.0	175,900*
32	79.7	149.6	167,000*
34	78.9	149.2	154,300
36	78.1	148.8	139,700
38	77.3	148.3	127,200
40	76.4	147.8	116,400
45	74.4	146.4	94,600
50	72.3	144.8	78,100
55	70.2	143.1	65,300
60	68.1	141.1	55,000
65	65.9	138.8	46,600
70	63.7	136.4	39,600
75	61.4	133.7	33,600
80	59.1	130.7	28,500

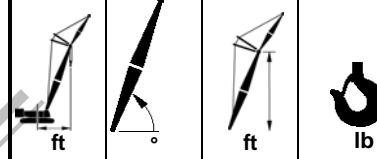
14000 S-2

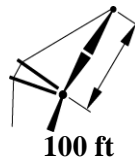
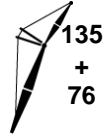
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154 ft			
26	82.6	160.6	181,200*
28	81.9	160.3	174,700*
30	81.1	160.0	168,600*
32	80.4	159.6	162,700*
34	79.6	159.2	154,500*
36	78.9	158.8	139,900
38	78.1	158.4	127,400
40	77.3	157.9	116,500
45	75.4	156.6	94,700
50	73.5	155.2	78,200
55	71.5	153.5	65,300
60	69.5	151.7	55,000
65	67.5	149.6	46,600
70	65.5	147.4	39,500
75	63.4	144.9	33,500
80	61.3	142.2	28,400
85	59.2	139.2	24,000

			
164 ft			
28	82.4	170.3	167,700*
30	81.7	170.0	162,400*
32	80.9	169.6	157,200*
34	80.2	169.3	152,300*
36	79.5	168.9	140,100
38	78.8	168.5	127,500
40	78.1	168.0	116,600
45	76.3	166.8	94,700
50	74.5	165.5	78,200
55	72.7	163.9	65,400
60	70.8	162.2	55,100
65	68.9	160.3	46,600
70	67.1	158.2	39,500
75	65.1	155.9	33,500
80	63.2	153.4	28,400
85	61.2	150.6	23,900
90	59.2	147.7	20,000
95	57.1	144.5	16,600

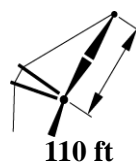
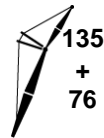
			
174 ft			
28	82.8	180.2	161,600*
30	82.1	179.9	156,500*
32	81.5	179.6	151,500*
34	80.8	179.3	146,700*
36	80.1	178.9	140,200
38	79.5	178.5	127,600
40	78.8	178.1	116,700
45	77.1	177.0	94,700
50	75.4	175.7	78,200
55	73.7	174.2	65,300
60	71.9	172.6	55,000
65	70.2	170.8	46,500
70	68.4	168.9	39,400
75	66.6	166.7	33,400
80	64.8	164.4	28,200
85	63.0	161.9	23,800
90	61.1	159.1	19,800
95	59.2	156.2	16,400
100	57.2	153.0	13,300

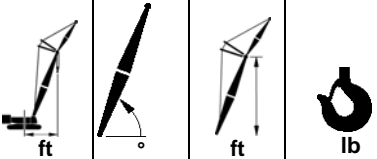



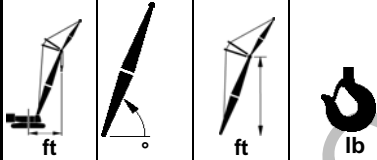

ft		lb	
 184 ft			
30	82.6	189.9	141,500*
32	81.9	189.6	137,400*
34	81.3	189.3	133,400*
36	80.7	188.9	129,500*
38	80.0	188.6	125,700*
40	79.4	188.2	116,700
45	77.8	187.1	94,800
50	76.2	185.9	78,200
55	74.6	184.5	65,300
60	72.9	183.0	55,000
65	71.3	181.3	46,500
70	69.7	179.5	39,400
75	68.0	177.4	33,400
80	66.3	175.3	28,200
85	64.5	172.9	23,800
90	62.8	170.4	19,800
95	61.0	167.6	16,400
100	59.2	164.6	13,300
105	57.3	161.5	10,500

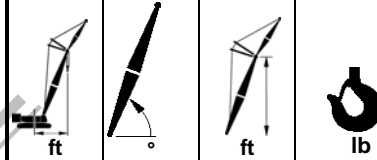

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 66 ft			
15	82.3	72.7	375,200*
16	81.4	72.5	351,800*
17	80.5	72.3	330,900*
18	79.7	72.1	312,000*
19	78.8	71.9	295,000*
20	77.8	71.7	279,600*
22	76.1	71.1	252,600*
24	74.2	70.5	229,500*
26	72.4	69.8	208,900*
28	70.5	69.1	191,100*
30	68.6	68.3	175,500*
32	66.7	67.4	161,400
34	64.8	66.4	144,700
36	62.8	65.3	130,500
38	60.8	64.2	118,300
40	58.7	62.9	107,700

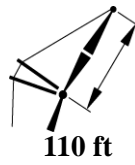
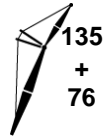
			
 75 ft			
16	82.6	82.5	330,700*
17	81.8	82.3	326,200*
18	81.0	82.2	312,600*
19	80.2	82.0	295,700*
20	79.5	81.8	280,200*
22	77.9	81.3	253,200*
24	76.3	80.8	230,400*
26	74.8	80.2	209,900*
28	73.2	79.6	192,100*
30	71.6	78.9	176,600*
32	69.9	78.1	162,900*
34	68.3	77.3	146,600
36	66.6	76.4	132,400
38	64.9	75.4	120,200
40	63.2	74.3	109,500
45	58.8	71.4	88,200


			
 85 ft			
17	82.7	92.3	302,000*
18	82.1	92.2	297,900*
19	81.4	92.0	293,900*
20	80.7	91.8	280,900*
22	79.3	91.4	253,900*
24	77.9	90.9	231,100*
26	76.6	90.4	210,900*
28	75.2	89.9	193,100*
30	73.8	89.3	177,600*
32	72.3	88.6	163,900*
34	70.9	87.9	148,200
36	69.5	87.1	133,900
38	68.0	86.2	121,700
40	66.6	85.3	111,000
45	62.8	82.8	89,600
50	58.9	79.8	73,500





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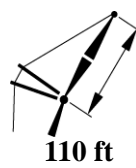
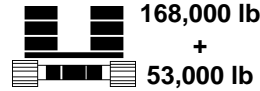
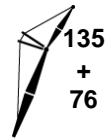
ft	°	ft	lb
 95 ft			
18	82.9	102.1	290,600*
19	82.3	102.0	286,900*
20	81.7	101.8	281,000*
22	80.4	101.4	254,100*
24	79.2	101.0	231,400*
26	78.0	100.6	211,200*
28	76.7	100.1	193,500*
30	75.5	99.5	178,000*
32	74.2	98.9	164,300*
34	73.0	98.3	149,300
36	71.7	97.6	135,000
38	70.4	96.9	122,700
40	69.1	96.1	112,000
45	65.8	93.9	90,600
50	62.5	91.3	74,400
55	59.0	88.3	61,800

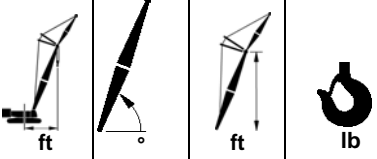
ft	°	ft	lb
 105 ft			
20	82.5	111.8	263,700*
22	81.3	111.4	254,000*
24	80.2	111.1	231,900*
26	79.1	110.7	212,000*
28	78.0	110.2	194,300*
30	76.9	109.7	178,800*
32	75.8	109.2	165,100*
34	74.6	108.6	150,400
36	73.5	108.0	136,000
38	72.3	107.3	123,700
40	71.2	106.6	113,000
45	68.2	104.7	91,500
50	65.2	102.4	75,400
55	62.2	99.8	62,700
60	59.0	96.8	52,600

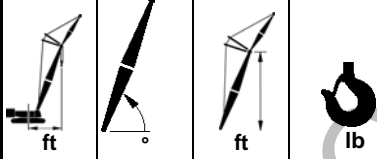
ft	°	ft	lb
 115 ft			
22	82.1	121.4	247,400*
24	81.1	121.1	231,900*
26	80.1	120.7	211,900*
28	79.1	120.3	194,200*
30	78.0	119.8	178,800*
32	77.0	119.4	165,100*
34	76.0	118.8	151,000
36	74.9	118.3	136,700
38	73.9	117.7	124,300
40	72.8	117.1	113,600
45	70.2	115.3	92,000
50	67.5	113.2	75,800
55	64.8	110.9	63,100
60	61.9	108.3	53,000
65	59.0	105.3	44,700

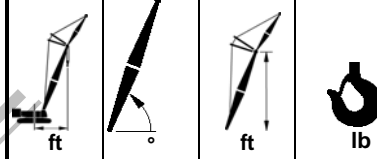
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125 ft			
22	82.7	131.4	231,700*
24	81.8	131.1	222,500*
26	80.9	130.7	212,000*
28	79.9	130.3	194,400*
30	79.0	129.9	178,900*
32	78.1	129.5	165,200*
34	77.1	129.0	151,600
36	76.2	128.5	137,200
38	75.2	127.9	124,800
40	74.2	127.4	114,100
45	71.8	125.7	92,500
50	69.4	123.9	76,200
55	66.9	121.8	63,500
60	64.3	119.4	53,400
65	61.7	116.7	45,000
70	59.1	113.8	38,000

