

LIFTCRANE CAPACITIES

MEETS
ANSI B30.5
REQUIREMENTS

4600
SERIES-3

BOOM NO. 27 WITH OPEN THROAT TOP 113,500 LB. COUNTERWEIGHT

LIFTING CAPACITIES: 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 shown by shaded areas.

Upper boom point capacity for liftcrane service with single part whip line or combination of two single part lines is 40,000 lbs. In all cases, upper boom point capacities cannot exceed those listed for the main boom capacity.

Capacities are shown in pounds. Weight of upper boom point, jib (see chart A), all load blocks, hooks, weight ball, slings, hoist lines, etc. beneath boom and jib point sheaves is to be considered part of the 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 surface. Refer to rigging No. 50973, load line specification chart No. 6444-A, and power plant and counterweight arrangement chart No. 6655-A.

Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

OPERATING RADIUS: Operating radius is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block with the load freely suspended. Add 15" to boom point radius for radius of sheave when using single part hoist line.

Boom angle is the 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, in feet, is the vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 26'-1" crawlers, 60" treads, 30' heavy duty mast, Vicon independent boom hoist with 16 part reeving, 12 part mast hoist reeving, four 1-3/8" boom pendants and 113,500 lb. counterweight.

HOIST REEVEING FOR MAIN LOAD BLOCK						
No. Parts of Line	1	2	3	4	5	6
Max. Load — Lbs.	40,000	80,000	120,000	160,000	200,000	240,000
No. Parts of Line	7	8	9	10	11	12
Max. Load — Lbs.	280,000	320,000	360,000	400,000	440,000	480,000

LOAD AND WHIP LINE SPECIFICATIONS	
LOAD LINE: 1-1/4" — 6x31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 79.9 Ton. (Approx. Weight Per Ft. in Lbs. 2.89)	
WHIP LINE: 1-1/4" — 6x31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 79.9 Ton. Maximum Load — 40,000 lbs. Per Line (Approx. Weight Per Ft. in Lbs. 2.89)	

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED				(A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
OVER FRONT OF BLOCKED CRAWLERS		OVER SIDE OF CRAWLERS			
Boom Lgth.	Jib No. 122A	Boom Lgth.	Jib No. 122A	Jib Length	Jib No. 122A
260'	—	230'	—	40'	6,300 Lb.
250'	—	220'	—	50'	7,200 Lb.
240'	—	210'	40'		
230'	50'	200'	50'		

Load block, hook and weight ball on ground at start.

DEDUCT FROM CAPACITIES WHEN UPPER BOOM POINT IS ATTACHED	
One Sheave Point	1,200 Lb.
Two Sheave Point	1,500 Lb.
Integral Point	1,600 Lb.

For jib capacities, consult jib chart.

