

**L. R. WILLSON & SONS, INC.**

773 ANNAPOLIS ROAD • PO BOX 227

GAMBRILLS, MARYLAND 21054

www.lrwilsonandsons.com

ANSI B30.5

**Liftcrane Boom Capacities****Boom No. 58 HL****332,000 lb Crane Counterweight****120,000 lb Carbody Counterweight****360 Degree Rating****16000 SERIES 3**

**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 (\*).

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

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

**OPERATING CONDITIONS:** Machine to operate in a level position on a firm uniformly supporting surface. Refer to boom rigging **No. A10415**, Wire Rope Specification chart **No. 8674-A**, Counterweight Arrangement chart **No. 8682-A** and Wind Conditions chart **No. 8688-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.

**MACHINE TRAVEL:** Machine to travel on a firm, level and uniformly supporting surface and boom within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8683-A**.



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



**BOOM ANGLE:** Boom angle in degrees ( $^{\circ}$ ) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



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

**MACHINE EQUIPMENT:** Machine equipped with 34 ft crawlers, 60 in. treads, 32 ft live mast, 26 part boom hoist reeving, boom support straps, 332,000 lb crane counterweight, two 30,000 lb and four 15,000 lb carbody counterweights.

Maximum Boom Length Lifted Unassisted	
Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
(a) 315.0 ft	275.6 ft
Load block, hook and weight ball on ground at start. (a) Upper boom point cannot be attached on 315.0 ft boom.	

Third Line Deduct
Deduct 500 lb from boom capacities when boom is equipped for three line operation.



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### Explanation of Symbols


58 HL  Boom No. 58 Heavy Lift Top


 Crane Counterweight  
+  
Carbody Counterweight


 360° 360 Degree Rating

 Operating Radius  
(see page 1)

 Boom Angle  
(see page 1)

 Boom Point Elevation  
(see page 1)

 Lifting Capacities  
(see page 1)

 Boom Length



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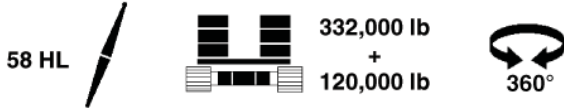
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ft	o	ft	lb
98.4 ft			
21	82.9	106.0	881,900 *
22	82.3	105.8	845,400 *
24	81.1	105.4	778,200 *
26	79.9	105.0	720,500 *
28	78.7	104.6	670,500 *
30	77.5	104.1	625,700 *
32	76.3	103.5	581,700 *
34	75.1	102.9	543,200 *
36	73.9	102.3	495,400
38	72.7	101.6	454,300
40	71.4	100.8	419,100
45	68.3	98.8	349,900
50	65.1	96.4	299,100
55	61.7	93.6	260,100
60	58.3	90.5	229,300
65	54.7	86.9	204,300
70	50.9	82.8	183,600
75	46.9	78.1	166,200
80	42.6	72.6	151,400
85	37.9	66.2	138,500
90	32.6	58.5	127,200
95	26.2	48.8	117,200
100	17.6	34.8	108,200

ft	o	ft	lb
118.1 ft			
24	82.6	125.4	775,000 *
26	81.6	125.1	719,300 *
28	80.6	124.7	669,300 *
30	79.6	124.3	625,000 *
32	78.7	123.8	581,000 *
34	77.7	123.3	542,500 *
36	76.7	122.8	496,300
38	75.6	122.2	455,000
40	74.6	121.6	419,700
45	72.1	120.0	350,300
50	69.5	118.0	299,400
55	66.8	115.8	260,400
60	64.1	113.4	229,500
65	61.3	110.6	204,500
70	58.5	107.5	183,800
75	55.5	104.0	166,400
80	52.5	100.1	151,500
85	49.3	95.7	138,700
90	45.9	90.9	127,500
95	42.3	85.4	117,600
100	38.4	79.1	108,900
105	34.1	71.7	101,000
110	29.2	63.0	93,900
115	23.3	52.0	87,400
120	15.2	36.0	81,500

ft	o	ft	lb
137.8 ft			
26	82.8	145.0	625,700 *
28	82.0	144.7	619,400 *
30	81.1	144.3	614,000 *
32	80.3	143.9	580,800 *
34	79.5	143.5	542,300 *
36	78.6	143.1	497,200
38	77.7	142.6	455,800
40	76.9	142.1	420,500
45	74.7	140.7	351,000
50	72.5	139.1	299,900
55	70.3	137.2	260,800
60	68.1	135.2	229,900
65	65.8	132.9	204,900
70	63.5	130.3	184,200
75	61.1	127.5	166,700
80	58.6	124.4	151,900
85	56.1	121.0	139,100
90	53.5	117.3	127,900
95	50.8	113.2	118,000
100	48.0	108.7	109,300
105	45.1	103.7	101,500
110	42.0	98.1	94,500
115	38.7	91.8	88,100
120	35.1	84.8	82,300
125	31.1	76.6	77,000
130	26.5	66.9	72,100
135	21.0	54.6	67,600