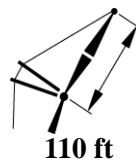
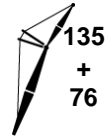
			
135 ft			
24	82.4	141.0	215,100*
26	81.5	140.7	206,600*
28	80.7	140.4	194,100*
30	79.8	140.0	178,600*
32	78.9	139.6	165,000*
34	78.1	139.1	152,000
36	77.2	138.7	137,600
38	76.3	138.1	125,200
40	75.4	137.6	114,400
45	73.2	136.1	92,700
50	71.0	134.4	76,400
55	68.7	132.5	63,700
60	66.3	130.3	53,500
65	64.0	127.9	45,100
70	61.6	125.2	38,200
75	59.1	122.3	32,200

			
144 ft			
24	82.9	151.0	194,000*
26	82.1	150.7	187,000*
28	81.3	150.4	180,300*
30	80.5	150.0	173,900*
32	79.7	149.6	165,300*
34	78.9	149.2	152,400
36	78.1	148.8	138,000
38	77.3	148.3	125,600
40	76.4	147.8	114,800
45	74.4	146.4	93,100
50	72.3	144.8	76,800
55	70.2	143.1	64,100
60	68.1	141.1	53,900
65	65.9	138.8	45,500
70	63.7	136.4	38,500
75	61.4	133.7	32,600
80	59.1	130.7	27,500



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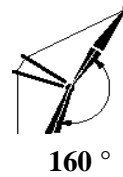
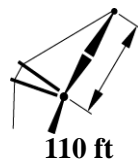
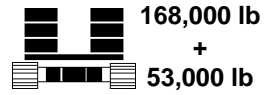
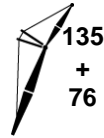
ft	°	ft	lb
 154 ft			
26	82.6	160.6	179,300*
28	81.9	160.3	172,800*
30	81.1	160.0	166,700*
32	80.4	159.6	160,800*
34	79.6	159.2	152,700
36	78.9	158.8	138,300
38	78.1	158.4	125,800
40	77.3	157.9	115,000
45	75.4	156.6	93,300
50	73.5	155.2	76,900
55	71.5	153.5	64,200
60	69.5	151.7	53,900
65	67.5	149.6	45,500
70	65.5	147.4	38,500
75	63.4	144.9	32,600
80	61.3	142.2	27,500
85	59.2	139.2	23,100



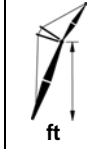


ft	°	ft	lb
 164 ft			
28	82.4	170.3	165,900*
30	81.7	170.0	160,600*
32	80.9	169.6	155,400*
34	80.2	169.3	150,500*
36	79.5	168.9	138,400
38	78.8	168.5	126,000
40	78.1	168.0	115,100
45	76.3	166.8	93,400
50	74.5	165.5	77,000
55	72.7	163.9	64,200
60	70.8	162.2	54,000
65	68.9	160.3	45,600
70	67.1	158.2	38,500
75	65.1	155.9	32,600
80	63.2	153.4	27,500
85	61.2	150.6	23,100
90	59.2	147.7	19,200
95	57.1	144.5	15,800

ft	°	ft	lb
 174 ft			
28	82.8	180.2	159,900*
30	82.1	179.9	154,800*
32	81.5	179.6	149,800*
34	80.8	179.3	145,000*
36	80.1	178.9	138,600
38	79.5	178.5	126,100
40	78.8	178.1	115,200
45	77.1	177.0	93,400
50	75.4	175.7	77,000
55	73.7	174.2	64,200
60	71.9	172.6	53,900
65	70.2	170.8	45,500
70	68.4	168.9	38,400
75	66.6	166.7	32,500
80	64.8	164.4	27,400
85	63.0	161.9	22,900
90	61.1	159.1	19,000
95	59.2	156.2	15,600
100	57.2	153.0	12,500

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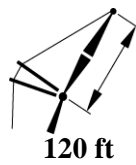
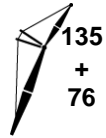



	 ft	 °	 ft	 lb
 184 ft				
30	82.6	189.9	139,900*	
32	81.9	189.6	135,700*	
34	81.3	189.3	131,700*	
36	80.7	188.9	127,800*	
38	80.0	188.6	124,000*	
40	79.4	188.2	115,300	
45	77.8	187.1	93,500	
50	76.2	185.9	77,000	
55	74.6	184.5	64,200	
60	72.9	183.0	53,900	
65	71.3	181.3	45,500	
70	69.7	179.5	38,500	
75	68.0	177.4	32,500	
80	66.3	175.3	27,400	
85	64.5	172.9	22,900	
90	62.8	170.4	19,000	
95	61.0	167.6	15,600	
100	59.2	164.6	12,500	
105	57.3	161.5	9,800	





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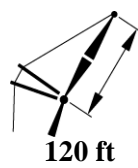
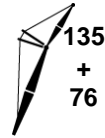
ft	°	ft	lb
 66 ft			
15	82.3	72.7	371,600*
16	81.4	72.5	348,300*
17	80.5	72.3	327,500*
18	79.7	72.1	308,700*
19	78.8	71.9	291,800*
20	77.8	71.7	276,400*
22	76.1	71.1	249,300*
24	74.2	70.5	225,400*
26	72.4	69.8	204,900*
28	70.5	69.1	187,200*
30	68.6	68.3	171,700*
32	66.7	67.4	157,400
34	64.8	66.4	140,900
36	62.8	65.3	126,900
38	60.8	64.2	114,800
40	58.7	62.9	104,300

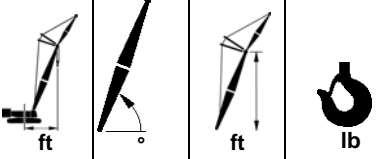

ft	°	ft	lb
 75 ft			
16	82.6	82.5	327,400*
17	81.8	82.3	322,900*
18	81.0	82.2	309,400*
19	80.2	82.0	292,500*
20	79.5	81.8	277,100*
22	77.9	81.3	250,200*
24	76.3	80.8	226,600*
26	74.8	80.2	206,100*
28	73.2	79.6	188,400*
30	71.6	78.9	172,900*
32	69.9	78.1	159,300*
34	68.3	77.3	143,100
36	66.6	76.4	129,000
38	64.9	75.4	116,800
40	63.2	74.3	106,300
45	58.8	71.4	85,200

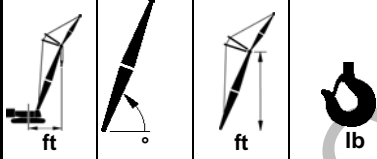
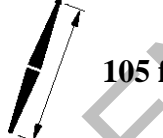
ft	°	ft	lb
 85 ft			
17	82.7	92.3	299,000*
18	82.1	92.2	294,800*
19	81.4	92.0	290,800*
20	80.7	91.8	277,900*
22	79.3	91.4	251,000*
24	77.9	90.9	227,600*
26	76.6	90.4	207,200*
28	75.2	89.9	189,600*
30	73.8	89.3	174,100*
32	72.3	88.6	160,500*
34	70.9	87.9	144,800
36	69.5	87.1	130,700
38	68.0	86.2	118,500
40	66.6	85.3	108,000
45	62.8	82.8	86,800
50	58.9	79.8	70,800

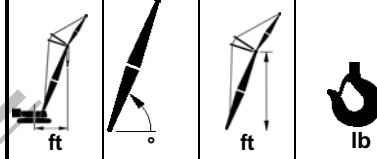
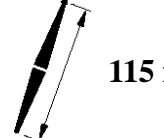
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18	82.9	102.1	287,700*
19	82.3	102.0	284,000*
20	81.7	101.8	278,100*
22	80.4	101.4	251,300*
24	79.2	101.0	228,100*
26	78.0	100.6	207,700*
28	76.7	100.1	190,000*
30	75.5	99.5	174,600*
32	74.2	98.9	161,000*
34	73.0	98.3	146,100
36	71.7	97.6	131,900
38	70.4	96.9	119,700
40	69.1	96.1	109,100
45	65.8	93.9	87,800
50	62.5	91.3	71,800
55	59.0	88.3	59,300

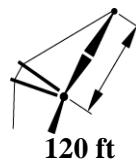
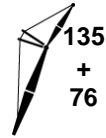
			
			
20	82.5	111.8	261,000*
22	81.3	111.4	250,800*
24	80.2	111.1	228,900*
26	79.1	110.7	208,500*
28	78.0	110.2	190,900*
30	76.9	109.7	175,500*
32	75.8	109.2	161,900*
34	74.6	108.6	147,200
36	73.5	108.0	133,000
38	72.3	107.3	120,800
40	71.2	106.6	110,200
45	68.2	104.7	88,900
50	65.2	102.4	72,800
55	62.2	99.8	60,300
60	59.0	96.8	50,300

			
			
22	82.1	121.4	244,200*
24	81.1	121.1	228,900*
26	80.1	120.7	208,500*
28	79.1	120.3	190,900*
30	78.0	119.8	175,500*
32	77.0	119.4	162,000*
34	76.0	118.8	148,000
36	74.9	118.3	133,700
38	73.9	117.7	121,500
40	72.8	117.1	110,800
45	70.2	115.3	89,500
50	67.5	113.2	73,400
55	64.8	110.9	60,800
60	61.9	108.3	50,700
65	59.0	105.3	42,500



