



900 SERIES

MODEL 9310A

CRAWLER CRANE

LIFT CRANE RATINGS IN POUNDS

With 77H Tubular Chord Boom with Hammerhead and "T-T" Counterweight (140,000 lbs.)

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
70 feet	16	82.8		450,000 *	77
	20	79.5		349,140	77
	25	75.4		239,580	75
	30	71.1		181,410	74
	35	66.7		145,410	72
	40	62.2	106,030	120,970	70
	50	52.4	79,130	89,630	63
	60	41.0	62,560	70,600	53
80 feet	70	25.6	51,170	57,680	37
	17	83.0		410,080 *	87
	20	80.8		349,060	87
	25	77.2		239,430	86
	30	73.5		181,220	84
	35	69.8		145,210	83
	40	65.9	105,800	120,770	81
	50	57.8	78,890	89,410	75
90 feet	60	48.8	62,340	70,400	68
	70	38.2	50,960	57,480	57
	80	23.8	42,700	48,160	39
	19	82.5		365,740 *	97
	20	81.9		348,940	97
	25	78.7		239,260	96
	30	75.4		181,000	95
	35	72.1	126,160	144,990	93
100 feet	40	68.7	105,550	120,540	92
	50	61.7	78,620	89,160	87
	60	54.2	62,080	70,170	81
	70	45.8	50,710	57,240	72
	80	35.9	42,460	47,930	60
	90	22.4	36,200	40,900	41
	20	82.7		329,260 *	107
	25	79.8		239,030	106
110 feet	30	76.9		180,740	105
	35	73.9	125,850	144,720	104
	40	70.9	105,250	120,270	102
	50	64.8	78,290	88,860	98
	60	58.2	61,780	69,880	93
	70	51.2	50,400	56,940	85
	80	43.3	42,150	47,630	76
	90	34.0	36,020	40,730	63
120 feet	100	21.2	31,070	35,190	43
	21	82.8		297,280 *	117
	25	80.7		238,790	116
	30	78.1		180,470	115
	35	75.4	125,340	144,430	114
	40	72.7	104,940	119,980	113
	50	67.2	77,970	88,540	109
	60	61.4	61,470	69,580	104
130 feet	70	55.3	50,080	56,640	98
	80	48.6	41,830	47,320	90
	90	41.2	35,740	40,460	80
	100	32.3	30,800	34,930	66
	110	20.1	26,810	30,480	45
	22	82.9		263,600 *	127
	25	81.5		238,600	126
	30	79.1	155,110	180,240	126
140 feet	35	76.7	125,270	144,190	124
	40	74.2	104,690	119,750	123
	50	69.2	77,690	88,280	120
	60	64.0	61,210	69,330	115
	70	58.5	49,830	56,390	110
	80	52.7	41,570	47,070	103
	90	46.4	35,520	40,240	94
	100	39.3	30,580	34,720	83
150 feet	110	30.9	26,610	30,290	69
	120	19.2	23,320	26,630	47

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
130 feet	24	82.6		233,390 *	137
	25	82.2		233,390 *	137
	30	79.9	154,760	179,930	136
	35	77.7	124,930	143,880	135
	40	75.4	104,360	119,440	134
	50	79.8	77,330	87,940	131
	60	66.1	60,860	68,990	127
	70	61.2	49,460	56,030	122
140 feet	80	56.0	41,200	46,710	115
	90	50.5	35,180	39,910	108
	100	44.5	30,250	34,400	99
	110	37.7	26,280	29,970	87
	120	29.6	22,990	26,320	71
	130	18.4	20,250	23,260	48
	25	82.7		206,680 *	147
	30	80.7	154,430	179,640	146
150 feet	35	78.6	124,580	143,560	145
	40	76.5	104,020	119,120	144
	50	72.3	76,960	87,590	141
	60	67.9	60,510	68,660	137
	70	63.4	49,110	55,690	133
	80	58.7	40,850	46,360	127
	90	53.8	34,840	39,590	121
	100	48.5	29,920	34,070	112
160 feet	110	42.8	25,940	29,640	102
	120	36.3	22,670	26,000	90
	130	28.5	19,930	22,950	74
	140	17.7	17,580	20,350	50
	26	82.8	183,600 *	183,600 *	157
	30	81.3	154,070	179,320	156
	35	79.3	124,230	143,230	155
	40	77.4	103,650	118,780	154
170 feet	50	73.5	76,580	87,220	152
	60	69.4	60,140	68,300	148
	70	65.3	48,730	55,320	144
	80	61.0	40,450	45,980	139
	90	56.6	34,480	39,230	133
	100	51.8	29,540	33,710	125
	110	46.8	25,580	29,280	117
	120	41.2	22,310	25,640	106
180 feet	130	35.0	19,570	22,600	93
	140	27.5	17,230	20,010	76
	150	17.1	15,220	17,790	51
	27	82.9	164,670 *	164,670 *	167
	30	81.8	153,720	164,670 *	166
	35	80.0	123,860	142,900	165
	40	78.2	103,300	118,450	164
	50	74.5	76,200	86,860	162
190 feet	60	70.8	59,770	67,940	159
	70	66.9	48,350	54,960	155
	80	63.0	40,080	45,610	150
	90	58.9	34,120	38,880	145
	100	54.6	29,200	33,360	138
	110	50.1	25,220	28,920	130
	120	45.2	21,950	25,290	121
	130	39.8	19,210	22,240	110
200 feet	140	33.8	16,880	19,660	96
	150	26.6	14,870	17,440	79
	160	16.5	13,130	15,520	53
	28	83.0	147,550 *	147,550 *	176
	30	82.3	147,550 *	147,550 *	176
	35	80.6	123,550	142,610	175
	40	78.9	102,990	118,160	175
	50	75.5	75,870	86,550	172
210 feet	60	72.0	59,450	67,630	169
	70	68.4	48,020	54,640	166
	80	64.7	39,740	45,280	161

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
170 feet (cont.)	90	60.9	33,810	38,570	156
	100	57.0	28,880	33,050	150
	110	52.8	24,900	28,610	143
	120	48.5	21,630	24,980	135
	130	43.8	18,900	21,940	125
	140	38.6	16,570	19,350	113
	150	32.7	14,570	17,140	99
	160	25.7	12,830	15,210	81
170	16.0	11,290	13,520	54	
180 feet	30	82.7	134,500 *	134,500 *	186
	35	81.1	123,180	134,500 *	186
	40	79.5	102,630	117,820	185
	50	76.3	75,480	86,170	183
	60	73.0	59,070	67,260	180
	70	69.6	47,630	54,260	176
	80	66.2	39,350	44,900	172
	90	62.7	33,440	38,210	168
	100	59.0	28,500	32,680	162
	110	55.2	24,520	28,240	155
	120	51.2	21,250	24,600	148
	130	47.0	18,510	21,560	139
	140	42.5	16,190	18,980	129
	150	37.5	14,180	16,760	117
160	31.8	12,450	14,840	102	
170	25.0	10,920	13,150	83	
180	15.5	9,570	11,660	55	
190 feet	31	82.8	120,610 *	120,610 *	196
	35	81.6	120,610 *	120,610 *	196
	40	80.1	102,270	117,480	195
	50	77.0	75,090	85,800	193
	60	73.9	58,690	66,900	190
	70	70.8	47,250	53,880	187
	80	67.5	38,950	44,510	183
	90	64.2	33,060	37,840	179
	100	60.8	28,120	32,310	174
	110	57.3	24,150	27,880	167
	120	53.6	20,880	24,230	161
	130	49.8	18,140	21,190	153
	140	45.7	15,810	18,600	143
	150	41.3	13,810	16,390	133
	160	36.4	12,070	14,470	120
	170	30.9	10,540	12,780	105
180	24.3	9,200	11,290	85	
190	15.1	8,000	9,970	57	
200 feet	32	82.9	110,090 *	110,090 *	206
	35	82.0	110,090 *	110,090 *	206
	40	80.6	101,900	110,090 *	205
	50	77.7	74,700	85,420	203
	60	74.7	58,300	66,520	201
	70	71.7	46,850	53,490	198
	80	68.7	38,540	44,110	194
	90	65.5	32,670	37,460	190
	100	62.4	27,740	31,940	185
	110	59.1	23,760	27,490	179
	120	55.7	20,480	23,840	173
	130	52.2	17,740	20,800	165
	140	48.4	15,420	18,220	157
	150	44.5	13,410	16,000	148
	160	40.2	11,680	14,070	136
	170	35.5	10,150	12,390	123
180	30.1	8,800	10,900	108	
190	23.7	7,600	9,570	87	
200	14.7	6,530	8,390	58	

LIFT CRANE RATINGS IN POUNDS (continued)

With 77H Tubular Chord Boom with Hammerhead and “T-T” Counterweight (140,000 lbs.)