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:			
80	18	81.5	86.9	480,000	90	20	81.2	96.7	420,700	100	21	81.5	106.7	385,700	110	23	81.2	116.5	330,000			
	19	80.8	86.8	462,500		21	80.5	96.6	386,100		22	80.9	106.5	356,200		24	80.7	116.3	307,900			
	20	80.0	86.6	421,400		22	79.9	96.4	356,600		23	80.3	106.4	330,800		25	80.1	116.2	288,500			
	21	79.3	86.4	386,900		23	79.2	96.2	331,200		24	79.7	106.2	308,700		26	79.6	116.0	271,200			
	22	78.6	86.2	357,400		24	78.6	96.0	309,100		25	79.1	106.0	289,200		27	79.1	115.8	255,900			
	23	77.9	86.0	332,000		25	77.9	95.8	289,700		26	78.6	105.8	272,000		28	78.6	115.6	242,100			
	24	77.1	85.8	309,900		26	77.3	95.6	272,500		27	78.0	105.6	256,700		29	78.0	115.4	229,600			
	25	76.4	85.6	290,500		27	76.6	95.4	257,100		28	77.4	105.4	242,900		30	77.5	115.2	218,400			
	26	75.6	85.3	273,300		28	76.0	95.1	243,400		29	76.8	105.2	230,500		32	76.4	114.7	198,700			
	27	74.9	85.0	258,000		29	75.3	94.9	230,900		30	76.2	104.9	219,200		34	75.3	114.2	182,100			
80	28	74.2	84.8	244,200	90	30	74.6	94.6	219,700	100	32	75.0	104.4	199,500	110	36	74.3	113.7	167,900			
	29	73.4	84.5	231,800		32	73.3	94.0	200,000		34	73.8	103.9	182,900		38	73.2	113.1	155,600			
	30	72.7	84.2	220,500		34	72.0	93.4	183,400		36	72.6	103.2	168,700		40	72.1	112.5	144,900			
	32	71.2	83.5	200,800		36	70.6	92.7	169,200		38	71.4	102.6	156,500		45	69.3	110.7	123,300			
	34	69.6	82.8	184,300		38	69.3	92.0	157,000		40	70.2	101.9	145,800		50	66.5	108.7	106,900			
	36	68.1	82.0	170,100		40	67.9	91.2	146,300		45	67.1	100.0	124,200		55	63.6	106.4	94,000			
	38	66.6	81.2	157,900		45	64.4	89.0	124,700		50	64.0	97.7	107,800		60	60.7	103.7	83,600			
	40	65.0	80.3	147,200		50	60.9	86.4	108,300		55	60.8	95.1	94,900		65	57.7	100.7	75,100			
	45	61.0	77.7	125,600		55	57.1	83.4	95,400		60	57.4	92.1	84,500		70	54.5	97.4	67,900			
	50	56.8	74.7	109,200		60	53.3	79.9	85,000		65	54.0	88.7	76,000		75	51.3	93.6	61,800			
80	55	52.4	71.2	96,300	90	65	49.2	75.9	76,500	100	70	50.3	84.8	68,800	110	80	47.8	89.3	56,600			
	60	47.7	67.0	85,900		70	44.8	71.2	69,300		75	46.5	80.3	62,700		85	44.2	84.5	52,100			
	65	42.7	62.0	77,400		75	40.1	65.8	63,300		80	42.4	75.2	57,500		90	40.3	79.0	48,100			
	70	37.1	56.0	70,200		80	34.9	59.3	58,000		85	38.0	69.3	53,000		95	36.1	72.7	44,500			
	75	30.6	48.6	64,200		85	28.8	51.2	53,500		90	33.0	62.3	49,000		100	31.5	65.2	41,400			
	80	22.6	38.6	58,900		90	21.3	40.5	49,500		95	27.3	53.7	45,400		105	26.0	56.1	38,600			