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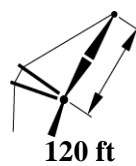
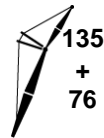
ft	°	ft	lb
 125 ft			
22	82.7	131.4	228,800*
24	81.8	131.1	219,500*
26	80.9	130.7	208,700*
28	79.9	130.3	191,100*
30	79.0	129.9	175,700*
32	78.1	129.5	162,200*
34	77.1	129.0	148,600
36	76.2	128.5	134,300
38	75.2	127.9	122,100
40	74.2	127.4	111,400
45	71.8	125.7	90,000
50	69.4	123.9	73,800
55	66.9	121.8	61,300
60	64.3	119.4	51,200
65	61.7	116.7	42,900
70	59.1	113.8	36,000

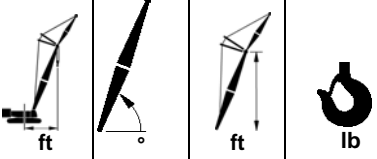
ft	°	ft	lb
 135 ft			
24	82.4	141.0	212,200*
26	81.5	140.7	203,700*
28	80.7	140.4	190,900*
30	79.8	140.0	175,500*
32	78.9	139.6	162,000*
34	78.1	139.1	149,100
36	77.2	138.7	134,800
38	76.3	138.1	122,500
40	75.4	137.6	111,800
45	73.2	136.1	90,300
50	71.0	134.4	74,100
55	68.7	132.5	61,500
60	66.3	130.3	51,400
65	64.0	127.9	43,100
70	61.6	125.2	36,200
75	59.1	122.3	30,300

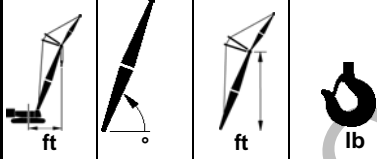
ft	°	ft	lb
 144 ft			
24	82.9	151.0	191,300*
26	82.1	150.7	184,300*
28	81.3	150.4	177,600*
30	80.5	150.0	171,200*
32	79.7	149.6	162,300*
34	78.9	149.2	149,600
36	78.1	148.8	135,200
38	77.3	148.3	122,900
40	76.4	147.8	112,200
45	74.4	146.4	90,700
50	72.3	144.8	74,600
55	70.2	143.1	61,900
60	68.1	141.1	51,800
65	65.9	138.8	43,500
70	63.7	136.4	36,600
75	61.4	133.7	30,700
80	59.1	130.7	25,700

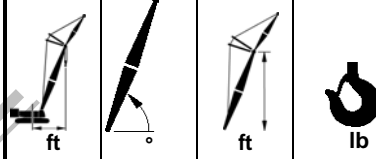
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154 ft			
26	82.6	160.6	176,600*
28	81.9	160.3	170,200*
30	81.1	160.0	164,000*
32	80.4	159.6	158,100*
34	79.6	159.2	149,900
36	78.9	158.8	135,500
38	78.1	158.4	123,200
40	77.3	157.9	112,500
45	75.4	156.6	90,900
50	73.5	155.2	74,700
55	71.5	153.5	62,000
60	69.5	151.7	51,900
65	67.5	149.6	43,600
70	65.5	147.4	36,600
75	63.4	144.9	30,700
80	61.3	142.2	25,700
85	59.2	139.2	21,300

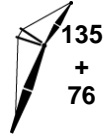
			
164 ft			
28	82.4	170.3	163,400*
30	81.7	170.0	158,000*
32	80.9	169.6	152,900*
34	80.2	169.3	147,900*
36	79.5	168.9	135,800
38	78.8	168.5	123,400
40	78.1	168.0	112,600
45	76.3	166.8	91,100
50	74.5	165.5	74,800
55	72.7	163.9	62,100
60	70.8	162.2	52,000
65	68.9	160.3	43,600
70	67.1	158.2	36,700
75	65.1	155.9	30,800
80	63.2	153.4	25,700
85	61.2	150.6	21,300
90	59.2	147.7	17,500
95	57.1	144.5	14,100

			
174 ft			
28	82.8	180.2	157,400*
30	82.1	179.9	152,300*
32	81.5	179.6	147,300*
34	80.8	179.3	142,500*
36	80.1	178.9	136,000
38	79.5	178.5	123,600
40	78.8	178.1	112,800
45	77.1	177.0	91,100
50	75.4	175.7	74,800
55	73.7	174.2	62,100
60	71.9	172.6	51,900
65	70.2	170.8	43,600
70	68.4	168.9	36,600
75	66.6	166.7	30,700
80	64.8	164.4	25,600
85	63.0	161.9	21,200
90	61.1	159.1	17,300
95	59.2	156.2	13,900



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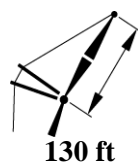
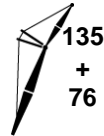
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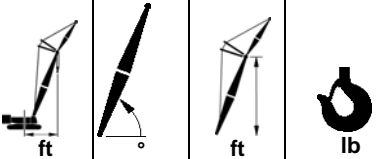


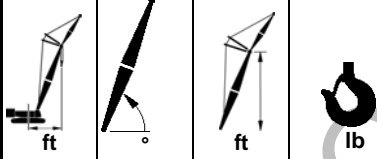
ft		lb	
<p>184 ft</p>			
30	82.6	189.9	137,500*
32	81.9	189.6	133,400*
34	81.3	189.3	129,400*
36	80.7	188.9	125,500*
38	80.0	188.6	121,600*
40	79.4	188.2	112,900
45	77.8	187.1	91,200
50	76.2	185.9	74,900
55	74.6	184.5	62,200
60	72.9	183.0	52,000
65	71.3	181.3	43,600
70	69.7	179.5	36,600
75	68.0	177.4	30,700
80	66.3	175.3	25,700
85	64.5	172.9	21,200
90	62.8	170.4	17,400
95	61.0	167.6	14,000

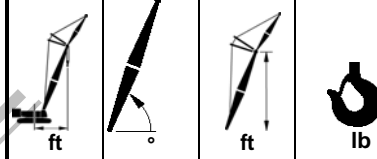
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66 ft			
15	82.3	72.7	376,400*
16	81.4	72.5	352,700*
17	80.5	72.3	331,400*
18	79.7	72.1	312,400*
19	78.8	71.9	295,100*
20	77.8	71.7	279,400*
22	76.1	71.1	252,000*
24	74.2	70.5	228,300*
26	72.4	69.8	207,300*
28	70.5	69.1	189,200*
30	68.6	68.3	173,300*
32	66.7	67.4	159,100
34	64.8	66.4	142,200
36	62.8	65.3	127,800
38	60.8	64.2	115,400
40	58.7	62.9	104,700
45	53.3	59.3	83,100

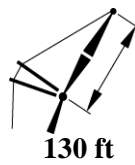
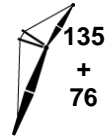
			
75 ft			
16	82.6	82.5	331,500*
17	81.8	82.3	326,900*
18	81.0	82.2	313,200*
19	80.2	82.0	296,000*
20	79.5	81.8	280,400*
22	77.9	81.3	253,000*
24	76.3	80.8	229,700*
26	74.8	80.2	208,800*
28	73.2	79.6	190,700*
30	71.6	78.9	174,900*
32	69.9	78.1	160,900*
34	68.3	77.3	144,700
36	66.6	76.4	130,300
38	64.9	75.4	117,900
40	63.2	74.3	107,100
45	58.8	71.4	85,500
50	54.2	67.8	69,100

			
85 ft			
17	82.7	92.3	302,700*
18	82.1	92.2	298,400*
19	81.4	92.0	294,300*
20	80.7	91.8	281,300*
22	79.3	91.4	253,900*
24	77.9	90.9	230,900*
26	76.6	90.4	210,200*
28	75.2	89.9	192,100*
30	73.8	89.3	176,300*
32	72.3	88.6	162,400*
34	70.9	87.9	146,800
36	69.5	87.1	132,300
38	68.0	86.2	119,900
40	66.6	85.3	109,100
45	62.8	82.8	87,400
50	58.9	79.8	71,000
55	54.8	76.4	58,200



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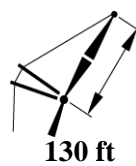
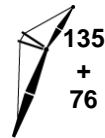
ft	°	ft	lb
95 ft			
18	82.9	102.1	291,200*
19	82.3	102.0	287,400*
20	81.7	101.8	281,600*
22	80.4	101.4	254,400*
24	79.2	101.0	231,300*
26	78.0	100.6	210,800*
28	76.7	100.1	192,800*
30	75.5	99.5	177,000*
32	74.2	98.9	163,100*
34	73.0	98.3	148,300
36	71.7	97.6	133,800
38	70.4	96.9	121,300
40	69.1	96.1	110,400
45	65.8	93.9	88,700
50	62.5	91.3	72,300
55	59.0	88.3	59,400
60	55.3	84.9	49,200
65	51.5	81.0	40,700

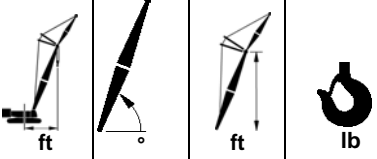
ft	°	ft	lb
105 ft			
20	82.5	111.8	264,000*
22	81.3	111.4	255,000*
24	80.2	111.1	232,000*
26	79.1	110.7	211,800*
28	78.0	110.2	193,800*
30	76.9	109.7	178,000*
32	75.8	109.2	164,100*
34	74.6	108.6	149,600
36	73.5	108.0	135,000
38	72.3	107.3	122,600
40	71.2	106.6	111,700
45	68.2	104.7	89,900
50	65.2	102.4	73,500
55	62.2	99.8	60,700
60	59.0	96.8	50,400
65	55.7	93.5	41,900
70	52.3	89.7	34,900