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
210 feet	33	82.9	100,370 *	100,370 *	216
	35	82.4	100,370 *	100,370 *	216
	40	81.0	100,370 *	100,370 *	215
	50	78.3	74,310	85,050	213
	60	75.5	57,920	66,150	211
	70	72.6	46,450	53,110	208
	80	69.8	38,140	43,720	205
	90	66.8	32,300	37,090	201
	100	63.8	27,360	31,560	196
	110	60.7	23,370	27,110	191
	120	57.6	20,100	23,470	185
	130	54.3	17,360	20,420	178
	140	50.8	15,030	17,830	170
	150	47.2	13,030	15,610	162
	160	43.3	11,280	13,690	152
	170	39.2	9,760	12,000	140
	180	34.6	8,410	10,510	126
220 feet	190	29.4	7,210	9,190	110
	200	23.1	6,140	8,010	89
	210	14.3	5,180	6,950	59
230 feet	36	82.8	84,660 *	84,660 *	236
	40	81.8	84,660 *	84,660 *	235
	50	79.3	73,550	84,320	234
	60	76.8	57,190	65,440	232
	70	74.2	45,700	52,370	229
	80	71.6	37,370	42,960	226
	90	68.9	31,570	36,380	222
	100	66.3	26,620	30,830	218
	110	63.5	22,630	26,380	213
	120	60.7	19,350	22,730	208
	130	57.8	16,620	19,680	202
	140	54.8	14,280	17,090	195
	150	51.7	12,280	14,870	188
	160	48.4	10,540	12,940	179
	170	45.0	9,010	11,250	170
	180	41.3	7,660	9,770	159
	190	37.3	6,450	8,440	147
240 feet	200	33.0	5,380	7,260	132
	210	28.3	4,420	6,190	115
	220	22.0	3,550	5,230	93
	230	13.7		4,360	61
250 feet	38	82.9	70,300 *	70,300 *	256
	40	82.5	70,240 *	70,240 *	256
	50	80.2	70,070 *	70,070 *	254
	60	77.8	56,410	64,690	252
	70	75.5	44,900	51,590	250
	80	73.1	36,570	42,180	247
	90	70.7	30,800	35,620	244
	100	68.3	25,840	30,070	240
	110	65.8	21,850	25,610	236
	120	63.2	18,560	21,950	231
	130	60.6	15,810	18,890	225
	140	58.0	13,480	16,300	220
	150	55.2	11,470	14,080	213
	160	52.4	9,730	12,150	206
	170	49.4	8,210	10,460	197
	180	46.3	6,850	8,970	188
	190	43.0	5,650	7,640	178
260 feet	200	39.5	4,570	6,450	166
	210	35.7	3,610	5,380	153
	220	31.6		4,420	138
	230	26.8		3,550	120
270 feet	39	83.0	64,700 *	64,700 *	266
	40	82.8	64,600 *	64,600 *	266
	50	80.5	64,440 *	64,440 *	264
	60	78.3	56,020	63,560 *	262
	70	76.1	44,500	51,200	260
	80	73.8	36,160	41,780	257
	90	71.5	30,400	35,230	254
	100	69.1	25,440	29,680	251
	110	66.7	21,450	25,220	247
	120	64.3	18,160	21,550	242
	130	61.9	15,410	18,490	237
	140	59.3	13,080	15,910	231
	150	56.7	11,070	13,680	225
	160	54.0	9,330	11,750	218
	170	51.3	7,800	10,060	210
	180	48.4	6,450	8,570	202
	190	45.3	5,250	7,240	192
280 feet	200	42.1	4,170	6,050	182
	210	38.7		4,980	170
	220	35.0		4,010	157

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LIFT CRANE RATINGS IN POUNDS

With 77H Tubular Chord Boom with Tapered Tip and “T-T” Counterweight (140,000 lbs.)

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
100 feet	22	80.2		243,800 *	105
	25	78.5		232,570 *	105
	30	75.6		183,610	104
	35	72.6		147,770	102
	40	69.6		123,250	100
	50	63.3		92,220	96
	60	56.7		73,350	90
	70	49.5	53,960	60,490	83
	80	41.5	45,780	51,250	73
	90	31.9	39,380	44,290	60
	100	18.3	34,810	38,940	38
110 feet	23	80.6		243,800 *	115
	25	79.6		232,430 *	115
	30	76.9		183,300	114
	35	74.2		147,450	113
	40	71.5		122,910	111
	50	65.9		91,870	107
	60	60.0	64,920	73,020	102
	70	53.8	53,610	60,160	96
	80	47.1	45,430	50,910	87
	90	39.5	39,220	43,940	77
	100	30.3	34,490	38,620	62
120 feet	110	17.5	30,570	34,240	40
130 feet	24	80.9		242,040 *	125
	25	80.4		232,290 *	125
	30	78.0		182,980	124
	35	75.6		147,140	123
	40	73.1		122,560	122
	50	68.0		91,540	118
	60	62.8	64,590	72,700	113
	70	57.2	53,280	59,830	108
	80	51.4	45,080	50,570	100
	90	44.9	38,870	43,590	92
	100	37.7	34,180	38,320	80
140 feet	110	29.0	30,250	33,930	65
	120	16.7	27,010	30,320	41
150 feet	26	80.7		223,150 *	135
	30	78.9		182,640	134
	35	76.7		146,780	133
	40	74.4		122,190	132
	50	69.8	80,570	91,160	129
	60	65.0	64,220	72,340	125
	70	60.0	52,890	59,460	119
	80	54.8	44,700	50,200	113
	90	49.2	38,490	43,220	105
	100	43.1	33,820	37,970	96
	110	36.2	29,890	33,570	83
160 feet	120	27.9	26,650	29,970	68
	130	16.0	23,950	26,960	43
170 feet	27	81.0		201,090 *	145
	30	79.7		182,290	145
	35	77.7		146,430	144
	40	75.6		121,830	142
	50	71.3	80,190	90,800	139
	60	66.9	63,850	71,980	136
	70	62.4	52,520	59,100	131
	80	57.6	44,320	49,830	125
	90	52.7	38,110	42,850	118
	100	47.3	33,470	37,620	110
	110	41.5	29,540	33,240	99
180 feet	120	34.8	26,310	29,630	87
	130	26.8	23,590	26,610	70
	140	15.5	21,300	24,070	44
190 feet	29	80.8		182,280 *	155
	30	80.4		181,980	155
	35	78.5		146,120	154
	40	76.5		121,500	153
	50	72.6	79,850	90,470	150
	60	68.5	63,530	71,680	146
	70	64.3	52,200	58,790	142
	80	60.0	43,990	49,510	137
	90	55.5	37,780	42,520	130
200 feet	32	80.9		150,170 *	175
	35	79.9	126,380	145,390	174
	40	78.1	105,970	121,110	173
	50	74.7	79,060	89,710	171
	60	71.2	62,760	70,920	168
	70	67.5	51,410	58,010	164
	80	63.8	43,200	48,740	159
	90	60.6	36,970	41,730	154
	100	56.0	32,420	36,590	148
	110	51.9	28,490	32,200	141
	120	47.5	25,250	28,590	132
210 feet	130	42.7	22,530	25,570	122
	140	37.5	20,240	23,020	110
	150	31.5	18,250	20,820	96
	160	24.3	16,550	18,930	77
	170	14.0	15,060	17,280	48



LIFT CRANE RATINGS IN POUNDS (continued)

With 77H Tubular Chord Boom with Tapered Tip and “T-T” Counterweight (140,000 lbs.)

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
180 feet	34	80.7	131,070	136,950 *	184
	35	80.4	125,970	136,950 *	184
	40	78.8	105,570	120,730	183
	50	75.5	78,630	89,300	181
	60	72.2	62,350	70,530	178
	70	68.8	51,000	57,610	175
	80	65.4	42,780	48,320	170
	90	61.8	36,560	41,320	165
	100	58.2	32,020	36,200	160
	110	54.3	28,090	31,810	153
	120	50.3	24,850	28,200	145
	130	46.0	22,140	25,180	136
	140	41.4	19,830	22,620	126
	150	36.4	17,860	20,430	113
	160	30.6	16,150	18,540	98
	170	23.6	14,640	16,870	79
	180	13.6	13,320	15,410	49
190 feet	35	80.9	125,270 *	125,270 *	194
	40	79.4	105,180	120,360	194
	50	76.3	78,220	88,910	191
	60	73.2	61,960	70,150	189
	70	70.0	50,590	57,220	185
	80	66.8	42,370	47,920	181
	90	63.5	36,140	40,910	177
	100	60.0	31,650	35,830	171
	110	56.5	27,700	31,420	165
	120	52.8	24,460	27,810	158
	130	48.9	21,750	24,800	150
	140	44.7	19,450	22,240	141
	150	40.3	17,480	20,050	130
	160	35.4	15,760	18,150	117
	170	29.8	14,250	16,480	101
	180	23.0	12,930	15,020	81
	190	13.3	11,760	13,730	50
200 feet	37	80.8	113,920 *	113,920 *	204
	40	79.9	134,830	113,920 *	204
	50	77.0	77,860	88,550	202
	60	74.1	61,600	69,800	199
	70	71.1	50,230	56,860	196
	80	68.0	42,010	47,560	192
	90	64.9	35,770	40,550	188
	100	61.7	31,300	35,490	183
	110	58.3	27,350	31,080	177
	120	54.9	24,120	27,470	170
	130	51.3	21,410	24,460	163
	140	47.6	19,100	21,900	154
	150	43.6	17,120	19,700	145
	160	39.2	15,410	17,800	133
	170	34.4	13,900	16,140	120
	180	29.0	12,580	14,670	104
	190	22.4	11,390	13,360	83
	200	12.9	10,360	12,220	51
210 feet	38	81.0	104,930 *	104,930 *	214
	40	80.4	104,420	104,930 *	214
	50	77.6	77,440	88,120	212
	60	74.8	61,190	69,410	209
	70	72.0	49,830	56,470	206
	80	69.1	41,590	47,160	203
	90	66.1	35,350	40,140	199
	100	63.1	30,890	35,090	194
	110	60.0	26,960	30,690	189
	120	56.8	23,710	27,070	183
	130	53.5	21,000	24,060	176
	140	50.0	18,700	21,500	168
	150	46.4	16,720	19,300	159
	160	42.5	15,000	17,400	149
	170	38.2	13,490	15,730	137
	180	33.6	12,160	14,260	123
	190	28.3	10,980	12,960	106
	200	21.8	9,930	11,800	85
	210	12.6	9,000	10,770	53
220 feet	40	80.9	96,520 *	96,520 *	224
	50	78.2	77,030	87,760	222
	60	75.5	60,790	69,020	220
	70	72.8	49,420	56,070	217
	80	70.1	41,180	46,750	214
	90	67.3	35,410	40,200	210
	100	64.4	30,510	34,710	205
	110	61.5	26,560	30,300	200
	120	58.5	23,310	26,680	194
	130	55.4	20,600	23,660	188
	140	52.2	18,300	21,110	181