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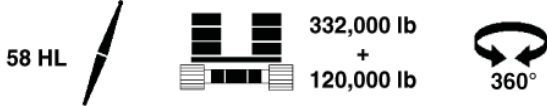
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ft	o	ft	lb
 157.5 ft			
28	83.0	164.6	597,000 *
30	82.3	164.3	592,900 *
32	81.5	164.0	579,600 *
34	80.8	163.6	541,100 *
36	80.0	163.2	497,300
38	79.3	162.8	455,800
40	78.6	162.4	420,400
45	76.7	161.1	350,700
50	74.8	159.7	299,500
55	72.9	158.2	260,300
60	71.0	156.4	229,300
65	69.0	154.4	204,200
70	67.0	152.3	183,400
75	65.0	149.9	166,000
80	63.0	147.3	151,100
85	60.9	144.5	138,300
90	58.7	141.4	127,100
95	56.6	138.1	117,200
100	54.3	134.4	108,500
105	52.0	130.5	100,700
110	49.6	126.2	93,700
115	47.1	121.5	87,300
120	44.5	116.4	81,600
125	41.8	110.8	76,300
130	38.9	104.6	71,500
135	35.8	97.7	67,000
140	32.4	89.9	62,900
145	28.7	81.0	59,100
150	24.4	70.3	55,500
155	19.2	56.9	52,100

			
ft	o	ft	lb
 177.2 ft			
32	82.5	183.9	483,000 *
34	81.8	183.6	467,100 *
36	81.2	183.2	451,800 *
38	80.5	182.9	437,300 *
40	79.9	182.5	420,400
45	78.2	181.4	350,600
50	76.5	180.2	299,300
55	74.9	178.8	260,000
60	73.2	177.2	229,000
65	71.5	175.5	203,900
70	69.7	173.6	183,100
75	68.0	171.6	165,600
80	66.2	169.3	150,700
85	64.4	166.9	137,800
90	62.6	164.3	126,600
95	60.7	161.4	116,700
100	58.8	158.4	108,000
105	56.9	155.1	100,200
110	54.9	151.5	93,200
115	52.9	147.7	86,900
120	50.8	143.6	81,100
125	48.6	139.2	75,900
130	46.4	134.4	71,100
135	44.1	129.2	66,600
140	41.6	123.6	62,500
145	39.1	117.4	58,800
150	36.3	110.6	55,200
155	33.4	103.1	52,000
160	30.2	94.7	48,900
165	26.7	84.9	46,000
170	22.6	73.4	43,200
175	17.6	58.8	40,600

			
ft	o	ft	lb
 196.9 ft			
34	82.6	203.5	435,600 *
36	82.1	203.2	422,500 *
38	81.5	202.9	409,700 *
40	80.9	202.5	397,400 *
45	79.4	201.6	350,000
50	77.9	200.4	298,600
55	76.4	199.2	259,200
60	74.9	197.8	228,100
65	73.4	196.3	202,900
70	71.8	194.6	182,000
75	70.3	192.8	164,500
80	68.7	190.8	149,600
85	67.1	188.7	136,700
90	65.5	186.4	125,500
95	63.9	183.9	115,600
100	62.3	181.2	106,800
105	60.6	178.4	99,000
110	58.9	175.3	92,000
115	57.2	172.1	85,600
120	55.4	168.6	79,900
125	53.6	164.9	74,600
130	51.7	160.9	69,800
135	49.8	156.6	65,400
140	47.8	152.1	61,300
145	45.8	147.2	57,500
150	43.7	142.0	54,000
155	41.5	136.3	50,800
160	39.2	130.2	47,700
165	36.8	123.5	44,800
170	34.2	116.2	42,200
175	31.4	108.1	39,600
180	28.4	99.0	37,200
185	25.0	88.6	35,000
190	21.1	76.2	32,800
195	16.3	60.4	30,700