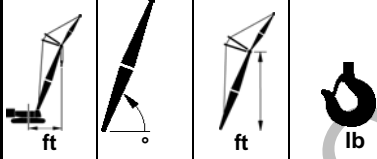
ft	°	ft	lb
115 ft			
22	82.1	121.4	248,300*
24	81.1	121.1	232,100*
26	80.1	120.7	211,900*
28	79.1	120.3	193,900*
30	78.0	119.8	178,200*
32	77.0	119.4	164,300*
34	76.0	118.8	150,500
36	74.9	118.3	135,900
38	73.9	117.7	123,400
40	72.8	117.1	112,500
45	70.2	115.3	90,600
50	67.5	113.2	74,200
55	64.8	110.9	61,300
60	61.9	108.3	51,000
65	59.0	105.3	42,500
70	56.0	102.0	35,500
75	52.9	98.3	29,500

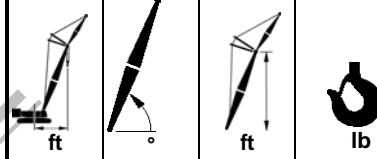
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125 ft			
22	82.7	131.4	232,600*
24	81.8	131.1	223,200*
26	80.9	130.7	212,200*
28	79.9	130.3	194,200*
30	79.0	129.9	178,500*
32	78.1	129.5	164,600*
34	77.1	129.0	151,300
36	76.2	128.5	136,600
38	75.2	127.9	124,100
40	74.2	127.4	113,200
45	71.8	125.7	91,300
50	69.4	123.9	74,800
55	66.9	121.8	61,900
60	64.3	119.4	51,600
65	61.7	116.7	43,100
70	59.1	113.8	36,000
75	56.3	110.5	30,000
80	53.5	106.8	24,900

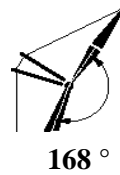
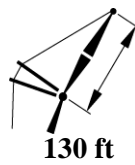
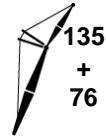
			
135 ft			
24	82.4	141.0	215,800*
26	81.5	140.7	207,100*
28	80.7	140.4	194,100*
30	79.8	140.0	178,400*
32	78.9	139.6	164,500*
34	78.1	139.1	151,800
36	77.2	138.7	137,200
38	76.3	138.1	124,600
40	75.4	137.6	113,700
45	73.2	136.1	91,700
50	71.0	134.4	75,200
55	68.7	132.5	62,300
60	66.3	130.3	51,900
65	64.0	127.9	43,400
70	61.6	125.2	36,300
75	59.1	122.3	30,300
80	56.6	119.0	25,100
85	53.9	115.4	20,600
90	51.2	111.4	16,700

			
144 ft			
24	82.9	151.0	194,700*
26	82.1	150.7	187,600*
28	81.3	150.4	180,700*
30	80.5	150.0	174,200*
32	79.7	149.6	165,000*
34	78.9	149.2	152,400
36	78.1	148.8	137,700
38	77.3	148.3	125,200
40	76.4	147.8	114,200
45	74.4	146.4	92,200
50	72.3	144.8	75,700
55	70.2	143.1	62,800
60	68.1	141.1	52,400
65	65.9	138.8	43,900
70	63.7	136.4	36,800
75	61.4	133.7	30,800
80	59.1	130.7	25,700
85	56.8	127.5	21,200
90	54.3	123.9	17,200
95	51.8	120.1	13,800



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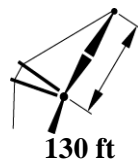
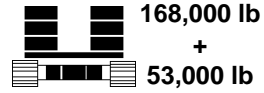
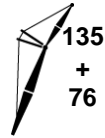
ft	°	ft	lb
154 ft			
26	82.6	160.6	179,800*
28	81.9	160.3	173,200*
30	81.1	160.0	167,000*
32	80.4	159.6	160,900*
34	79.6	159.2	152,500*
36	78.9	158.8	138,100
38	78.1	158.4	125,500
40	77.3	157.9	114,500
45	75.4	156.6	92,500
50	73.5	155.2	75,900
55	71.5	153.5	63,000
60	69.5	151.7	52,600
65	67.5	149.6	44,100
70	65.5	147.4	37,000
75	63.4	144.9	30,900
80	61.3	142.2	25,800
85	59.2	139.2	21,300
90	56.9	136.0	17,300
95	54.7	132.5	13,800
100	52.3	128.7	10,700

ft	°	ft	lb
164 ft			
28	82.4	170.3	166,200*
30	81.7	170.0	160,800*
32	80.9	169.6	155,600*
34	80.2	169.3	150,500*
36	79.5	168.9	138,400
38	78.8	168.5	125,800
40	78.1	168.0	114,800
45	76.3	166.8	92,700
50	74.5	165.5	76,100
55	72.7	163.9	63,100
60	70.8	162.2	52,700
65	68.9	160.3	44,200
70	67.1	158.2	37,100
75	65.1	155.9	31,000
80	63.2	153.4	25,900
85	61.2	150.6	21,400
90	59.2	147.7	17,400
95	57.1	144.5	13,900
100	55.0	141.0	10,800

ft	°	ft	lb
174 ft			
28	82.8	180.2	160,100*
30	82.1	179.9	155,000*
32	81.5	179.6	149,900*
34	80.8	179.3	145,000*
36	80.1	178.9	138,700
38	79.5	178.5	126,000
40	78.8	178.1	115,000
45	77.1	177.0	92,900
50	75.4	175.7	76,200
55	73.7	174.2	63,200
60	71.9	172.6	52,800
65	70.2	170.8	44,200
70	68.4	168.9	37,100
75	66.6	166.7	31,000
80	64.8	164.4	25,800
85	63.0	161.9	21,300
90	61.1	159.1	17,400
95	59.2	156.2	13,900

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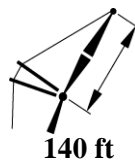
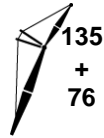



	 184 ft		
30	82.6	189.9	140,100*
32	81.9	189.6	135,900*
34	81.3	189.3	131,800*
36	80.7	188.9	127,800*
38	80.0	188.6	123,900*
40	79.4	188.2	115,100
45	77.8	187.1	93,000
50	76.2	185.9	76,300
55	74.6	184.5	63,300
60	72.9	183.0	52,900
65	71.3	181.3	44,300
70	69.7	179.5	37,200
75	68.0	177.4	31,100
80	66.3	175.3	25,900
85	64.5	172.9	21,400
90	62.8	170.4	17,500
95	61.0	167.6	14,000





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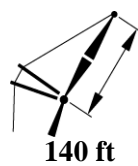
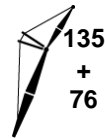
ft	°	ft	lb
 66 ft			
15	82.3	72.7	373,500*
16	81.4	72.5	349,800*
17	80.5	72.3	328,600*
18	79.7	72.1	309,500*
19	78.8	71.9	292,300*
20	77.8	71.7	276,600*
22	76.1	71.1	249,100*
24	74.2	70.5	224,600*
26	72.4	69.8	203,700*
28	70.5	69.1	185,600*
30	68.6	68.3	169,700*
32	66.7	67.4	155,400
34	64.8	66.4	138,600
36	62.8	65.3	124,300
38	60.8	64.2	112,100
40	58.7	62.9	101,400
45	53.3	59.3	79,900

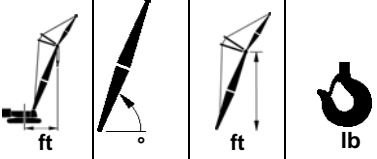

ft	°	ft	lb
 75 ft			
16	82.6	82.5	328,700*
17	81.8	82.3	324,000*
18	81.0	82.2	310,500*
19	80.2	82.0	293,300*
20	79.5	81.8	277,700*
22	77.9	81.3	250,400*
24	76.3	80.8	226,300*
26	74.8	80.2	205,400*
28	73.2	79.6	187,400*
30	71.6	78.9	171,500*
32	69.9	78.1	157,600*
34	68.3	77.3	141,400
36	66.6	76.4	127,100
38	64.9	75.4	114,800
40	63.2	74.3	104,100
45	58.8	71.4	82,500
50	54.2	67.8	66,300

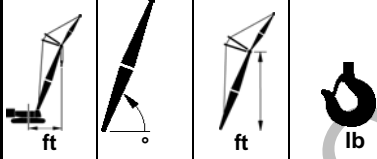

ft	°	ft	lb
 85 ft			
17	82.7	92.3	300,100*
18	82.1	92.2	295,800*
19	81.4	92.0	291,600*
20	80.7	91.8	278,700*
22	79.3	91.4	251,400*
24	77.9	90.9	227,700*
26	76.6	90.4	206,900*
28	75.2	89.9	188,900*
30	73.8	89.3	173,100*
32	72.3	88.6	159,200*
34	70.9	87.9	143,700
36	69.5	87.1	129,300
38	68.0	86.2	116,900
40	66.6	85.3	106,200
45	62.8	82.8	84,600
50	58.9	79.8	68,300
55	54.8	76.4	55,700