SEE CONDITIONS ON REVERSE SIDE

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	
24	81.5	126.3	307,800		29	81.2	156.1	227,500		34	81.1	185.6	178,300		36	81.4	205.6	163,000		36	81.4	205.6	163,000		
25	81.0	126.3	288,400		30	80.9	155.9	216,200		35	80.5	185.3	164,100		37	80.8	205.3	150,700		37	80.8	205.3	150,700		
26	80.5	126.2	271,200		31	80.1	155.6	206,500		36	79.8	185.0	151,800		38	80.3	204.9	140,000		38	80.3	204.9	140,000		
27	80.0	126.0	255,800		32	79.3	155.2	179,900		37	79.2	184.6	141,100		39	78.8	204.0	118,300		39	78.8	204.0	118,300		
28	79.5	125.8	242,000		33	78.5	154.8	165,700		38	77.5	183.6	119,400		40	77.3	202.9	101,900		40	77.3	202.9	101,900		
29	79.0	125.6	229,600		34	77.7	154.4	153,400		39	75.9	182.4	103,000		41	75.9	201.7	88,900		41	75.9	201.7	88,900		
30	78.5	125.4	218,300		35	77.0	153.9	142,700		40	74.3	181.1	90,100		42	74.4	200.4	78,500		42	74.4	200.4	78,500		
31	77.6	125.0	198,600		36	75.0	152.7	121,000		41	72.6	179.6	79,700		43	72.9	199.0	70,000		43	72.9	199.0	70,000		
32	76.6	124.5	182,000		37	73.0	151.3	104,600		42	70.9	177.9	71,100		44	71.4	197.3	62,800		44	71.4	197.3	62,800		
33	75.6	124.0	167,800		38	71.0	149.6	91,700		43	69.2	176.1	63,900		45	69.9	195.6	56,700		45	69.9	195.6	56,700		
34	74.6	123.5	155,600		39	69.0	147.8	81,300		44	67.5	174.1	57,800		46	68.3	193.7	51,500		46	68.3	193.7	51,500		
35	73.6	122.9	144,800		40	66.9	145.8	72,700		45	65.8	172.0	52,600		47	66.8	191.6	46,900		47	66.8	191.6	46,900		
36	71.1	121.3	123,200		41	64.8	143.5	65,600		46	64.2	169.6	48,000		48	65.2	189.4	43,500		48	65.2	189.4	43,500		
37	68.6	119.5	106,800		42	62.7	141.1	59,500		47	62.0	167.1	44,000		49	63.6	187.0	39,400		49	63.6	187.0	39,400		
38	66.0	117.4	93,900		43	60.5	138.4	54,200		48	60.4	164.4	40,500		50	62.0	184.4	36,200		50	62.0	184.4	36,200		
39	63.3	115.0	83,500		44	58.3	135.4	49,700		49	58.6	161.4	37,400		51	60.4	181.7	33,400		51	60.4	181.7	33,400		
40	60.6	112.4	75,000		45	56.0	132.2	45,700		50	56.7	158.2	34,500		52	58.7	178.7	30,800		52	58.7	178.7	30,800		
41	57.9	109.4	67,800		46	53.7	128.7	42,200		51	54.8	154.8	32,000		53	57.0	175.6	28,500		53	57.0	175.6	28,500		
42	55.0	106.1	61,700		47	51.3	124.8	39,000		52	52.8	151.2	29,700		54	55.3	172.2	26,400		54	55.3	172.2	26,400		
43	52.0	102.4	56,500		48	48.8	120.6	36,200		53	50.8	147.2	27,600		55	53.5	168.7	24,500		55	53.5	168.7	24,500		
44	48.9	98.3	52,000		49	46.2	116.1	33,700		54	48.7	143.0	25,700		56	51.7	164.9	22,800		56	51.7	164.9	22,800		
45	45.7	93.7	48,000		50	43.5	111.0	31,400		55	46.5	138.4	23,900		57	49.9	160.8	21,100		57	49.9	160.8	21,100		
46	42.2	88.5	44,500		51	40.6	105.5	29,300		56	44.3	133.5	22,300		58	48.0	156.4	19,600		58	48.0	156.4	19,600		
47	38.6	82.6	41,300		52	37.6	99.3	27,300		57	42.0	128.2	20,800		59	46.0	151.8	18,200		59	46.0	151.8	18,200		