A.I.S.C. Certified Erector



PCI P.C.I. Qualified Erector

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ft	o	ft	lb
216.5 ft			
36	82.8	223.1	368,600 *
38	82.3	222.8	358,600 *
40	81.7	222.5	348,900 *
45	80.4	221.6	325,900 *
50	79.0	220.6	298,100
55	77.7	219.5	258,600
60	76.3	218.2	227,500
65	74.9	216.9	202,200
70	73.6	215.4	181,300
75	72.2	213.7	163,800
80	70.8	211.9	148,800
85	69.3	210.0	135,900
90	67.9	208.0	124,600
95	66.5	205.8	114,800
100	65.0	203.4	106,000
105	63.5	200.9	98,200
110	62.0	198.2	91,100
115	60.5	195.3	84,800
120	58.9	192.3	79,000
125	57.4	189.1	73,800
130	55.8	185.6	69,000
135	54.1	182.0	64,500
140	52.5	178.1	60,500
145	50.7	174.0	56,700
150	49.0	169.6	53,200
155	47.2	165.0	49,900
160	45.3	160.0	46,900
165	43.4	154.7	44,000
170	41.4	149.1	41,300
175	39.3	142.9	38,800
180	37.1	136.4	36,500
185	34.8	129.2	34,200
190	32.3	121.4	32,100
195	29.7	112.7	30,100
200	26.8	103.0	28,200
205	23.6	91.8	26,300
210	19.8	78.6	24,600
215	15.2	61.7	22,900

ft	o	ft	lb
236.2 ft			
38	82.9	242.7	330,500 *
40	82.4	242.4	321,300 *
45	81.2	241.6	299,500 *
50	80.0	240.7	279,400 *
55	78.7	239.7	257,700
60	77.5	238.5	226,400
65	76.2	237.3	201,100
70	75.0	235.9	180,200
75	73.7	234.4	162,600
80	72.4	232.8	147,600
85	71.1	231.1	134,600
90	69.8	229.2	123,300
95	68.5	227.2	113,400
100	67.2	225.1	104,600
105	65.9	222.8	96,800
110	64.5	220.4	89,800
115	63.2	217.9	83,400
120	61.8	215.1	77,600
125	60.4	212.3	72,400
130	59.0	209.2	67,500
135	57.5	206.0	63,100
140	56.1	202.7	59,000
145	54.6	199.1	55,300
150	53.1	195.3	51,700
155	51.5	191.3	48,500
160	49.9	187.1	45,400
165	48.3	182.6	42,600
170	46.6	177.9	39,900
175	44.9	172.8	37,400
180	43.1	167.5	35,000
185	41.3	161.8	32,800
190	39.4	155.7	30,700
195	37.4	149.2	28,700
200	35.3	142.1	26,800
205	33.1	134.5	25,000
210	30.7	126.2	23,300
215	28.2	117.0	21,600
220	25.4	106.7	20,000
225	22.3	94.9	18,500
230	18.7	80.8	17,100

ft	o	ft	lb
255.9 ft			
40	83.0	262.3	302,900 *
45	81.9	261.6	288,700 *
50	80.7	260.7	275,100 *
55	79.6	259.8	256,900
60	78.5	258.7	225,600
65	77.3	257.6	200,200
70	76.1	256.3	179,200
75	75.0	254.9	161,500
80	73.8	253.5	146,500
85	72.6	251.9	133,500
90	71.5	250.2	122,200
95	70.3	248.4	112,300
100	69.1	246.4	103,500
105	67.9	244.4	95,600
110	66.6	242.2	88,600
115	65.4	239.9	82,200
120	64.2	237.4	76,400
125	62.9	234.8	71,100
130	61.6	232.1	66,300
135	60.3	229.2	61,900
140	59.0	226.2	57,800
145	57.7	223.0	54,000
150	56.3	219.7	50,500
155	55.0	216.1	47,200
160	53.6	212.4	44,200
165	52.2	208.5	41,300
170	50.7	204.4	38,700
175	49.2	200.1	36,100
180	47.7	195.5	33,800
185	46.2	190.7	31,600
190	44.6	185.6	29,400
195	42.9	180.2	27,500
200	41.2	174.5	25,600
205	39.5	168.5	23,800
210	37.6	162.0	22,100
215	35.7	155.1	20,400
220	33.7	147.6	18,900
225	31.6	139.6	17,400
230	29.3	130.7	16,000
235	26.9	121.0	14,600
240	24.2	110.2	13,300
245	21.2	97.7	12,000
250	17.7	82.8	10,800