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
220 feet (cont.)	150	48.8	16,320	18,910	172
	160	45.2	14,600	17,000	163
	170	41.4	13,090	15,330	152
	180	37.3	11,760	13,860	140
	190	32.8	10,580	12,550	126
	200	27.6	9,520	11,390	109
	210	21.3	8,590	10,360	87
	220	12.3	7,740	9,420	54
230 feet	42	80.8	89,130 *	89,130 *	234
	50	78.7	76,600	87,340	232
	60	76.2	60,380	68,620	230
	70	73.6	49,000	55,660	227
	80	71.0	40,750	46,340	224
	90	68.3	35,000	39,800	221
	100	65.6	30,100	34,310	216
	110	62.8	26,150	29,890	211
	120	60.0	22,910	26,280	206
	130	57.1	20,190	23,260	200
	140	54.1	17,890	20,700	193
	150	50.9	15,900	18,490	185
	160	47.7	14,180	16,590	177
	170	44.2	12,680	14,930	167
	180	40.5	11,340	13,450	156
	190	36.5	10,160	12,140	144
	200	32.0	9,110	10,980	129
	210	27.0	8,160	9,930	111
	220	20.9	7,310	8,990	89
	230	12.0	6,550	8,150	55
240 feet	43	80.9	82,340 *	82,340 *	244
	50	79.2	76,180	82,270 *	243
	60	76.8	59,980	68,230	240
	70	74.3	48,590	55,260	238
	80	71.8	40,330	45,930	235
	90	69.3	34,610	39,420	231
	100	66.7	29,700	33,920	227
	110	64.1	25,760	29,500	223
	120	61.4	22,510	25,880	217
	130	58.6	19,790	22,850	212
	140	55.8	17,480	20,300	205
	150	52.8	15,490	18,090	198
	160	49.8	13,770	16,190	190
	170	46.6	12,260	14,510	181
	180	43.2	10,940	13,050	171
	190	39.6	9,750	11,730	160
	200	35.7	8,690	10,560	147
	210	31.4	7,740	9,520	132
	220	26.4	6,880	8,570	114
	230	20.4	6,120	7,720	90
	240	11.8	5,430	6,960	56
250 feet	45	80.8	74,930 *	74,930 *	254
	50	79.6	74,730 *	74,730 *	253
	60	77.3	59,610	67,870	251
	70	74.9	48,210	54,890	248
	80	72.6	39,950	45,550	245
	90	70.1	34,240	39,050	242
	100	67.7	29,340	33,550	238
	110	65.2	25,380	29,140	234
	120	62.6	22,130	25,510	229
	130	60.0	19,420	22,500	223
	140	57.3	17,110	19,930	217
	150	54.6	15,130	17,730	210
	160	51.7	13,400	15,820	203
	170	48.7	11,890	14,150	195
	180	45.6	10,560	12,670	185
	190	42.3	9,380	11,370	175
	200	38.8	8,320	10,200	163
	210	34.9	7,370	9,150	150
	220	30.7	6,500	8,190	134
	230	25.9	5,730	7,340	116
	240	20.2	5,030	6,560	92
	250	11.6	4,410	5,880	57
260 feet	46	80.9	69,430 *	69,430 *	264
	50	80.1	69,380 *	69,380 *	263
	60	77.8	59,190	67,470	261
	70	75.5	47,790	54,480	259
	80	73.3	39,520	45,130	256
	90	70.9	33,840	38,660	252
	100	68.6	28,930	33,160	249
	110	66.2	24,980	28,740	245
	120	63.8	21,730	25,110	240
	130	61.3	19,010	22,090	235
	140	58.7	16,700	19,520	229

Boom Length (Feet)	Radius in Feet	Boom Angle Degrees	Lift Rating in Pounds		Feet From Boom Point
			Side Frames Retracted	Side Frames Extended	
260 feet (cont.)	150	56.1	14,720	17,320	223
	160	53.4	12,990	15,400	216
	170	50.6	11,480	13,730	208
	180	47.7	10,140	12,260	199
	190	44.7	8,960	10,950	190
	200	41.4	7,900	9,780	179
	210	38.0	6,950	8,730	167
	220	34.2	6,080	7,770	153
	230	30.1	5,310	6,920	137
	240	25.4	4,600	6,130	118
	250	19.6	3,960	5,430	94
	260	11.3	3,390	4,790	58
270 feet	48	80.8	64,260 *	64,260 *	273
	50	80.4	64,220 *	64,220 *	273
	60	78.3	58,790	63,500 *	271
	70	76.1	47,370	54,070	269
	80	73.9	39,110	44,730	266
	90	71.7	33,440	38,270	263
	100	69.4	28,530	32,760	260
	110	67.1	24,570	28,340	256
	120	64.8	21,320	24,710	251
	130	62.4	18,600	21,680	246
	140	60.0	16,300	19,120	241
	150	57.5	14,310	16,910	235
	160	55.0	12,590	15,010	228
	170	52.3	11,070	13,330	221
	180	49.6	9,730	11,850	212
	190	46.8	8,590	10,540	203
	200	43.8	7,490	9,370	194
	210	40.6	6,530	8,310	183
220	37.2	5,670	7,360	170	
230	33.6	4,890	6,500	156	
240	29.5	4,180	5,720	140	
250	24.9	3,540	5,010	120	
260	19.2	2,940	4,350	96	
270	11.1		3,780	59	
280 feet	49	81.0	59,760 *	59,760 *	283
	50	80.8	59,700 *	59,700 *	283
	60	78.7	58,380	58,910 *	281
	70	76.6	46,960	53,670	279
	80	74.5	38,690	44,310	277
	90	72.3	33,040	37,870	274
	100	70.2	28,120	32,360	270
	110	68.0	24,170	27,940	266
	120	65.8	20,910	24,310	262
	130	63.5	18,190	21,280	257
	140	61.2	15,880	18,710	252
	150	58.8	13,890	16,500	246
	160	56.4	12,170	14,590	240
	170	53.9	10,650	12,910	233
	180	51.3	9,310	11,430	225
	190	48.7	8,130	10,120	217
	200	45.9	7,060	8,950	208
	210	43.0	6,110	7,900	198
220	39.9	5,240	6,940	186	
230	36.5	4,460	6,070	174	
240	33.0	3,750	5,290	159	
250	29.0	3,100	4,580	142	
260	24.4		3,920	123	
270	18.9		3,330	97	
290 feet	51	80.9	55,430 *	55,430 *	293
	60	79.1	54,610 *	54,610 *	292
	70	77.1	46,540	53,260	289
	80	75.0	38,260	43,890	287
	90	73.0	32,630	37,470	284
	100	70.9	27,710	31,960	281
	110	68.8	23,760	27,530	277
	120	66.7	20,500	23,900	273
	130	64.5	17,770	20,870	268
	140	62.3	15,460	18,300	263
	150	60.0	13,470	16,090	258
	160	57.7	11,750	14,180	252
	170	55.3	10,230	12,500	245
	180	52.9	8,900	11,020	238
	190	50.4	7,710	9,710	230
	200	47.8	6,650	8,530	221
	210	45.0	5,690	7,480	212
	220	42.2	4,830	6,530	201
230	39.1	4,040	5,650	190	
240	35.9	3,320	4,860	177	
250	32.4	2,680	4,150	162	
260	28.5		3,490	145	
270	24.0		2,900	125	

LIFT CRANE RATINGS IN KILOGRAMS

With 77H Tubular Chord Boom with Hammerhead and “T-T” Counterweight (63504 Kgs.)