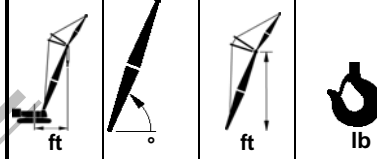

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 95 ft			
18	82.9	102.1	288,700*
19	82.3	102.0	284,800*
20	81.7	101.8	279,200*
22	80.4	101.4	251,900*
24	79.2	101.0	228,500*
26	78.0	100.6	207,700*
28	76.7	100.1	189,700*
30	75.5	99.5	174,000*
32	74.2	98.9	160,100*
34	73.0	98.3	145,300
36	71.7	97.6	130,900
38	70.4	96.9	118,500
40	69.1	96.1	107,700
45	65.8	93.9	86,100
50	62.5	91.3	69,700
55	59.0	88.3	57,000
60	55.3	84.9	46,800
65	51.5	81.0	38,400

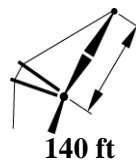
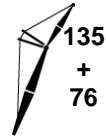
			
 105 ft			
20	82.5	111.8	261,700*
22	81.3	111.4	252,100*
24	80.2	111.1	229,500*
26	79.1	110.7	208,800*
28	78.0	110.2	190,800*
30	76.9	109.7	175,100*
32	75.8	109.2	161,300*
34	74.6	108.6	146,800
36	73.5	108.0	132,300
38	72.3	107.3	119,900
40	71.2	106.6	109,100
45	68.2	104.7	87,400
50	65.2	102.4	71,100
55	62.2	99.8	58,300
60	59.0	96.8	48,100
65	55.7	93.5	39,700
70	52.3	89.7	32,700

			
 115 ft			
22	82.1	121.4	245,600*
24	81.1	121.1	229,700*
26	80.1	120.7	209,000*
28	79.1	120.3	191,100*
30	78.0	119.8	175,400*
32	77.0	119.4	161,500*
34	76.0	118.8	147,800
36	74.9	118.3	133,300
38	73.9	117.7	120,800
40	72.8	117.1	110,000
45	70.2	115.3	88,300
50	67.5	113.2	71,900
55	64.8	110.9	59,100
60	61.9	108.3	48,800
65	59.0	105.3	40,400
70	56.0	102.0	33,400
75	52.9	98.3	27,400



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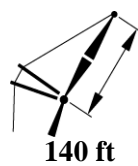
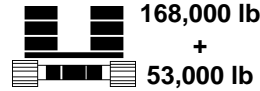
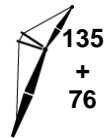
ft	°	ft	lb
125 ft			
22	82.7	131.4	230,100*
24	81.8	131.1	220,700*
26	80.9	130.7	209,400*
28	79.9	130.3	191,400*
30	79.0	129.9	175,800*
32	78.1	129.5	161,900*
34	77.1	129.0	148,600
36	76.2	128.5	134,100
38	75.2	127.9	121,600
40	74.2	127.4	110,800
45	71.8	125.7	89,000
50	69.4	123.9	72,600
55	66.9	121.8	59,800
60	64.3	119.4	49,500
65	61.7	116.7	41,100
70	59.1	113.8	34,000
75	56.3	110.5	28,100
80	53.5	106.8	22,900






ft	°	ft	lb
135 ft			
24	82.4	141.0	213,400*
26	81.5	140.7	204,700*
28	80.7	140.4	191,400*
30	79.8	140.0	175,700*
32	78.9	139.6	161,900*
34	78.1	139.1	149,300
36	77.2	138.7	134,700
38	76.3	138.1	122,200
40	75.4	137.6	111,300
45	73.2	136.1	89,500
50	71.0	134.4	73,000
55	68.7	132.5	60,200
60	66.3	130.3	49,900
65	64.0	127.9	41,400
70	61.6	125.2	34,400
75	59.1	122.3	28,400
80	56.6	119.0	23,300
85	53.9	115.4	18,800
90	51.2	111.4	14,900






ft	°	ft	lb
144 ft			
24	82.9	151.0	192,400*
26	82.1	150.7	185,200*
28	81.3	150.4	178,400*
30	80.5	150.0	171,800*
32	79.7	149.6	162,400*
34	78.9	149.2	149,900
36	78.1	148.8	135,300
38	77.3	148.3	122,800
40	76.4	147.8	111,900
45	74.4	146.4	90,100
50	72.3	144.8	73,600
55	70.2	143.1	60,800
60	68.1	141.1	50,500
65	65.9	138.8	42,000
70	63.7	136.4	35,000
75	61.4	133.7	29,000
80	59.1	130.7	23,800
85	56.8	127.5	19,400
90	54.3	123.9	15,500
95	51.8	120.1	12,000






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ft	ft	ft	lb
 154 ft			
26	82.6	160.6	177,600*
28	81.9	160.3	171,000*
30	81.1	160.0	164,700*
32	80.4	159.6	158,600*
34	79.6	159.2	150,000*
36	78.9	158.8	135,800
38	78.1	158.4	123,200
40	77.3	157.9	112,300
45	75.4	156.6	90,400
50	73.5	155.2	73,900
55	71.5	153.5	61,000
60	69.5	151.7	50,700
65	67.5	149.6	42,200
70	65.5	147.4	35,100
75	63.4	144.9	29,100
80	61.3	142.2	24,000
85	59.2	139.2	19,500
90	56.9	136.0	15,600
95	54.7	132.5	12,100

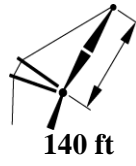
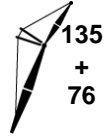
   			
ft	ft	ft	lb
 164 ft			
28	82.4	170.3	164,100*
30	81.7	170.0	158,700*
32	80.9	169.6	153,400*
34	80.2	169.3	148,300*
36	79.5	168.9	136,100
38	78.8	168.5	123,500
40	78.1	168.0	112,600
45	76.3	166.8	90,700
50	74.5	165.5	74,100
55	72.7	163.9	61,200
60	70.8	162.2	50,900
65	68.9	160.3	42,400
70	67.1	158.2	35,300
75	65.1	155.9	29,300
80	63.2	153.4	24,100
85	61.2	150.6	19,700
90	59.2	147.7	15,700
95	57.1	144.5	12,300

   			
ft	ft	ft	lb
 174 ft			
28	82.8	180.2	158,000*
30	82.1	179.9	152,800*
32	81.5	179.6	147,800*
34	80.8	179.3	142,800*
36	80.1	178.9	136,400
38	79.5	178.5	123,800
40	78.8	178.1	112,800
45	77.1	177.0	90,800
50	75.4	175.7	74,300
55	73.7	174.2	61,300
60	71.9	172.6	50,900
65	70.2	170.8	42,400
70	68.4	168.9	35,300
75	66.6	166.7	29,300
80	64.8	164.4	24,100
85	63.0	161.9	19,700
90	61.1	159.1	15,700



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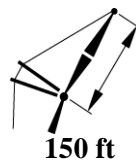
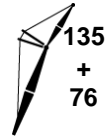
14000 S-2

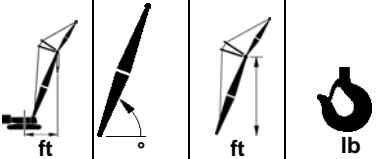



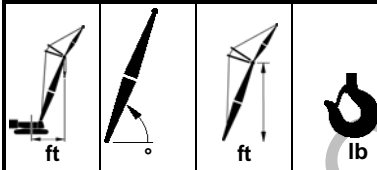
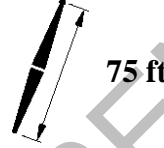
ft		lb	
30	82.6	189.9	138,100*
32	81.9	189.6	133,800*
34	81.3	189.3	129,800*
36	80.7	188.9	125,800*
38	80.0	188.6	121,900*
40	79.4	188.2	113,000
45	77.8	187.1	91,000
50	76.2	185.9	74,400
55	74.6	184.5	61,500
60	72.9	183.0	51,100
65	71.3	181.3	42,600
70	69.7	179.5	35,500
75	68.0	177.4	29,500
80	66.3	175.3	24,300
85	64.5	172.9	19,800
90	62.8	170.4	15,900

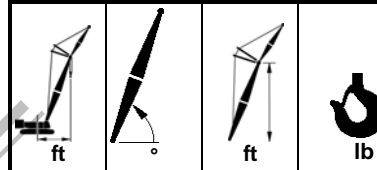
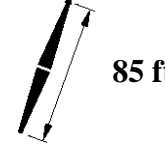
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15	82.3	72.7	371,300*
16	81.4	72.5	347,600*
17	80.5	72.3	326,500*
18	79.7	72.1	307,400*
19	78.8	71.9	290,200*
20	77.8	71.7	274,600*
22	76.1	71.1	246,400*
24	74.2	70.5	222,100*
26	72.4	69.8	201,200*
28	70.5	69.1	183,100*
30	68.6	68.3	167,200*
32	66.7	67.4	152,700
34	64.8	66.4	136,000
36	62.8	65.3	121,800
38	60.8	64.2	109,600
40	58.7	62.9	99,000
45	53.3	59.3	77,700

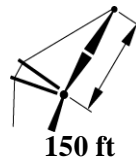
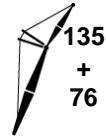
			
			
16	82.6	82.5	326,600*
17	81.8	82.3	321,800*
18	81.0	82.2	308,600*
19	80.2	82.0	291,400*
20	79.5	81.8	275,800*
22	77.9	81.3	248,200*
24	76.3	80.8	223,900*
26	74.8	80.2	203,000*
28	73.2	79.6	185,000*
30	71.6	78.9	169,200*
32	69.9	78.1	155,300*
34	68.3	77.3	139,000
36	66.6	76.4	124,800
38	64.9	75.4	112,500
40	63.2	74.3	101,900
45	58.8	71.4	80,500
50	54.2	67.8	64,400