48	34.6	75.9	38,500		53	34.4	92.5	25,600		58	39.5	122.4	19,400		60	44.0	146.8	17,000		60	44.0	146.8	17,000		
49	30.1	68.0	36,000		54	30.8	84.6	24,000		59	37.0	116.0	18,100		61	41.9	141.4	15,800		61	41.9	141.4	15,800		
50	24.9	58.4	33,700		55	26.8	75.5	22,500		60	34.2	109.0	16,900		62	39.7	135.6	14,600		62	39.7	135.6	14,600		
51	18.4	45.8	31,600		56	22.2	64.6	21,100		61	31.3	101.3	15,800		63	37.4	129.3	13,600		63	37.4	129.3	13,600		
52					57	16.5	50.4	19,800		62	28.1	92.5	14,700		64	35.0	122.5	12,600		64	35.0	122.5	12,600		
53					58					63	24.5	82.4	13,800		65	32.4	115.0	11,700		65	32.4	115.0	11,700		
54					59					64	20.3	70.2	12,800		66	29.6	106.7	10,800		66	29.6	106.7	10,800		
55					60					65	15.0	54.5	12,000		67	26.6	97.3	9,200		67	26.6	97.3	9,200		
56					61					66					68	23.2	86.6	8,200		68	23.2	86.6	8,200		
57					62					67	81.0	195.4	163,400		69	19.2	73.7	7,500		69	19.2	73.7	7,500		
58					63					68	80.4	195.1	151,100		70					70					
59					64					69	79.7	194.8	140,300		71					71					
60					65					70	78.2	193.8	118,700		72					72					
61					66					71	76.7	192.7	102,200		73					73					
62					67					72					74					74					
63					68					73	75.1	191.4	89,300		75					75					
64					69					74	73.5	190.0	78,900		76					76					
65					70					75	72.0	188.5	70,300		77					77					
66					71					76	70.4	186.8	63,100		78					78					
67					72					77	68.8	184.9	57,000		79					79					
68					73					78	67.1	182.9	51,800		80					80					
69					74					79	65.5	180.7	47,200		81					81					
70					75					80	63.8	178.3	43,200		82					82					
71					76					81	62.1	175.8	39,700		83					83					
72					77					82	60.4	173.0	36,600		84					84					
73					78					83					85					85					
74					79					84	58.7	170.1	33,700		86					86					
75					80					85	56.9	166.9	31,200		87					87					
76					81					86	55.1	163.5	28,900		88					88					
77					82					87	53.2	159.9	26,800		89					89					
78					83					88	51.3	156.1	24,900		90					90					
79					84					89	49.3	151.9	23,100		91					91					
80					85					90	47.3	147.5	21,500		92					92					
81					86					91	45.2	142.7	20,000		93					93					
82					87					92	43.1	137.5	18,600		94					94					
83					88					93	40.8	131.9	17,300		95					95					
84					89					94					96					96					
85					90					95	38.4	125.9	16,100		97					97					
86					91					96	35.9	119.3	15,000		98					98					
87					92					97	33.3	112.1	13,900		99					99					
88					93					98	30.4	104.0	12,900		100					100					
89					94					99	27.3	95.0	12,000		101					101					
90					95					100					102					102					
91					96					101	23.8	84.5	11,100		103					103					
92					97					102	19.7	72.0	10,300		104					104					
93					98					103					105					105					
94					99					104					106					106					
95					100					105	</														