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
21.3 meters	4.9	82.8		204,120 *	23
	5.5	81.1		183,840 *	23
	6.0	79.8		163,020	23
	7.0	77.1		124,660	23
	8.0	74.3		100,650	22
	9.0	71.5		84,230	22
	10.0	68.7		72,300	21
	11.0	65.8		63,180	21
	12.0	62.8		56,000	21
	13.0	59.7	44,180	50,280	20
	14.0	56.5	40,080	45,510	20
	15.0	53.2	36,640	41,520	19
	16.0	49.8	33,690	38,120	18
	17.0	46.1	31,190	35,240	17
	18.0	42.2	28,960	32,700	16
	19.0	37.9	27,000	30,460	15
	20.0	33.2	25,250	28,480	13
24.4 meters	5.2	82.9		186,010 *	26
	6.0	81.1		162,990	26
	7.0	78.7		124,610	26
	8.0	76.3		100,580	26
	9.0	73.9		84,150	25
	10.0	71.4		72,220	25
	11.0	68.9		63,080	25
	12.0	66.4	48,930	55,590	24
	13.0	63.8	44,070	50,190	24
	14.0	61.2	39,980	45,410	23
	15.0	58.5	36,520	41,410	23
	16.0	55.6	33,580	38,010	22
	17.0	52.7	31,090	35,150	21
	18.0	49.7	28,860	32,600	20
	19.0	46.5	26,900	30,360	19
	20.0	43.1	25,150	28,380	18
	22.0	35.5	22,190	25,030	19
24.0	26.0	19,780	22,300	12	
27.4 meters	5.6	82.9		165,890 *	29
	6.0	82.1		162,940	29
	7.0	80.0		124,530	29
	8.0	77.8		100,490	29
	9.0	75.7		84,050	28
	10.0	73.6		72,120	28
	11.0	71.4	54,890	62,980	28
	12.0	69.2	48,810	55,790	27
	13.0	66.9	43,960	50,080	27
	14.0	64.6	39,860	45,310	27
	15.0	62.3	36,400	41,300	26
	16.0	59.9	33,450	37,900	26
	17.0	57.5	30,980	35,040	25
	18.0	54.9	28,750	32,500	24
	19.0	52.3	26,780	30,250	24
	20.0	49.6	25,040	28,280	23
	22.0	43.8	22,090	24,930	21
24.0	37.3	19,670	22,200	18	
26.0	29.5	17,660	19,940	15	
30.5 meters	6.0	82.8		149,350 *	32
	7.0	81.0		124,440	32
	8.0	79.1		100,380	32
	9.0	77.2		83,930	32
	10.0	75.2	62,390	72,000	31
	11.0	73.6	54,740	62,850	31
	12.0	71.3	48,660	55,660	31
	13.0	69.3	43,810	49,950	30
	14.0	67.3	39,710	45,170	30
	15.0	65.3	36,260	41,160	30
	16.0	63.2	33,300	37,760	29
	17.0	61.0	30,840	34,920	28
	18.0	58.9	28,610	32,360	28
	19.0	56.6	26,640	30,120	27
	20.0	54.3	24,900	28,140	27
	22.0	49.5	21,940	24,790	25
	24.0	44.3	19,530	22,060	23
26.0	38.6	17,520	19,810	21	
28.0	31.9	15,890	17,960	18	
30.0	23.6	14,410	16,320	14	
33.5 meters	6.3	83.0		134,570 *	35
	7.0	81.8		124,340	35
	8.0	80.1		100,260	35
	9.0	78.3		83,820	35
	10.0	76.6	62,250	71,880	34
	11.0	74.8	54,590	62,710	34
	12.0	73.1	48,510	55,520	34
	13.0	71.3	43,670	49,820	34
	14.0	69.5	39,570	45,030	33
	15.0	67.6	36,110	41,020	33
	16.0	65.8	33,150	37,620	32
	17.0	63.9	30,700	34,780	32
	18.0	62.0	28,470	32,230	31
	19.0	60.0	26,500	29,990	31
	20.0	58.0	24,760	28,000	30
	22.0	53.9	21,800	24,650	29
	24.0	49.5	19,390	21,930	27
Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
33.5 meters (cont.)	26.0	44.8	17,370	19,660	25
	28.0	39.6	15,750	17,840	23
	30.0	33.8	14,290	16,200	20
	32.0	26.9	13,020	14,790	17
36.6 meters	6.7	82.9		119,430 *	38
	7.0	82.5		119,430 *	38
	8.0	80.9		100,160	38
	9.0	79.3	71,950	83,710	38
	10.0	77.7	62,140	71,780	38
	11.0	76.1	54,480	62,610	37
	12.0	74.5	48,390	55,400	37
	13.0	72.9	43,560	49,710	37
	14.0	71.2	39,450	44,920	36
	15.0	69.6	35,980	40,910	36
	16.0	67.9	33,030	37,490	36
	17.0	66.2	30,590	34,670	35
	18.0	64.5	28,350	32,120	35
	19.0	62.7	26,390	29,880	34
	20.0	61.0	24,640	27,900	34
	22.0	57.3	21,680	24,530	33
	24.0	53.5	19,270	21,810	31
39.6 meters	7.1	82.9		105,150 *	41
	8.0	81.6		100,040	41
	9.0	80.1	71,800	83,580	41
	10.0	78.7	61,980	71,640	41
	11.0	77.2	54,310	62,460	40
	12.0	75.7	48,230	55,250	40
	13.0	74.2	43,400	49,560	40
	14.0	72.7	39,290	44,770	40
	15.0	71.2	35,820	40,750	39
	16.0	69.7	32,860	37,340	39
	17.0	68.1	30,430	34,520	39
	18.0	66.6	28,190	31,960	38
	19.0	65.0	26,220	29,720	38
	20.0	63.4	24,480	27,730	37
	22.0	60.1	21,520	24,380	36
	24.0	56.7	19,100	21,650	35
42.7 meters	7.5	82.9		93,670 *	44
	8.0	82.2	84,950	93,670 *	44
	9.0	80.8	71,650	83,440	44
	10.0	79.5	61,830	71,500	44
	11.0	78.1	54,150	62,310	44
	12.0	76.8	48,060	55,090	43
	13.0	75.4	43,240	49,410	43
	14.0	74.0	39,130	44,620	43
	15.0	72.6	35,660	40,590	43
	16.0	71.2	32,700	37,180	42
	17.0	69.8	30,270	34,370	42
	18.0	68.3	28,040	31,820	41
	19.0	66.9	26,060	29,570	41
	20.0	65.4	24,320	27,580	41
	22.0	62.4	21,360	24,220	40
	24.0	59.3	18,930	21,490	39
45.7 meters	7.8	83.0	83,090 *	83,090 *	47
	8.0	82.7	83,090 *	83,090 *	47
	9.0	81.5	71,490	83,090 *	47
	10.0	80.2	61,680	71,360	47
	11.0	78.9	53,990	62,160	47
	12.0	77.7	48,040	55,080	47
	13.0	76.4	43,070	49,260	46
	14.0	75.1	38,950	44,450	46
	15.0	73.8	35,480	40,430	46
	16.0	72.5	32,520	37,010	45
	17.0	71.2	30,100	34,210	45
	18.0	69.8	27,860	31,650	45
	19.0	68.5	25,890	29,400	44
	20.0	67.2	24,140	27,410	44
	22.0	64.4	21,180	24,050	43
	24.0	61.6	18,760	21,320	42
Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
45.7 meters (cont.)	26.0	58.7	16,750	19,060	41
	28.0	55.7	15,180	17,280	40
	30.0	52.6	13,720	15,640	38
	32.0	49.4	12,450	14,230	36
	34.0	45.9	11,350	13,000	35
	36.0	42.3	10,370	11,910	33
	38.0	38.4	9,500	10,950	30
	40.0	34.1	8,730	10,090	27
	42.0	29.3	8,030	9,320	24
	44.0	23.5	7,400	8,610	20
48.8 meters	8.2	82.9	74,720 *	74,720 *	50
	9.0	82.0	71,330	74,720 *	50
	10.0	80.8	61,520	71,210	50
	11.0	79.6	53,820	62,010	50
	12.0	78.4	47,880	54,940	50
	13.0	77.2	42,910	49,100	49
	14.0	76.0	38,790	44,290	49
	15.0	74.8	35,310	40,270	49
	16.0	73.6	32,340	36,840	49
	17.0	72.4	29,940	34,050	48
	18.0	71.1	27,700	31,490	48
	19.0	69.9	25,720	29,240	48
	20.0	68.7	23,980	27,250	47
	22.0	66.1	21,010	23,880	46
	24.0	63.5	18,590	21,150	45
	26.0	60.8	16,570	18,880	44
	28.0	58.1	15,010	17,110	43
	30.0	55.3	13,550	15,480	42
	32.0	52.4	12,290	14,070	40
	34.0	49.3	11,190	12,840	39
36.0	46.1	10,210	11,750	37	
38.0	42.8	9,340	10,790	35	
40.0	39.1	8,570	9,930	33	
42.0	35.2	7,870	9,160	30	
44.0	30.8	7,240	8,450	27	
46.0	25.8	6,670	7,820	23	
48.0	19.5	6,140	7,240	18	
51.8 meters	8.6	82.9	67,100 *	67,100 *	53
	9.0	82.5	67,100 *	67,100 *	53
	10.0	81.4	61,380	67,100 *	53
	11.0	80.2	53,680	61,870	53
	12.0	79.1	47,740	54,800	53
	13.0	78.0	42,760	48,960	53
	14.0	76.9	38,640	44,150	52
	15.0	75.7	35,160	40,120	52
	16.0	74.6	32,190	36,690	52
	17.0	73.4	29,790	33,710	52
18.0	72.3	27,560	31,350	51	
19.0	71.1	25,580	29,090	51	
20.0	70.0	23,830	27,110	51	
22.0	67.6	20,860	23,740	50	
24.0	65.2	18,430	21,000	49	
26.0	62.7	16,420	18,730	48	
28.0	60.2	14,870	16,980	47	
30.0	57.6	13,410	15,340	46	
32.0	54.9	12,150	13,930	44	
34.0	52.2	11,040	12,700	43	
36.0	49.3	10,070	11,610	41	
38.0	46.3	9,200	10,650	39	
40.0	43.2	8,430	9,790	37	
42.0	39.8	7,730	9,020	35	
44.0	36.2	7,100	8,320	32	
46.0					



LIFT CRANE RATINGS IN KILOGRAMS (continued)

With 77H Tubular Chord Boom with Hammerhead and “T-T” Counterweight (63504 Kgs.)

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
54.9 meters (cont.)	50.0	29.2	5,350	6,400	28
	52.0	24.5	4,910	5,920	24
	54.0	18.7	4,500	5,470	19
57.9 meters	9.3	83.8	55,080 *	55,080 *	59
	10.0	82.3	55,080 *	55,080 *	59
	11.0	81.3	53,350	55,080 *	59
	12.0	80.3	47,410	54,500	59
	13.0	79.3	42,430	48,650	59
	14.0	78.3	38,290	43,820	59
	15.0	77.3	34,810	39,780	58
	16.0	76.2	32,030	36,550	58
	17.0	75.2	29,460	33,590	58
	18.0	74.2	27,210	31,020	58
	19.0	73.2	25,230	28,760	57
	20.0	72.1	23,480	26,770	57
	22.0	70.1	20,510	23,390	56
	24.0	67.9	18,080	20,650	56
	26.0	65.8	16,060	18,380	55
	28.0	63.6	14,530	16,650	54
	30.0	61.4	13,070	15,010	53
	32.0	59.1	11,810	13,590	52
	34.0	56.7	10,700	12,360	50
	36.0	54.3	9,720	11,280	49
	38.0	51.8	8,860	10,310	47
	40.0	49.3	8,080	9,450	46
	42.0	46.6	7,390	8,680	44
	44.0	43.8	6,750	7,980	42
61.0 meters	46.0	40.8	6,180	7,340	40
	48.0	37.7	5,660	6,770	37
	50.0	34.3	5,180	6,240	34
	52.0	30.5	4,740	5,750	31
	54.0	26.3	4,330	5,300	27
	56.0	21.3	3,950	4,880	23
	9.7	82.9	49,770 *	49,770 *	62
	10.0	82.7	49,770 *	49,770 *	62
	11.0	81.7	49,770 *	49,770 *	62
	12.0	80.8	47,250	49,770 *	62
	13.0	79.8	42,260	46,480	62
	14.0	78.9	38,120	43,660	62
	15.0	77.9	34,630	39,620	61
	16.0	76.9	31,830	36,380	61
	17.0	76.0	29,280	33,430	61
	18.0	75.0	27,030	30,850	61
	19.0	74.0	25,060	28,590	60
	20.0	73.1	23,300	26,590	60
	22.0	71.1	20,320	23,210	60
	24.0	69.1	17,890	20,470	59
	26.0	67.1	15,870	18,200	58
	28.0	65.0	14,360	16,470	57
	30.0	62.9	12,900	14,830	56
	32.0	60.8	11,630	13,420	55
	34.0	58.6	10,520	12,190	54
	36.0	56.4	9,550	11,100	53
64.0 meters	38.0	54.1	8,680	10,130	51
	40.0	51.7	7,900	9,270	50
	42.0	49.3	7,210	8,500	48
	44.0	46.7	6,580	7,800	46
	46.0	44.1	6,010	7,170	44
	48.0	41.3	5,480	6,590	42
	50.0	38.3	5,000	6,060	40
	52.0	35.2	4,560	5,570	37
	54.0	31.7	4,150	5,130	34
	56.0	27.9	3,770	4,700	30
	58.0	23.4	3,430	4,320	26
	60.0	18.0	3,110	3,960	20
	10.1	82.9	45,480 *	45,480 *	65
	11.0	82.1	45,480 *	45,480 *	65
	12.0	81.2	45,480 *	45,480 *	65
	13.0	80.3	42,090	45,480 *	65
	14.0	79.4	37,950	43,490	65
	15.0	78.5	34,460	39,440	65
	16.0	77.6	31,690	36,220	64
	17.0	76.7	29,110	33,260	64
	18.0	75.7	26,860	30,680	64
	19.0	74.8	24,880	28,420	64
	20.0	73.9	23,120	26,420	63
	22.0	72.0	20,140	23,040	62
	24.0	70.1	17,710	20,290	62
	26.0	68.2	15,890	18,220	61
	28.0	66.3	14,190	16,310	60
	30.0	64.3	12,720	14,670	60
	32.0	62.3	11,460	13,250	59
	34.0	60.3	10,350	12,010	57
	36.0	58.2	9,370	10,930	56
	38.0	56.0	8,500	9,960	55
	40.0	53.8	7,730	9,100	53
	42.0	51.6	7,030	8,330	52
	44.0	49.2	6,400	7,630	50
	46.0	46.8	5,820	6,990	48
	48.0	44.3	5,300	6,410	46
	50.0	41.7	4,820	5,880	44