			
			
17	82.7	92.3	298,200*
18	82.1	92.2	293,800*
19	81.4	92.0	289,600*
20	80.7	91.8	276,900*
22	79.3	91.4	249,700*
24	77.9	90.9	225,400*
26	76.6	90.4	204,700*
28	75.2	89.9	186,700*
30	73.8	89.3	171,000*
32	72.3	88.6	157,100*
34	70.9	87.9	141,400
36	69.5	87.1	127,100
38	68.0	86.2	114,800
40	66.6	85.3	104,200
45	62.8	82.8	82,700
50	58.9	79.8	66,500
55	54.8	76.4	53,900



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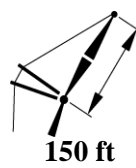
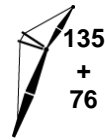
ft	°	ft	lb
 95 ft			
18	82.9	102.1	286,800*
19	82.3	102.0	282,900*
20	81.7	101.8	277,400*
22	80.4	101.4	250,300*
24	79.2	101.0	226,300*
26	78.0	100.6	205,500*
28	76.7	100.1	187,600*
30	75.5	99.5	171,900*
32	74.2	98.9	158,100*
34	73.0	98.3	143,200
36	71.7	97.6	128,800
38	70.4	96.9	116,500
40	69.1	96.1	105,800
45	65.8	93.9	84,300
50	62.5	91.3	68,100
55	59.0	88.3	55,400
60	55.3	84.9	45,200
65	51.5	81.0	36,900

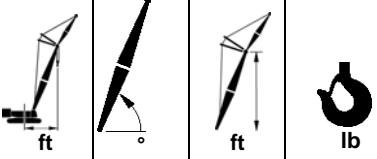
ft	°	ft	lb
 105 ft			
20	82.5	111.8	260,000*
22	81.3	111.4	250,000*
24	80.2	111.1	227,400*
26	79.1	110.7	206,700*
28	78.0	110.2	188,800*
30	76.9	109.7	173,100*
32	75.8	109.2	159,300*
34	74.6	108.6	144,700
36	73.5	108.0	130,400
38	72.3	107.3	118,000
40	71.2	106.6	107,300
45	68.2	104.7	85,700
50	65.2	102.4	69,500
55	62.2	99.8	56,800
60	59.0	96.8	46,600
65	55.7	93.5	38,300
70	52.3	89.7	31,300

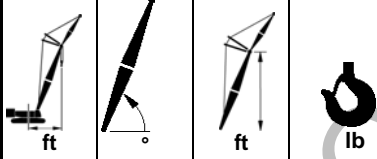
ft	°	ft	lb
 115 ft			
22	82.1	121.4	243,600*
24	81.1	121.1	227,700*
26	80.1	120.7	207,000*
28	79.1	120.3	189,100*
30	78.0	119.8	173,500*
32	77.0	119.4	159,700*
34	76.0	118.8	145,800
36	74.9	118.3	131,400
38	73.9	117.7	119,000
40	72.8	117.1	108,300
45	70.2	115.3	86,600
50	67.5	113.2	70,400
55	64.8	110.9	57,600
60	61.9	108.3	47,400
65	59.0	105.3	39,100
70	56.0	102.0	32,100
75	52.9	98.3	26,200

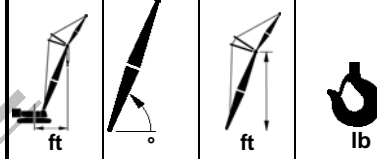
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125 ft			
22	82.7	131.4	228,200*
24	81.8	131.1	218,700*
26	80.9	130.7	207,400*
28	79.9	130.3	189,600*
30	79.0	129.9	173,900*
32	78.1	129.5	160,100*
34	77.1	129.0	146,800
36	76.2	128.5	132,300
38	75.2	127.9	119,900
40	74.2	127.4	109,100
45	71.8	125.7	87,400
50	69.4	123.9	71,100
55	66.9	121.8	58,400
60	64.3	119.4	48,200
65	61.7	116.7	39,800
70	59.1	113.8	32,800
75	56.3	110.5	26,900
80	53.5	106.8	21,800

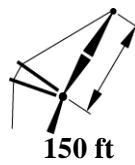
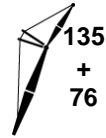
			
135 ft			
24	82.4	141.0	211,500*
26	81.5	140.7	202,800*
28	80.7	140.4	189,600*
30	79.8	140.0	173,900*
32	78.9	139.6	160,200*
34	78.1	139.1	147,500
36	77.2	138.7	133,000
38	76.3	138.1	120,500
40	75.4	137.6	109,700
45	73.2	136.1	88,000
50	71.0	134.4	71,600
55	68.7	132.5	58,900
60	66.3	130.3	48,600
65	64.0	127.9	40,200
70	61.6	125.2	33,200
75	59.1	122.3	27,200
80	56.6	119.0	22,100
85	53.9	115.4	17,700
90	51.2	111.4	13,800

			
144 ft			
24	82.9	151.0	190,600*
26	82.1	150.7	183,500*
28	81.3	150.4	176,600*
30	80.5	150.0	170,000*
32	79.7	149.6	160,700*
34	78.9	149.2	148,200
36	78.1	148.8	133,700
38	77.3	148.3	121,200
40	76.4	147.8	110,400
45	74.4	146.4	88,600
50	72.3	144.8	72,300
55	70.2	143.1	59,500
60	68.1	141.1	49,200
65	65.9	138.8	40,800
70	63.7	136.4	33,800
75	61.4	133.7	27,900
80	59.1	130.7	22,800
85	56.8	127.5	18,300
90	54.3	123.9	14,400
95	51.8	120.1	11,000



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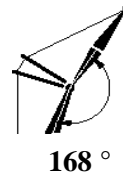
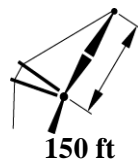
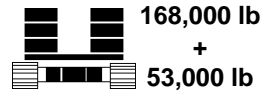
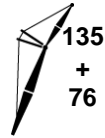
ft	°	ft	lb
154 ft			
26	82.6	160.6	175,800*
28	81.9	160.3	169,200*
30	81.1	160.0	162,900*
32	80.4	159.6	156,900*
34	79.6	159.2	148,400*
36	78.9	158.8	134,100
38	78.1	158.4	121,600
40	77.3	157.9	110,800
45	75.4	156.6	89,000
50	73.5	155.2	72,600
55	71.5	153.5	59,800
60	69.5	151.7	49,500
65	67.5	149.6	41,100
70	65.5	147.4	34,000
75	63.4	144.9	28,100
80	61.3	142.2	22,900
85	59.2	139.2	18,500
90	56.9	136.0	14,600






ft	°	ft	lb
164 ft			
28	82.4	170.3	162,400*
30	81.7	170.0	157,000*
32	80.9	169.6	151,700*
34	80.2	169.3	146,600*
36	79.5	168.9	134,500
38	78.8	168.5	122,000
40	78.1	168.0	111,100
45	76.3	166.8	89,300
50	74.5	165.5	72,800
55	72.7	163.9	60,000
60	70.8	162.2	49,700
65	68.9	160.3	41,300
70	67.1	158.2	34,200
75	65.1	155.9	28,300
80	63.2	153.4	23,100
85	61.2	150.6	18,700
90	59.2	147.7	14,800

ft	°	ft	lb
174 ft			
28	82.8	180.2	156,400*
30	82.1	179.9	151,200*
32	81.5	179.6	146,100*
34	80.8	179.3	141,200*
36	80.1	178.9	134,900
38	79.5	178.5	122,300
40	78.8	178.1	111,400
45	77.1	177.0	89,500
50	75.4	175.7	73,000
55	73.7	174.2	60,100
60	71.9	172.6	49,800
65	70.2	170.8	41,400
70	68.4	168.9	34,300
75	66.6	166.7	28,300
80	64.8	164.4	23,200
85	63.0	161.9	18,700
90	61.1	159.1	14,800

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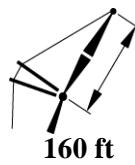
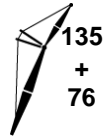



	 ft	 °	 ft	 lb
	 184 ft			
30	82.6	189.9	136,600*	
32	81.9	189.6	132,300*	
34	81.3	189.3	128,200*	
36	80.7	188.9	124,200*	
38	80.0	188.6	120,300*	
40	79.4	188.2	111,600	
45	77.8	187.1	89,700	
50	76.2	185.9	73,200	
55	74.6	184.5	60,300	
60	72.9	183.0	50,000	
65	71.3	181.3	41,500	
70	69.7	179.5	34,500	
75	68.0	177.4	28,500	
80	66.3	175.3	23,300	
85	64.5	172.9	18,900	
90	62.8	170.4	15,000	





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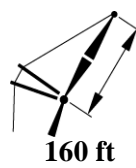
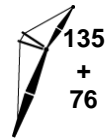
ft	ft	ft	lb
 66 ft			
15	82.3	72.7	368,300*
16	81.4	72.5	344,600*
17	80.5	72.3	323,500*
18	79.7	72.1	304,500*
19	78.8	71.9	287,300*
20	77.8	71.7	271,400*
22	76.1	71.1	242,600*
24	74.2	70.5	218,200*
26	72.4	69.8	197,400*
28	70.5	69.1	179,300*
30	68.6	68.3	163,500*
32	66.7	67.4	148,900
34	64.8	66.4	132,300
36	62.8	65.3	118,200
38	60.8	64.2	106,100
40	58.7	62.9	95,500
45	53.3	59.3	74,400