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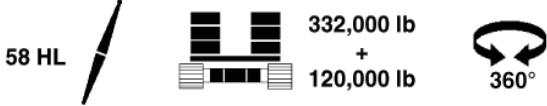
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ft	ft	ft	lb
275.6 ft			
45	82.5	281.5	252,000 *
50	81.4	280.7	245,700 *
55	80.3	279.8	239,800 *
60	79.3	278.9	224,500
65	78.2	277.8	199,000
70	77.2	276.6	178,000
75	76.1	275.4	160,300
80	75.0	274.0	145,200
85	73.9	272.5	132,200
90	72.8	271.0	120,800
95	71.7	269.3	110,900
100	70.6	267.5	102,100
105	69.5	265.6	94,200
110	68.4	263.6	87,100
115	67.3	261.5	80,700
120	66.1	259.2	74,900
125	65.0	256.9	69,600
130	63.8	254.4	64,800
135	62.7	251.8	60,400
140	61.5	249.1	56,300
145	60.3	246.2	52,500
150	59.1	243.2	49,000
155	57.8	240.0	45,700
160	56.6	236.7	42,600
165	55.3	233.2	39,800
170	54.0	229.6	37,100
175	52.7	225.7	34,600
180	51.4	221.7	32,200
185	50.0	217.5	30,000
190	48.6	213.1	27,900
195	47.2	208.4	25,900
200	45.8	203.6	24,000
205	44.3	198.4	22,200
210	42.7	193.0	20,500
215	41.2	187.3	18,900
220	39.5	181.2	17,300
225	37.8	174.8	15,800
230	36.1	168.0	14,400
235	34.2	160.6	13,100
240	32.3	152.8	11,800
245	30.2	144.3	10,500
250	28.1	135.0	9,300
255	25.7	124.8	8,100 *

ft	ft	ft	lb
295.3 ft			
45	83.0	301.4	211,600 *
50	82.0	300.6	206,200 *
55	81.0	299.8	201,100 *
60	80.0	298.9	196,300 *
65	79.0	297.9	191,900 *
70	78.0	296.8	176,900
75	77.0	295.7	159,200
80	76.0	294.4	144,100
85	75.0	293.0	131,000
90	74.0	291.6	119,700
95	73.0	290.0	109,700
100	72.0	288.4	100,900
105	71.0	286.6	93,000
110	69.9	284.8	85,900
115	68.9	282.8	79,500
120	67.8	280.8	73,700
125	66.8	278.6	68,400
130	65.7	276.3	63,600
135	64.6	273.9	59,100
140	63.5	271.4	55,000
145	62.4	268.8	51,200
150	61.3	266.0	47,700
155	60.2	263.1	44,500
160	59.1	260.1	41,400
165	57.9	257.0	38,500
170	56.8	253.7	35,900
175	55.6	250.2	33,400
180	54.4	246.6	31,000
185	53.2	242.9	28,800
190	52.0	238.9	26,700
195	50.7	234.8	24,700
200	49.4	230.5	22,800
205	48.1	226.0	21,000
210	46.8	221.3	19,300
215	45.4	216.4	17,700
220	44.0	211.2	16,100
225	42.6	205.8	14,600
230	41.1	200.0	13,200
235	39.6	194.0	11,900
240	38.0	187.6	10,600
245	36.4	180.8	9,400
250	34.7	173.6	8,200
255	32.9	165.9	7,000

ft	ft	ft	lb
315.0 ft			
50	82.5	320.5	178,400 *
55	81.6	319.8	173,800 *
60	80.6	318.9	169,500 *
65	79.7	318.0	165,500 *
70	78.8	317.0	161,600 *
75	77.9	315.9	157,600 *
80	76.9	314.7	142,700
85	76.0	313.4	129,600
90	75.0	312.1	118,200
95	74.1	310.6	108,200
100	73.1	309.1	99,400
105	72.2	307.5	91,500
110	71.2	305.7	84,400
115	70.3	303.9	78,000
120	69.3	302.0	72,100
125	68.3	300.0	66,800
130	67.3	297.9	62,000
135	66.3	295.7	57,500
140	65.3	293.4	53,400
145	64.3	290.9	49,600
150	63.3	288.4	46,100
155	62.3	285.7	42,800
160	61.2	283.0	39,800
165	60.2	280.1	36,900
170	59.1	277.1	34,200
175	58.0	273.9	31,700
180	56.9	270.7	29,300
185	55.8	267.3	27,100
190	54.7	263.7	25,000
195	53.6	260.0	23,000
200	52.4	256.1	21,100
205	51.3	252.1	19,300
210	50.1	247.9	17,600
215	48.9	243.5	16,000
220	47.7	239.0	14,500
225	46.4	234.2	13,000
230	45.1	229.2	11,600
235	43.8	224.0	10,200
240	42.4	218.5	8,900
245	41.1	212.8	7,700