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
64.0 meters (cont.)	52.0	38.9	4,380	5,390	42
	54.0	35.9	3,970	4,940	39
	56.0	32.7	3,600	4,540	36
	58.0	29.2	3,250	4,150	33
	60.0	25.2	2,930	3,790	29
	62.0	20.5	2,630	3,460	24
	64.0	14.4	2,340	3,150	18
67.1 meters	10.4	83.0	41,640 *	41,640 *	68
	11.0	82.5	41,640 *	41,640 *	68
	12.0	81.6	41,640 *	41,640 *	68
	13.0	80.7	41,640 *	41,640 *	68
	14.0	79.9	37,790	41,640 *	68
	15.0	79.0	34,290	39,290	68
	16.0	78.1	31,540	36,070	67
	17.0	77.3	28,960	33,110	67
	18.0	76.4	26,700	30,530	67
	19.0	75.5	24,730	28,270	67
	20.0	74.6	22,970	26,260	67
	22.0	72.9	19,980	22,880	66
	24.0	71.1	17,550	20,130	65
	26.0	69.2	15,740	18,070	65
	28.0	67.4	14,030	16,150	64
	30.0	65.6	12,560	14,510	63
	32.0	63.7	11,300	13,090	62
	34.0	61.7	10,190	11,860	61
	36.0	59.8	9,220	10,770	60
	38.0	57.8	8,350	9,810	59
	40.0	55.7	7,570	8,940	57
	42.0	53.6	6,880	8,170	56
	44.0	51.5	6,240	7,470	54
	46.0	49.2	5,670	6,840	53
	48.0	46.9	5,140	6,250	51
	50.0	44.5	4,660	5,720	49
70.1 meters	52.0	42.0	4,230	5,240	47
	54.0	39.4	3,810	4,790	44
	56.0	36.6	3,440	4,370	42
	58.0	33.6	3,090	3,990	39
	60.0	30.3	2,770	3,630	36
	62.0	26.7	2,470	3,300	32
	64.0	22.5	2,180	2,980	27
	66.0	17.4	1,920	2,700	22
	10.8	83.0	38,220 *	38,220 *	71
	11.0	82.8	38,220 *	38,220 *	71
	12.0	82.0	38,220 *	38,220 *	71
	13.0	81.2	38,220 *	38,220 *	71
	14.0	80.3	37,610	38,220 *	71
	15.0	79.5	34,110	38,220 *	71
	16.0	78.7	31,370	35,910	71
	17.0	77.8	28,780	32,940	70
	18.0	77.0	26,530	30,360	70
	19.0	76.2	24,540	28,100	70
	20.0	75.3	22,780	26,090	70
	22.0	73.6	19,800	22,700	69
	24.0	71.9	17,360	19,950	68
	26.0	70.2	15,570	17,900	68
	28.0	68.4	13,860	15,980	67
	30.0	66.7	12,390	14,340	66
	32.0	64.9	11,120	12,920	65
	34.0	63.1	10,010	11,680	64
	36.0	61.2	9,040	10,600	63
	38.0	59.3	8,170	9,630	62
	40.0	57.4	7,390	8,770	61
	42.0	55.4	6,690	7,990	60
	44.0	53.4	6,060	7,290	58
	46.0	51.4	5,480	6,650	57
73.2 meters	48.0	49.2	4,960	6,070	55
	50.0	47.0	4,490	5,550	53
	52.0	44.7	4,040	5,060	51
	54.0	42.3	3,630	4,610	49
	56.0	39.8	3,260	4,200	47
	58.0	37.2	2,910	3,810	44
	60.0	34.4	2,590	3,450	41
	62.0	31.4	2,280	3,120	38
	64.0	28.0	2,000	2,800	35
	66.0	24.2	1,740	2,510	30
	68.0	19.8	1,490	2,240	25
	70.0	14.0		1,990	19
	11.2	82.9	34,550 *	34,550 *	74
	12.0	82.3	34,550 *	34,550 *	74
	13.0	81.5	34,550 *	34,550 *	74
	14.0	80.7	34,550 *	34,550 *	74
	15.0	79.9	34,190	34,550 *	74
	16.0	79.1	31,200	34,550 *	74
	17.0	78.3	28,610	32,780	74
	18.0	77.6	26,360	30,190	73
	19.0	76.7	24,370	27,920	73
	20.0	75.9	22,610	25,920	73
	22.0	74.3	19,620	22,530	72
	24.0	72.7	17,180	19,780	72
	26.0	71.1	15,390	17,740	71
	28.0	69.4	13,680	15,810	70

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
73.2 meters (cont.)	30.0	67.7	12,210	14,170	70
	32.0	66.0	10,940	12,750	69
	34.0	64.3	9,830	11,510	68
	36.0	62.5	8,860	10,420	67
	38.0	60.7	7,990	9,450	66
	40.0	58.9	7,210	8,590	64
	42.0	57.1	6,510	7,820	63
	44.0	55.2	5,880	7,110	62
	46.0	53.3	5,310	6,480	60
	48.0	51.3	4,780	5,900	59
	50.0	49.2	4,300	5,370	57
	52.0	47.1	3,860	4,880	55
	54.0	44.9	3,450	4,430	53
	56.0	42.7	3,080	4,010	51
	58.0	40.3	2,730	3,630	49
	60.0	37.8	2,400	3,270	47
76.2 meters	62.0	35.1	2,100	2,930	44
	64.0	32.3	1,820	2,620	41
	66.0	29.1	1,560	2,330	37
	68.0	25.7		2,060	33
	70.0	21.7		1,800	29
	72.0	16.9		1,560	23
	11.5	83.0	31,770 *	31,560 *	77
	12.0	82.6	31,770 *	31,770 *	77
	13.0	81.9	31,770 *	31,770 *	77
	14.0	81.1	31,770 *	31,770 *	77
15.0	80.3	31,770 *	31,770 *	77	
16.0	79.6	31,020	31,680 *	77	
17.0	78.8	28,440	31,650 *	77	
18.0	78.1	26,180	30,020	76	
19.0	77.3	24,190	27,750	76	
20.0	76.5	22,430	25,750	76	
22.0	75.0	19,440	22,350	75	
24.0	73.4	17,000	19,590	75	
26.0	71.8	15,220	17,560	74	
28.0	70.2	13,500	15,640	74	
30.0	68.6	12,040	13,990	73	
32.0	67.0	10,760	12,570	72	
34.0	65.4	9,650	11,330	71	
36.0	63.7	8,680	10,240	70	
38.0	62.0	7,800	9,270	69	
40.0	60.3	7,030	8,400	68	
42.0	58.5	6,330	7,630	67	
44.0	56.8	5,700	6,930	66	
46.0	54.9	5,120	6,300	64	
48.0	53.1	4,590	5,710	63	
50.0	51.2	4,120	5,180	61	
52.0	49.2	3,680	4,690	59	
54.0	47.2	3,270	4,250	58	
56.0	45.1	2,890	3,830	56	
58.0	42.9	2,540	3,440	54	
60.0	40.7	2,220	3,080	51	
62.0	38.3	1,910	2,750	49	
64.0	35.8	1,630	2,440	46	
66.0	33.1		2,150	43	
68.0	30.2		1,870	40	
70.0	27.0		1,620	36	
79.2 meters	11.9	83.0	29,310 *	29,310 *	81
	12.0	82.9	29,310 *	29,310 *	81
	13.0	82.2	29,310 *	29,310 *	80
	14.0	81.4	29,310 *	29,310 *	80
	15.0	80.7	29,180 *	29,180 *	80
	16.0	80.0	29,070 *	29,070 *	80
	17.0	79.2	28,260	29,040 *	80
	18.0	78.5	26,000	28,780 *	80
	19.0	77.8	24,020	27,580	79
	20.0	77.0	22,250	25,570	79
	22.0	75.6	19,250	22,180	79
	24.0	74.1	16,810	19,420	78
	26.0	72.6	15,050	17,390	77
	28.0	71.0	13,330	15,460	77
	30.0	69.5	11,860	13,820	76
	32.0	67.9	10,590	12,400	75
	34.0	66.4	9,480	11,150	74
	36.0	64.8	8,500	10,060	74
	38.0	63.2	7,620	9,090	73
	40.0	61.5	6,850	8,230	72
	42.0	59.9	6,150	7,450	70
	44.0	58.2	5,520	6,750	69
	46.0	56.5	4,940	6,110	68
	48.0	54.7	4,410	5,530	67
50.0	52.9	3,940	5,000	65	
52.0	51.1	3,490	4,510	63	
54.0	49.2	3,080	4,060	62	
56.0	47.2	2,710	3,650	60	
58.0	45.3	2,360	3,260	58	
60.0	43.2	2,030	2,900	56	
62.0	41.0	1,730	2,570	54	
64.0	38.7		2,250	51	
66.0	36.3		1,960	49	
68.0	33.8		1,690	46	

LIFT CRANE RATINGS IN KILOGRAMS

With 77H Tubular Chord Boom with Tapered Tip and “T-T” Counterweight (63504 Kgs.)