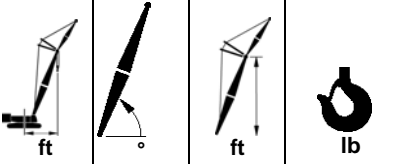

ft	ft	ft	lb
 75 ft			
16	82.6	82.5	323,500*
17	81.8	82.3	318,700*
18	81.0	82.2	305,700*
19	80.2	82.0	288,600*
20	79.5	81.8	273,000*
22	77.9	81.3	244,500*
24	76.3	80.8	220,200*
26	74.8	80.2	199,500*
28	73.2	79.6	181,500*
30	71.6	78.9	165,700*
32	69.9	78.1	151,800*
34	68.3	77.3	135,600
36	66.6	76.4	121,400
38	64.9	75.4	109,200
40	63.2	74.3	98,600
45	58.8	71.4	77,400
50	54.2	67.8	61,400

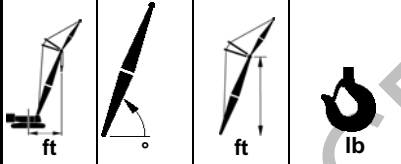

ft	ft	ft	lb
 85 ft			
17	82.7	92.3	295,400*
18	82.1	92.2	291,000*
19	81.4	92.0	286,700*
20	80.7	91.8	274,200*
22	79.3	91.4	246,200*
24	77.9	90.9	222,000*
26	76.6	90.4	201,300*
28	75.2	89.9	183,300*
30	73.8	89.3	167,600*
32	72.3	88.6	153,800*
34	70.9	87.9	138,200
36	69.5	87.1	124,000
38	68.0	86.2	111,700
40	66.6	85.3	101,100
45	62.8	82.8	79,800
50	58.9	79.8	63,800
55	54.8	76.4	51,200

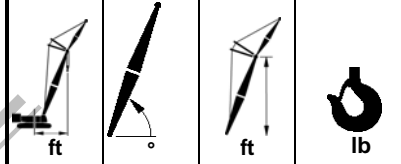

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 95 ft			
18	82.9	102.1	284,400*
19	82.3	102.0	280,200*
20	81.7	101.8	274,800*
22	80.4	101.4	247,100*
24	79.2	101.0	223,000*
26	78.0	100.6	202,300*
28	76.7	100.1	184,400*
30	75.5	99.5	168,700*
32	74.2	98.9	154,900*
34	73.0	98.3	140,100
36	71.7	97.6	125,800
38	70.4	96.9	113,600
40	69.1	96.1	102,900
45	65.8	93.9	81,500
50	62.5	91.3	65,400
55	59.0	88.3	52,800
60	55.3	84.9	42,700
65	51.5	81.0	34,500

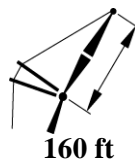
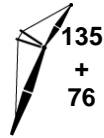
			
 105 ft			
20	82.5	111.8	257,600*
22	81.3	111.4	247,100*
24	80.2	111.1	224,200*
26	79.1	110.7	203,600*
28	78.0	110.2	185,700*
30	76.9	109.7	170,100*
32	75.8	109.2	156,300*
34	74.6	108.6	141,800
36	73.5	108.0	127,500
38	72.3	107.3	115,200
40	71.2	106.6	104,500
45	68.2	104.7	83,100
50	65.2	102.4	67,000
55	62.2	99.8	54,400
60	59.0	96.8	44,300
65	55.7	93.5	36,000
70	52.3	89.7	29,100

			
 115 ft			
22	82.1	121.4	240,700*
24	81.1	121.1	224,600*
26	80.1	120.7	204,000*
28	79.1	120.3	186,100*
30	78.0	119.8	170,500*
32	77.0	119.4	156,800*
34	76.0	118.8	143,000
36	74.9	118.3	128,600
38	73.9	117.7	116,300
40	72.8	117.1	105,600
45	70.2	115.3	84,100
50	67.5	113.2	67,900
55	64.8	110.9	55,300
60	61.9	108.3	45,200
65	59.0	105.3	36,900
70	56.0	102.0	29,900
75	52.9	98.3	24,000



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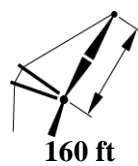
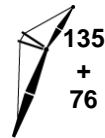
ft	°	ft	lb
125 ft			
22	82.7	131.4	225,500*
24	81.8	131.1	216,000*
26	80.9	130.7	204,400*
28	79.9	130.3	186,600*
30	79.0	129.9	171,000*
32	78.1	129.5	157,300*
34	77.1	129.0	144,000
36	76.2	128.5	129,600
38	75.2	127.9	117,300
40	74.2	127.4	106,600
45	71.8	125.7	85,000
50	69.4	123.9	68,800
55	66.9	121.8	56,100
60	64.3	119.4	46,000
65	61.7	116.7	37,700
70	59.1	113.8	30,700
75	56.3	110.5	24,800
80	53.5	106.8	19,700

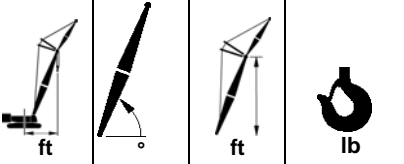

ft	°	ft	lb
135 ft			
24	82.4	141.0	208,800*
26	81.5	140.7	200,100*
28	80.7	140.4	186,700*
30	79.8	140.0	171,100*
32	78.9	139.6	157,400*
34	78.1	139.1	144,800
36	77.2	138.7	130,400
38	76.3	138.1	118,000
40	75.4	137.6	107,300
45	73.2	136.1	85,600
50	71.0	134.4	69,400
55	68.7	132.5	56,700
60	66.3	130.3	46,500
65	64.0	127.9	38,100
70	61.6	125.2	31,200
75	59.1	122.3	25,300
80	56.6	119.0	20,200
85	53.9	115.4	15,800
90	51.2	111.4	11,900

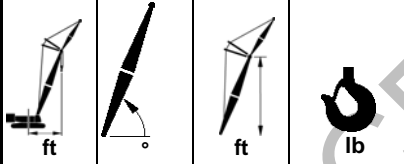

ft	°	ft	lb
144 ft			
24	82.9	151.0	188,200*
26	82.1	150.7	181,000*
28	81.3	150.4	174,000*
30	80.5	150.0	167,400*
32	79.7	149.6	158,000*
34	78.9	149.2	145,500
36	78.1	148.8	131,100
38	77.3	148.3	118,700
40	76.4	147.8	108,000
45	74.4	146.4	86,400
50	72.3	144.8	70,100
55	70.2	143.1	57,400
60	68.1	141.1	47,200
65	65.9	138.8	38,800
70	63.7	136.4	31,900
75	61.4	133.7	25,900
80	59.1	130.7	20,900
85	56.8	127.5	16,500
90	54.3	123.9	12,600

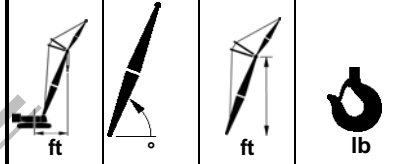

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 154 ft			
26	82.6	160.6	173,400*
28	81.9	160.3	166,800*
30	81.1	160.0	160,500*
32	80.4	159.6	154,400*
34	79.6	159.2	145,700*
36	78.9	158.8	131,700
38	78.1	158.4	119,300
40	77.3	157.9	108,500
45	75.4	156.6	86,800
50	73.5	155.2	70,500
55	71.5	153.5	57,700
60	69.5	151.7	47,500
65	67.5	149.6	39,100
70	65.5	147.4	32,100
75	63.4	144.9	26,200
80	61.3	142.2	21,100
85	59.2	139.2	16,700
90	56.9	136.0	12,800

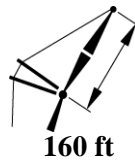
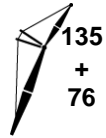
			
 164 ft			
28	82.4	170.3	160,100*
30	81.7	170.0	154,600*
32	80.9	169.6	149,300*
34	80.2	169.3	144,200*
36	79.5	168.9	132,100
38	78.8	168.5	119,700
40	78.1	168.0	108,800
45	76.3	166.8	87,100
50	74.5	165.5	70,800
55	72.7	163.9	58,000
60	70.8	162.2	47,800
65	68.9	160.3	39,400
70	67.1	158.2	32,400
75	65.1	155.9	26,400
80	63.2	153.4	21,300
85	61.2	150.6	16,900

			
 174 ft			
28	82.8	180.2	154,200*
30	82.1	179.9	148,900*
32	81.5	179.6	143,800*
34	80.8	179.3	138,900*
36	80.1	178.9	132,500
38	79.5	178.5	120,000
40	78.8	178.1	109,200
45	77.1	177.0	87,400
50	75.4	175.7	71,000
55	73.7	174.2	58,200
60	71.9	172.6	47,900
65	70.2	170.8	39,500
70	68.4	168.9	32,500
75	66.6	166.7	26,500
80	64.8	164.4	21,400
85	63.0	161.9	17,000