**Capacities continued
on next page.**



LIFTCRANE CAPACITIES — 4600 SERIES-3
BOOM NO. 27 WITH OPEN THROAT TOP, CONT'D.

SEE CONDITIONS ON FRONT PAGE

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:
40	81.2	225.2	138,700		45	80.7	244.6	115,800		45	81.4	264.9	114,500	
45	79.8	224.3	117,000		50	79.5	243.8	99,400		50	80.3	264.1	98,000	
50	78.5	223.4	100,500		55	78.3	242.8	86,400		55	79.2	263.2	85,100	
55	77.2	222.3	87,600		60	77.0	241.7	76,000		60	78.1	262.2	74,600	
60	75.8	221.1	77,200		65	75.8	240.5	67,400		65	76.9	261.1	66,100	
65	74.5	219.8	68,600		70	74.6	239.2	60,200		70	75.8	259.8	58,900	
70	73.1	218.3	61,400		75	73.3	237.7	54,100		75	74.6	258.5	52,800	
75	71.8	216.8	55,300		80	72.1	236.2	48,900		80	73.5	257.1	47,500	
80	70.4	215.0	50,100		85	70.8	234.5	44,300		85	72.3	255.6	42,900	
85	69.0	213.2	45,500		90	69.6	232.7	40,300		90	71.2	253.9	38,900	
90	67.6	211.2	41,500		95	68.3	230.8	36,800		95	70.0	252.2	35,400	
95	66.2	209.1	38,000		100	67.0	228.7	33,600		100	68.8	250.3	32,200	
100	64.8	206.8	34,800		105	65.7	226.5	30,800		105	67.7	248.3	29,400	
105	63.3	204.4	32,000		110	64.4	224.2	28,300		110	66.5	246.2	26,900	
110	61.8	201.8	29,400		115	63.0	221.7	25,900		115	65.3	243.9	24,600	
115	60.4	199.0	27,100		120	61.7	219.1	23,800		120	64.0	241.6	22,400	
120	58.8	196.1	25,000		125	60.3	216.3	21,900		125	62.8	239.1	20,500	
125	57.3	192.9	23,100		130	58.9	213.4	20,200		130	61.6	236.4	18,800	
130	55.7	189.6	21,300		135	57.5	210.3	18,500		135	60.3	233.6	17,100	
135	54.2	186.1	19,700		140	56.1	207.0	17,000		140	59.0	230.7	15,600	
140	52.5	182.4	18,200		145	54.7	203.6	15,600		145	57.7	227.6	14,200	
145	50.9	178.5	16,800		150	53.2	199.9	14,400		150	56.4	224.4	12,900	
150	49.2	174.3	15,500		155	51.7	196.1	13,100		155	55.1	221.0	11,700	
155	47.4	169.8	14,300		160	50.1	192.0	12,000		160	53.7	217.4	10,600	
160	45.6	165.1	13,200		165	48.6	187.7	11,000		165	52.3	213.6	9,600	
165	43.8	160.0	12,200		170	46.9	183.2	10,000		170	50.9	209.7	8,600	
170	41.9	154.6	11,200		175	45.3	178.4	9,100		175	49.5	205.5	7,600	
175	39.9	148.9	10,200		180	43.6	173.3	8,200		180	48.0	201.1	6,800	
180	37.8	142.6	9,400		185	41.8	167.9	7,400		185	46.5	196.5	5,900	
185	35.6	135.9	8,500		190	40.0	162.1	6,600		190	45.0	191.7	5,200	
190	33.3	128.7	7,800		195	38.1	155.9	5,800		195	43.4	186.5	4,400	
195	30.9	120.7	7,000		200	36.1	149.3	5,100						
200	28.2	111.9	6,300		205	34.1	142.2	4,500						
205	25.3	102.0	5,700											
210	22.1	90.6	5,000											
215	18.3	77.0	4,400											
40	81.5	235.3	138,000		45	81.1	254.8	115,100		45	81.1	254.8	115,100	
45	80.3	234.5	116,200		50	79.9	253.9	98,600		50	79.9	253.9	98,600	
50	79.0	233.6	99,800		55	78.7	253.0	85,700		55	78.7	253.0	85,700	
55	77.7	232.6	86,800		60	77.6	251.9	75,300		60	77.6	251.9	75,300	
60	76.5	231.4	76,400		65	76.4	250.8	66,700		65	76.4	250.8	66,700	
65	75.2	230.2	67,800		70	75.2	249.5	59,500		70	75.2	249.5	59,500	
70	73.9	228.8	60,600		75	74.0	248.1	53,400		75	74.0	248.1	53,400	
75	72.6	227.3	54,500		80	72.8	246.7	48,100		80	72.8	246.7	48,100	
80	71.3	225.6	49,300		85	71.6	245.0	43,600		85	71.6	245.0	43,600	
85	70.0	223.9	44,700		90	70.4	243.3	39,600		90	70.4	243.3	39,600	
90	68.6	222.0	40,700		95	69.2	241.5	36,000		95	69.2	241.5	36,000	
95	67.3	220.0	37,200		100	68.0	239.5	32,900		100	68.0	239.5	32,900	
100	65.9	217.8	34,000		105	66.7	237.4	30,000		105	66.7	237.4	30,000	
105	64.6	215.5	31,200		110	65.5	235.2	27,500		110	65.5	235.2	27,500	
110	63.2	213.0	28,700		115	64.2	232.9	25,200		115	64.2	232.9	25,200	
115	61.8	210.4	26,300		120	62.9	230.4	23,100		120	62.9	230.4	23,100	
120	60.3	207.7	24,200		125	61.6	227.8	21,200		125	61.6	227.8	21,200	
125	58.9	204.7	22,300		130	60.3	225.0	19,400		130	60.3	225.0	19,400	
130	57.4	201.6	20,600		135	59.0	222.0	17,800		135	59.0	222.0	17,800	
135	55.9	198.3	18,900		140	57.6	219.0	16,300		140	57.6	219.0	16,300	
140	54.4	194.9	17,400		145	56.3	215.7	14,900		145	56.3	215.7	14,900	
145	52.9	191.2	16,000		150	54.9	212.3	13,600		150	54.9	212.3	13,600	
150	51.3	187.3	14,700		155	53.5	208.7	12,400		155	53.5	208.7	12,400	
155	49.7	183.2	13,500		160	52.0	204.9	11,300		160	52.0	204.9	11,300	
160	48.0	178.8	12,400		165	50.6	200.9	10,200		165	50.6	200.9	10,200	
165	46.3	174.2	11,400		170	49.1	196.6	9,200		170	49.1	196.6	9,200	
170	44.6	169.2	10,400		175	47.5	192.2	8,300		175	47.5	192.2	8,300	
175	42.8	164.0	9,500		180	45.9	187.5	7,400		180	45.9	187.5	7,400	
180	40.9	158.4	8,600		185	44.3	182.5	6,600		185	44.3	182.5	6,600	
185	39.0	152.4	7,800		190	42.7	177.2	5,800		190	42.7	177.2	5,800	
190	36.9	146.0	7,000		195	40.9	171.6	5,100		195	40.9	171.6	5,100	
195	34.8	139.1	6,200		200	39.2	165.7	4,400		200	39.2	165.7	4,400	
200	32.6	131.6	5,500											
205	30.2	123.4	4,900											
210	27.6	114.3	4,200											

Combined From Charts:
No. 6722-A 2-20-84
No. 6721-A 2-20-84
No. 6444-A 2-20-84