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
30.5 meters	6.4	80.8		110,580 *	32
	7.0	79.7		110,580 *	32
	8.0	77.8		100,450 *	31
	9.0	75.8		85,230	31
	10.0	73.9		73,360	31
	11.0	71.9		64,250	31
	12.0	69.9		57,100	30
	13.0	67.9		51,420	30
	14.0	65.9		46,670	29
	15.0	63.8		42,680	29
	16.0	61.7		39,290	28
	17.0	59.5		36,470	28
	18.0	57.3		33,930	27
	19.0	55.1	28,240	31,710	27
	20.0	52.7	26,500	29,740	26
	22.0	47.8	23,560	26,410	24
	24.0	42.5	21,170	23,700	22
	26.0	36.6	19,180	21,460	20
	28.0	29.8	17,500	19,580	17
	30.0	21.0	16,100	18,010	12
33.5 meters	6.8	81.0		110,580 *	35
	7.0	80.6		110,580 *	35
	8.0	78.9		100,390 *	34
	9.0	77.2		85,090	34
	10.0	75.4		73,220	34
	11.0	73.6		64,110	34
	12.0	71.8		56,940	33
	13.0	70.0		51,270	33
	14.0	68.2		46,520	33
	15.0	66.3		42,530	32
	16.0	64.5		39,140	32
	17.0	62.5	32,250	36,320	31
	18.0	60.6	30,030	33,780	31
	19.0	58.6	28,080	31,560	30
	20.0	56.6	26,340	29,590	30
	22.0	52.4	23,410	26,250	28
	24.0	48.0	21,010	23,550	26
	26.0	43.2	19,020	21,310	24
	28.0	37.9	17,340	19,420	22
	30.0	31.9	15,960	17,870	19
32.0	24.7	14,710	16,470	16	
36.6 meters	7.3	80.9		100,320 *	38
	8.0	79.8		100,320 *	38
	9.0	78.2		84,950	37
	10.0	76.6		73,070	37
	11.0	75.0		63,960	37
	12.0	73.4		56,790	37
	13.0	71.7		51,130	36
	14.0	70.1		46,370	36
	15.0	68.4		42,370	26
	16.0	66.7	34,520	38,980	35
	17.0	65.0	32,100	36,180	35
	18.0	63.3	29,880	33,640	34
	19.0	61.5	27,930	31,410	34
	20.0	59.7	26,190	29,440	33
	22.0	56.0	23,250	26,100	32
	24.0	52.1	20,860	23,400	30
	26.0	48.0	18,860	21,150	29
	28.0	43.7	17,180	19,260	27
	30.0	38.9	15,820	17,730	25
	32.0	33.6	14,560	16,330	22
34.0	27.5	13,470	15,110	18	
36.0	19.6	12,510	14,030	14	
39.6 meters	7.8	80.9		100,250 *	41
	8.0	80.6		100,250 *	41
	9.0	79.2		84,790	40
	10.0	77.7		72,920	40
	11.0	76.2		63,790	40
	12.0	74.7		56,620	40
	13.0	73.2		50,970	39
	14.0	71.7		46,200	39
	15.0	70.2	37,290	42,210	39
	16.0	68.6	34,350	38,810	38
	17.0	67.0	31,930	36,020	38
	18.0	65.5	29,710	33,480	38
	19.0	63.9	27,750	31,240	37
	20.0	62.2	26,020	29,270	37
	22.0	58.9	23,080	25,940	35
	24.0	55.5	20,680	23,230	34
	26.0	51.9	18,680	20,980	33
	28.0	48.1	17,010	19,090	31
	30.0	44.1	15,650	17,570	29
	32.0	39.8	14,400	16,170	27
34.0	35.0	13,310	14,950	24	
36.0	29.6	12,340	13,880	21	
38.0	23.1	11,480	12,920	17	
42.7 meters	8.3	80.9		91,210 *	44
	9.0	79.9		84,630	44
	10.0	78.6		72,760	43
	11.0	77.2		63,630	43
	12.0	75.8		56,450	43
Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
42.7 meters (cont.)	13.0	74.4		50,810	43
	14.0	73.0	40,560	46,040	42
	15.0	71.6	37,120	42,040	42
	16.0	70.2	34,170	38,650	42
	17.0	68.8	31,770	35,860	41
	18.0	67.3	29,540	33,320	41
	19.0	65.8	27,590	31,080	40
	20.0	64.4	25,850	29,110	40
	22.0	61.3	22,910	25,770	39
	24.0	58.2	20,510	23,060	38
	26.0	55.0	18,510	20,810	37
	28.0	51.7	16,830	18,920	35
	30.0	48.2	15,490	17,420	33
	32.0	44.5	14,240	16,020	31
	34.0	40.5	13,150	14,800	29
	36.0	36.2	12,180	13,720	27
	38.0	31.3	11,330	12,760	24
	40.0	25.7	10,560	11,920	20
	42.0	18.5	9,870	11,150	15
45.7 meters	8.7	81.0		82,340 *	47
	9.0	80.6		82,340 *	47
	10.0	79.3		72,630	46
	11.0	78.1		63,490	46
	12.0	76.8		56,310	46
	13.0	75.5	44,500	50,670	46
	14.0	74.2	40,410	45,890	46
	15.0	72.9	36,960	41,900	45
	16.0	71.6	34,020	38,500	45
	17.0	70.2	31,620	35,720	45
	18.0	68.9	29,400	33,180	44
	19.0	67.6	27,440	30,940	44
	20.0	66.2	25,710	28,970	43
	22.0	63.4	22,760	25,630	42
	24.0	60.6	20,360	22,920	41
	26.0	57.7	18,370	20,670	40
	28.0	54.6	16,680	18,780	39
	30.0	51.5	15,360	17,280	37
	32.0	48.2	14,110	15,880	36
	34.0	44.8	13,010	14,660	34
	36.0	41.1	12,050	13,580	32
	38.0	37.1	11,190	12,630	29
	40.0	32.7	10,420	11,780	26
	42.0	27.8	9,730	11,020	23
	44.0	21.8	9,110	10,320	19
48.8 meters	9.2	81.0		74,890 *	50
	10.0	80.0		72,470	50
	11.0	78.8		63,320	49
	12.0	77.6	49,090	56,130	49
	13.0	76.4	44,330	50,500	49
	14.0	75.2	40,230	45,720	49
	15.0	74.0	36,780	41,720	48
	16.0	72.8	33,840	38,320	48
	17.0	71.5	31,440	35,550	48
	18.0	70.3	29,220	33,010	47
	19.0	69.0	27,270	30,770	47
	20.0	67.8	25,530	28,790	47
	22.0	65.2	22,580	25,450	46
	24.0	62.6	20,180	22,740	45
	26.0	59.9	18,180	20,490	44
	28.0	57.1	16,500	18,590	43
	30.0	54.3	15,190	17,110	41
	32.0	51.3	13,930	15,710	40
	34.0	48.3	12,840	14,490	38
	36.0	45.0	11,870	13,420	36
	38.0	41.6	11,010	12,460	34
	40.0	37.9	10,250	11,610	32
	42.0	33.9	9,560	10,840	29
	44.0	29.5	8,940	10,160	26
	46.0	24.3	8,370	9,530	22
	48.0	17.7	7,860	8,930	16
51.8 meters	9.7	80.9		67,960 *	53
	10.0	80.6		67,960 *	53
	11.0	79.5	54,980	63,150	53
	12.0	78.4	48,920	55,960	52
	13.0	77.2	44,140	50,330	52
	14.0	76.1	40,050	45,550	52
	15.0	74.9	36,600	41,550	52
	16.0	73.8	33,650	38,140	51
	17.0	72.6	31,270	35,380	51
	18.0	71.5	29,050	32,840	51
	19.0	70.3	27,090	30,600	50
	20.0	69.1	25,350	28,620	50
	22.0	66.7	22,400	25,280	49
	24.0	64.3	20,000	22,560	48
	26.0	61.8	18,000	20,310	47
	28.0	59.3	16,320	18,420	46
	30.0	56.7	15,020	16,950	45
	32.0	54.0	13,770	15,540	43
	34.0	51.2	12,670	14,320	42
	36.0	48.3	11,710	13,250	40
	38.0	45.3	10,850	12,290	38
	40.0	42.1	10,080	11,440	36
Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
51.8 meters (cont.)	42.0	35.0	9,390	10,670	34
	44.0	30.9	8,760	9,980	31
	46.0	30.9	8,200	8,360	28
	48.0	26.3	7,690	8,790	25
	50.0	20.7	7,210	8,260	20
54.9 meters	10.2	80.9	60,760	61,960 *	56
	11.0	80.1	54,800	61,960 *	56
	12.0	79.0	48,720	55,780	55
	13.0	77.9	43,960	50,160	55
	14.0	76.9	39,870	45,380	55
	15.0	75.8	36,410	41,370	55
	16.0	74.7	33,460	37,960	54
	17.0	73.6	31,090	35,210	54
	18.0	72.5	28,870	32,660	54
	19.0	71.4	26,900	30,420	54
	20.0	70.3	25,170	28,440	53
	22.0	68.1	22,220	25,100	52
	24.0	65.8	19,810	22,380	52
	26.0	63.5	17,810	20,130	51
	28.0	61.2	16,130	18,230	50
	30.0	58.8	14,840	16,770	48
	32.0	56.3	13,580	15,370	47
	34.0	53.7	12,490	14,150	46
57.9 meters	10.7	80.9	56,720	56,850 *	59
	11.0	80.6	54,610	56,850 *	59
	12.0	79.6	48,530	55,600	59
	13.0	78.6	43,790	49,990	58
	14.0	77.6	39,690	45,200	58
	15.0	76.6	36,220	41,190	58
	16.0	75.5	33,280	37,780	58
	17.0	74.5	30,910	35,040	57
	18.0	73.5	28,690	32,490	57
	19.0	72.5	26,730	30,250	57
	20.0	71.4	24,980	28,270	56
	22.0	69.3	22,040	24,920	56
	24.0	67.2	19,630	22,200	55
	26.0	65.0	17,630	19,940	54
	28.0	62.8	16,120	18,230	53
	30.0	60.6	14,660	16,600	52
	32.0	58.3	13,410	15,200	51
	34.0	55.9	12,310	13,970	50
	36.0	53.5	11,350	12,90	