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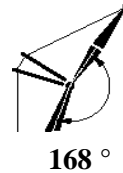
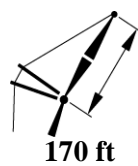
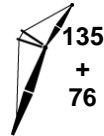
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ft		lb	
 184 ft			
30	82.6	189.9	134,400*
32	81.9	189.6	130,100*
34	81.3	189.3	126,000*
36	80.7	188.9	122,000*
38	80.0	188.6	118,000*
40	79.4	188.2	109,400
45	77.8	187.1	87,600
50	76.2	185.9	71,200
55	74.6	184.5	58,400
60	72.9	183.0	48,100
65	71.3	181.3	39,700
70	69.7	179.5	32,700
75	68.0	177.4	26,700
80	66.3	175.3	21,600
85	64.5	172.9	17,200

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ft	°	ft	lb
66 ft			
15	82.3	72.7	365,400*
16	81.4	72.5	341,800*
17	80.5	72.3	320,700*
18	79.7	72.1	301,700*
19	78.8	71.9	284,200*
20	77.8	71.7	267,800*
22	76.1	71.1	239,000*
24	74.2	70.5	214,700*
26	72.4	69.8	193,900*
28	70.5	69.1	175,900*
30	68.6	68.3	160,100*
32	66.7	67.4	145,300
34	64.8	66.4	128,800
36	62.8	65.3	114,800
38	60.8	64.2	102,800
40	58.7	62.9	92,300
45	53.3	59.3	71,400

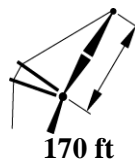
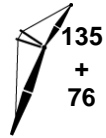
ft	°	ft	lb
75 ft			
16	82.6	82.5	321,200*
17	81.8	82.3	316,300*
18	81.0	82.2	303,100*
19	80.2	82.0	286,000*
20	79.5	81.8	269,800*
22	77.9	81.3	241,200*
24	76.3	80.8	217,000*
26	74.8	80.2	196,200*
28	73.2	79.6	178,300*
30	71.6	78.9	162,600*
32	69.9	78.1	148,700*
34	68.3	77.3	132,400
36	66.6	76.4	118,300
38	64.9	75.4	106,200
40	63.2	74.3	95,700
45	58.8	71.4	74,600
50	54.2	67.8	58,700


ft	°	ft	lb
85 ft			
17	82.7	92.3	293,200*
18	82.1	92.2	288,800*
19	81.4	92.0	284,500*
20	80.7	91.8	271,500*
22	79.3	91.4	243,000*
24	77.9	90.9	218,900*
26	76.6	90.4	198,200*
28	75.2	89.9	180,300*
30	73.8	89.3	164,700*
32	72.3	88.6	150,900*
34	70.9	87.9	135,200
36	69.5	87.1	121,000
38	68.0	86.2	108,900
40	66.6	85.3	98,400
45	62.8	82.8	77,200
50	58.9	79.8	61,300
55	54.8	76.4	48,800





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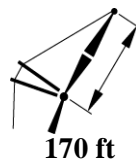
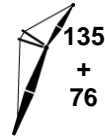
ft	ft	ft	lb
 95 ft			
18	82.9	102.1	282,100*
19	82.3	102.0	278,100*
20	81.7	101.8	272,500*
22	80.4	101.4	244,000*
24	79.2	101.0	220,000*
26	78.0	100.6	199,300*
28	76.7	100.1	181,500*
30	75.5	99.5	165,900*
32	74.2	98.9	152,100*
34	73.0	98.3	137,200
36	71.7	97.6	123,100
38	70.4	96.9	110,900
40	69.1	96.1	100,300
45	65.8	93.9	79,100
50	62.5	91.3	63,100
55	59.0	88.3	50,600
60	55.3	84.9	40,600
65	51.5	81.0	32,300






ft	ft	ft	lb
 105 ft			
20	82.5	111.8	255,700*
22	81.3	111.4	244,800*
24	80.2	111.1	221,300*
26	79.1	110.7	200,700*
28	78.0	110.2	182,900*
30	76.9	109.7	167,400*
32	75.8	109.2	153,600*
34	74.6	108.6	139,000
36	73.5	108.0	124,800
38	72.3	107.3	112,600
40	71.2	106.6	102,000
45	68.2	104.7	80,800
50	65.2	102.4	64,700
55	62.2	99.8	52,200
60	59.0	96.8	42,200
65	55.7	93.5	34,000
70	52.3	89.7	27,100






ft	ft	ft	lb
 115 ft			
22	82.1	121.4	238,500*
24	81.1	121.1	221,800*
26	80.1	120.7	201,200*
28	79.1	120.3	183,400*
30	78.0	119.8	167,900*
32	77.0	119.4	154,200*
34	76.0	118.8	140,400
36	74.9	118.3	126,100
38	73.9	117.7	113,900
40	72.8	117.1	103,200
45	70.2	115.3	81,900
50	67.5	113.2	65,800
55	64.8	110.9	53,300
60	61.9	108.3	43,200
65	59.0	105.3	34,900
70	56.0	102.0	28,100
75	52.9	98.3	22,200






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 125 ft			
22	82.7	131.4	223,400*
24	81.8	131.1	213,900*
26	80.9	130.7	201,800*
28	79.9	130.3	184,000*
30	79.0	129.9	168,500*
32	78.1	129.5	154,800*
34	77.1	129.0	141,500
36	76.2	128.5	127,200
38	75.2	127.9	114,900
40	74.2	127.4	104,300
45	71.8	125.7	82,900
50	69.4	123.9	66,700
55	66.9	121.8	54,200
60	64.3	119.4	44,100
65	61.7	116.7	35,800
70	59.1	113.8	28,900
75	56.3	110.5	23,000
80	53.5	106.8	18,000

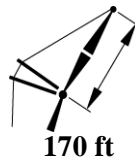
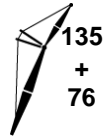
   			
 135 ft			
24	82.4	141.0	206,800*
26	81.5	140.7	197,800*
28	80.7	140.4	184,200*
30	79.8	140.0	168,600*
32	78.9	139.6	155,000*
34	78.1	139.1	142,400
36	77.2	138.7	128,000
38	76.3	138.1	115,700
40	75.4	137.6	105,000
45	73.2	136.1	83,600
50	71.0	134.4	67,400
55	68.7	132.5	54,800
60	66.3	130.3	44,700
65	64.0	127.9	36,400
70	61.6	125.2	29,400
75	59.1	122.3	23,600
80	56.6	119.0	18,500
85	53.9	115.4	14,200

   			
 144 ft			
24	82.9	151.0	186,200*
26	82.1	150.7	179,000*
28	81.3	150.4	172,100*
30	80.5	150.0	165,400*
32	79.7	149.6	155,600*
34	78.9	149.2	143,200
36	78.1	148.8	128,800
38	77.3	148.3	116,500
40	76.4	147.8	105,800
45	74.4	146.4	84,300
50	72.3	144.8	68,200
55	70.2	143.1	55,500
60	68.1	141.1	45,400
65	65.9	138.8	37,100
70	63.7	136.4	30,200
75	61.4	133.7	24,300
80	59.1	130.7	19,300
85	56.8	127.5	14,900



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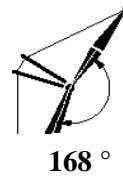
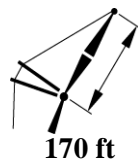
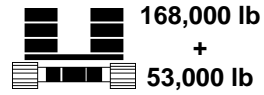
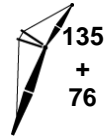
ft	ft	ft	lb
26	82.6	160.6	171,500*
28	81.9	160.3	164,900*
30	81.1	160.0	158,500*
32	80.4	159.6	152,400*
34	79.6	159.2	143,500*
36	78.9	158.8	129,400
38	78.1	158.4	117,100
40	77.3	157.9	106,400
45	75.4	156.6	84,800
50	73.5	155.2	68,600
55	71.5	153.5	55,900
60	69.5	151.7	45,800
65	67.5	149.6	37,500
70	65.5	147.4	30,500
75	63.4	144.9	24,600
80	61.3	142.2	19,600
85	59.2	139.2	15,200

ft	ft	ft	lb
28	82.4	170.3	158,300*
30	81.7	170.0	152,800*
32	80.9	169.6	147,500*
34	80.2	169.3	142,100*
36	79.5	168.9	129,900
38	78.8	168.5	117,600
40	78.1	168.0	106,800
45	76.3	166.8	85,200
50	74.5	165.5	69,000
55	72.7	163.9	56,300
60	70.8	162.2	46,100
65	68.9	160.3	37,800
70	67.1	158.2	30,800
75	65.1	155.9	24,900
80	63.2	153.4	19,800
85	61.2	150.6	15,400

ft	ft	ft	lb
28	82.8	180.2	152,400*
30	82.1	179.9	147,100*
32	81.5	179.6	142,000*
34	80.8	179.3	137,100*
36	80.1	178.9	130,400
38	79.5	178.5	117,900
40	78.8	178.1	107,200
45	77.1	177.0	85,500
50	75.4	175.7	69,200
55	73.7	174.2	56,500
60	71.9	172.6	46,300
65	70.2	170.8	37,900
70	68.4	168.9	31,000
75	66.6	166.7	25,000
80	64.8	164.4	20,000

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	ft	°	ft	lb
	 184 ft			
30	82.6	189.9	132,700*	
32	81.9	189.6	128,400*	
34	81.3	189.3	124,300*	
36	80.7	188.9	120,200*	
38	80.0	188.6	116,300*	
40	79.4	188.2	107,500	
45	77.8	187.1	85,800	
50	76.2	185.9	69,500	
55	74.6	184.5	56,800	
60	72.9	183.0	46,600	
65	71.3	181.3	38,200	
70	69.7	179.5	31,200	
75	68.0	177.4	25,300	
80	66.3	175.3	20,200	