LIFT CRANE RATINGS IN KILOGRAMS (continued)

With 77H Tubular Chord Boom with Tapered Tip and “T-T” Counterweight (63504 Kgs.)

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
64.0 meters	11.6	81.0	47,510 *	47,510 *	65
	12.0	80.6	47,510 *	47,510 *	65
	13.0	79.7	43,440	47,510 *	65
	14.0	78.8	39,330	44,860	64
	15.0	77.9	35,870	40,850	64
	16.0	76.9	32,910	37,430	64
	17.0	76.0	30,570	34,710	64
	18.0	75.1	28,340	32,150	63
	19.0	74.2	26,380	29,910	63
	20.0	73.2	24,630	27,930	63
	22.0	71.4	21,680	24,580	62
	24.0	69.5	19,270	21,850	61
	26.0	67.5	17,270	19,590	61
	28.0	65.6	15,780	17,890	60
	30.0	63.6	14,320	16,270	59
	32.0	61.6	13,070	14,860	58
	34.0	59.5	11,970	13,640	57
	36.0	57.4	11,010	12,560	56
	38.0	55.3	10,150	11,610	54
	40.0	53.1	9,380	10,750	53
	42.0	50.8	8,690	9,980	51
	44.0	48.5	8,060	9,290	49
	46.0	46.0	7,500	8,660	48
	48.0	43.5	6,980	8,090	46
	50.0	40.8	6,510	7,570	43
	52.0	38.0	6,070	7,080	41
	54.0	35.0	5,670	6,640	38
	56.0	31.7	5,300	6,230	35
	58.0	28.1	4,960	5,860	32
	60.0	24.0	4,640	5,510	28
	62.0	19.2	4,350	5,180	23
	64.0	12.6	4,080	4,880	16
67.1 meters	12.1	80.9	43,840 *	43,840 *	68
	13.0	80.2	43,250	43,840 *	68
	14.0	79.3	39,150	43,840 *	67
	15.0	78.4	35,680	40,660	67
	16.0	77.6	32,730	37,250	67
	17.0	76.7	30,390	34,540	67
	18.0	75.8	28,160	31,970	67
	19.0	74.9	26,200	29,730	66
	20.0	74.0	24,450	27,750	66
	22.0	72.2	21,500	24,390	65
	24.0	70.4	19,090	21,670	65
	26.0	68.6	17,080	19,410	64
	28.0	66.8	15,600	17,720	63
	30.0	64.9	14,150	16,090	62
	32.0	63.0	12,890	14,690	61
	34.0	61.0	11,800	13,460	60
	36.0	59.1	10,830	12,380	59
	38.0	57.1	9,970	11,430	58
	40.0	55.0	9,200	10,570	56
	42.0	52.9	8,510	9,810	55
	44.0	50.7	7,880	9,110	53
	46.0	48.5	7,320	8,490	52
	48.0	46.1	6,800	7,910	50
	50.0	43.7	6,330	7,390	48
	52.0	41.2	5,890	6,910	46
	54.0	38.5	5,490	6,460	43
	56.0	35.7	5,120	6,060	41
	58.0	32.7	4,780	5,670	38
	60.0	29.3	4,460	5,320	34
	62.0	25.6	4,160	4,990	31
	64.0	21.3	3,890	4,690	26
	66.0	16.0	3,630	4,410	20
70.1 meters	12.6	80.9	40,360 *	40,360 *	71
	13.0	80.6	40,360 *	40,360 *	71
	14.0	79.8	38,960	40,360 *	71
	15.0	78.9	35,490	40,360 *	70
	16.0	78.1	32,530	37,060	70
	17.0	77.3	30,210	34,360	70
	18.0	76.4	27,970	31,790	70
	19.0	75.6	26,010	29,550	69
	20.0	74.7	24,260	27,560	69
	22.0	73.0	21,310	24,210	69
	24.0	71.3	18,890	21,480	68
	26.0	69.6	16,890	19,220	67
	28.0	67.8	15,410	17,540	66
	30.0	66.1	13,970	15,910	66
	32.0	64.2	12,710	14,510	65
	34.0	62.4	11,610	13,280	64
	36.0	60.6	10,640	12,200	63
	38.0	58.7	9,780	11,240	61
	40.0	56.7	9,010	10,390	60
	42.0	54.7	8,320	9,620	59
	44.0	52.7	7,700	8,930	57
	46.0	50.6	7,130	8,300	56
	48.0	48.5	6,620	7,730	54
	50.0	46.3	6,140	7,200	52
	52.0	44.0	5,710	6,720	50
	54.0	41.6	5,310	6,280	48
	56.0	39.0	4,930	5,860	46
	58.0	36.3	4,590	5,480	43
	60.0	33.5	4,270	5,130	40

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
70.1 meters (cont.)	62.0	30.4	3,970	4,800	37
	64.0	27.0	3,700	4,500	33
	66.0	23.1	3,440	4,210	29
	68.0	18.5	3,200	3,950	24
	70.0	12.4	2,980	3,710	17
73.2 meters	13.0	81.0	37,390 *	37,390 *	74
	14.0	80.2	37,390 *	37,330 *	74
	15.0	79.4	35,300	37,330 *	73
	16.0	78.6	32,340	36,880	73
	17.0	77.8	30,020	34,180	73
	18.0	77.0	27,790	31,620	73
	19.0	76.2	25,820	29,370	73
	20.0	75.4	24,080	27,380	72
	22.0	73.8	21,120	24,020	72
	24.0	72.1	18,700	21,290	71
	26.0	70.5	16,700	19,030	71
	28.0	68.8	15,240	17,360	70
	30.0	67.1	13,790	15,730	69
	32.0	65.4	12,530	14,330	68
	34.0	63.7	11,430	13,100	67
	36.0	61.9	10,460	12,020	66
	38.0	60.1	9,600	11,070	65
	40.0	58.3	8,830	10,210	64
	42.0	56.4	8,143	9,440	63
	44.0	54.5	7,520	8,750	61
	46.0	52.6	6,950	8,120	60
	48.0	50.6	6,430	7,540	58
	50.0	48.5	5,960	7,020	56
	52.0	46.4	5,520	6,540	55
	54.0	44.2	5,120	6,090	53
	56.0	41.9	4,750	5,680	50
	58.0	39.5	4,400	5,300	48
	60.0	37.0	4,080	4,950	46
	62.0	34.3	3,790	4,620	43
	64.0	31.4	3,510	4,310	40
	66.0	28.2	3,250	4,030	36
	68.0	24.7	3,010	3,760	32
	70.0	20.6	2,780	3,510	27
	72.0	15.6	2,570	3,270	21
76.2 meters	13.5	81.0	33,800 *	33,880 *	77
	14.0	80.6	33,800 *	33,800 *	77
	15.0	79.8	33,800 *	33,880 *	77
	16.0	79.1	32,420	33,880 *	76
	17.0	78.3	29,860	33,820 *	76
	18.0	77.5	27,620	31,450	76
	19.0	76.8	25,650	29,200	76
	20.0	76.0	23,910	27,220	75
	22.0	74.4	20,940	23,850	75
	24.0	72.9	18,530	21,120	74
	26.0	71.3	16,520	18,860	74
	28.0	69.7	15,040	17,200	73
	30.0	68.1	13,620	15,570	72
	32.0	66.4	12,360	14,170	71
	34.0	64.8	11,260	12,940	71
	36.0	63.1	10,290	11,860	70
	38.0	61.4	9,430	10,900	68
	40.0	59.7	8,670	10,040	67
	42.0	57.9	7,970	9,280	66
	44.0	56.1	7,350	8,580	65
	46.0	54.3	6,780	7,950	63
	48.0	52.4	6,260	7,380	62
	50.0	50.5	5,790	6,850	60
	52.0	48.5	5,350	6,370	59
	54.0	46.5	4,950	5,930	57
	56.0	44.4	4,580	5,510	55
	58.0	42.2	4,240	5,130	53
	60.0	39.9	3,910	4,780	50
	62.0	37.5	3,620	4,450	48
	64.0	35.0	3,340	4,150	45
	66.0	32.2	3,070	3,860	42
	68.0	29.3	2,830	3,590	39
	70.0	26.0	2,610	3,340	35
	72.0	22.4	2,390	3,100	31
	74.0	18.0	2,190	2,880	25
	76.0	12.3	2,010	2,680	18
79.2 meters	14.0	81.0	31,420 *	31,420 *	80
	15.0	80.2	31,410 *	31,410 *	80
	16.0	79.5	31,390 *	31,390 *	79
	17.0	78.8	29,670	31,230 *	79
	18.0	78.0	27,440	31,120 *	79
	19.0	77.3	25,460	29,020	79
	20.0	76.5	23,720	27,030	79
	22.0	75.0	20,750	23,660	78
	24.0	73.5	18,340	20,930	78
	26.0	72.0	16,330	18,670	77
	28.0	70.5	14,890	17,020	76
	30.0	68.9	13,430	15,390	76
	32.0	67.4	12,170	13,980	75
	34.0	65.8	11,080	12,750	74
	36.0	64.2	10,110	11,670	73
	38.0	62.6	9,240	10,710	72
	40.0	61.0	8,480	9,860	71

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
79.2 meters (cont.)	42.0	59.3	7,790	9,090	70
	44.0	57.6	7,160	8,400	68
	46.0	55.9	6,590	7,770	67
	48.0	54.1	6,070	7,190	66
	50.0	52.3	5,600	6,660	64
	52.0	50.5	5,160	6,180	63
	54.0	48.5	4,760	5,740	61
	56.0	46.6	4,390	5,320	59
	58.0	44.6	4,050	4,950	57
	60.0	42.5	3,720	4,590	55
	62.0	40.3	3,420	4,260	53
	64.0	38.0	3,150	3,950	50
	66.0	35.6	2,880	3,660	48



LIFT CRANE RATINGS IN KILOGRAMS (continued)

With 77H Tubular Chord Boom with Tapered Tip and “T-T” Counterweight (63504 Kgs.)

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
85.3 meters (cont.)	80.0	23.2		1700	35
	82.0	19.5		1530	30
	84.0	14.9		1360	24
88.4 meters	15.4	81.0	25,140 *	25,140 *	89
	16.0	80.6	25,140 *	25,140 *	89
	17.0	79.9	24,970 *	24,970 *	89
	18.0	79.3	24,840 *	24,840 *	88
	19.0	78.6	24,620 *	24,620 *	88
	20.0	77.9	23,160	24,470 *	88
	22.0	76.6	20,180	23,110	88
	24.0	75.3	17,770	20,370	87
	26.0	73.9	15,750	18,100	87
	28.0	72.6	14,340	16,480	86

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
88.4 meters (cont.)	30.0	71.2	12,890	14,850	85
	32.0	69.8	11,630	13,440	85
	34.0	68.5	10,520	12,210	84
	36.0	67.1	9,550	11,130	83
	38.0	65.6	8,690	10,160	82
	40.0	64.2	7,920	9,300	81
	42.0	62.8	7,230	8,540	80
	44.0	61.3	6,600	7,840	79
	46.0	59.8	6,030	7,210	78
	48.0	58.3	5,520	6,640	77
	50.0	56.7	5,040	6,110	75
	52.0	55.2	4,600	5,620	74
	54.0	53.6	4,200	5,180	73

Boom Length (Meters)	Radius in Meters	Boom Angle Degrees	Lift Rating in Kilograms		Meters From Boom Point
			Side Frames Retracted	Side Frames Extended	
88.4 meters (cont.)	56.0	52.0	3,820	4,770	71
	58.0	50.3	3,480	4,380	70
	60.0	48.6	3,160	4,030	68
	62.0	46.8	2,860	3,700	66
	64.0	45.0	2,580	3,390	64
	66.0	43.2	2,320	3,100	62
	68.0	41.3	2,070	2,830	60
	70.0	39.2	1,840	2,570	57
	72.0	37.1	1,620	2,340	55
	74.0	34.9	1,410	2,110	52
	76.0	32.6	1,230	1,900	49
	78.0	30.1		1,700	46
	80.0	27.4		1,510	42

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CRANE RATING DATA

⚠ WARNING

These lift ratings are invalid if the crane has been modified or altered by use of other than GENUINE AMERICAN PARTS as such modifications or alterations may affect its capacity or safe operation. See American Crane Corporation Service Bulletin #259.

The ratings in this chart are for planning purposes only. Only those ratings specifically assigned to a crane and mounted in the operator's cab or in the Operator's Manual should be used for actual operation.

Ratings in this chart are in POUNDS (KGS) and do not exceed the percentage of tipping specified for this crane by ANSI B30.5. All ratings require that the crane be standing level on a firm uniformly supporting surface.

Do not lift loads in excess of those shown on this chart. Lifting loads in excess of those shown or operation not in accordance with good operating practice, including limitations shown on page 3499 of Operator's Manual, can cause tipping, structural damage or catastrophic failure.

Asterisk(*) areas on this chart indicate ratings which are limited by strength of material or factors other than stability (tipping).

“RADIUS IN FEET” is the horizontal distance at ground level from the crane centerline of rotation to a vertical line through the center of gravity of the suspended load.

When using the main boom fall with jib in place, the main fall ratings must be reduced by the jib effective weight shown on the jib rating chart, plus twice the weight of all suspended blocks, slings, rope, etc., at the jib fall. See Appendix A.

Blocks, slings, buckets and other load carrying devices are considered part of the load. The weight of standard hoisting ropes for the rating at a given radius has been calculated as part of the boom point load and need not be considered in determining net allowable loads. See Appendix A.

Boom with tapered tip, use hanger block when more than 2 parts of line are required. Reduce ratings 800 pounds when hanger block is in place.

Ratings shown on this chart make no allowance for such factors as out of plumb loads, wind, poor soil conditions, improper inflation of rubber tires and dynamic effects due to excessive operating speeds. The user (operator) must exercise judgement to make allowance for these conditions. See page 3499 of Operator's Manual for detailed information.

No account is taken of the wind force on the load. This effect, which can be substantial for loads with large surface areas, must be considered by the user. In any wind it is strongly recommended that taglines be used to control the load.

BOOM HOIST LINE is 14 parts of .875 inch diameter, 6 x 26, WS, FW, RAL, IWRC, EIPS wire rope with a minimum breaking strength of 79,600 pounds.

PENDANT SUSPENSION LINE is 4 parts of 1.375 inch diameter AAA wire rope with a minimum breaking strength of 211,000 pounds.

MAIN LOAD LINE is 1.125 inch diameter 6 x 25, FW, RRL, IWRC super strength wire rope with a weight of 2.34 lbs/ft and a minimum breaking strength of 143,000 pounds.

Combinations of boom or boom and jib with a total length exceeding 350' can be operated at full rated capacity only in wind speeds of 15 MPH or less. If lifts are to be performed in winds between 15 MPH and 25 MPH, ratings must be reduced 10%. No operation of the above combinations should be attempted in wind speeds over 25 MPH. The above limitations do not take into account loads with excessive surface area which are not restrained by tag lines.

Erection over the idler end with A-Frame raised and idler tumblers blocked. Erection over the side with A-Frame fully raised and Side Frames extended. Blocks, slings and other load carrying devices must be on the ground during erection.



LOAD HOISTING DATA

Maximum Lifting Capacity In Pounds	Minimum Parts of Load Line	Maximum Hoisting Distance		
		RH Drum With Controlled Load Lowering Feet	LH Drum With Controlled Load Lowering Feet	LH Drum Without Controlled Load Lowering Feet
450,000	12	69	35	53
449,420	11	76	38	58
408,570	10	83	42	64
367,710	9	93	47	71
326,850	8	104	52	80
286,000	7	119	60	92
245,140	6	139	70	107
204,280	5	167	84	129
163,420	4	209	105	161
122,570	3	279	141	215
81,710	2	419	211	323
40,850	1	839	423	647

Based on 1-1/8" Super Grade Rope

Maximum Lifting Capacity In Kgs.	Minimum Parts of Load Line	Maximum Hoisting Distance		
		RH Drum With Controlled Load Lowering Meters	LH Drum With Controlled Load Lowering Meters	LH Drum Without Controlled Load Lowering Meters
204,120	12	21	10	16
203,786	11	23	11	18
185,260	10	25	12	19
166,734	9	28	14	22
148,208	8	32	16	24
129,682	7	36	18	28
111,156	6	42	21	33
92,630	5	51	25	39
74,104	4	64	32	49
55,578	3	85	43	65
39,052	2	128	64	98
18,526	1	256	128	197

Based on 28.6 mm Super Grade Rope

77H TAPERED TIP BOOM COMPOSITION

Boom Length		30 Ft. (9.14m) 77S Inner	10 Ft. (3.05m) 77S Center	20 Ft. (6.10m) 77S Center	50 Ft. (15.24m) 77S Center	40 Ft. (12.19m) 77H Outer Base	30 Ft. (9.2m) 77H Outer Base
Ft.	Meters						
100	30.5	1	—	—	—	1	1
110	33.5	1	1	—	—	1	1
120	36.6	1	—	1	—	1	1
130	39.6	1	1	1	—	1	1
140	42.7	1	—	2	—	1	1
150	45.7	1	—	—	1	1	1
160	48.8	1	1	—	1	1	1
170	51.8	1	—	1	1	1	1
180	54.9	1	1	1	1	1	1
190	57.9	1	—	2	1	1	1
200	61.0	1	—	—	2	1	1
210	64.0	1	1	—	2	1	1
220	67.1	1	—	1	2	1	1
230	70.1	1	1	1	2	1	1
240	73.2	1	—	2	2	1	1
250	76.2	1	—	—	3	1	1
260	79.2	1	1	—	3	1	1
270	82.3	1	—	1	3	1	1
280	85.3	1	1	1	3	1	1
290	88.4	1	—	2	3	1	1

77H HAMMERHEAD BOOM COMPOSITION

Boom Length		30 Ft. (9.14m) 77S Inner	10 Ft. (3.05m) 77S Center	20 Ft. (6.10m) 77S Center	50 Ft. (15.24m) 77S Center	40 Ft. (12.19m) 77H Outer Base	30 Ft. (9.2m) 77H Outer Base
Ft.	Meters						
70	21.3	1	—	—	—	1	1
80	24.4	1	1	—	—	1	1
90	27.4	1	—	1	—	1	1
100	30.5	1	1	1	—	1	1
110	33.5	1	—	2	—	1	1
120	36.6	1	—	—	1	1	1
130	39.6	1	1	—	1	1	1
140	42.7	1	—	1	1	1	1
150	45.7	1	1	1	1	1	1
160	48.8	1	—	2	1	1	1
170	51.8	1	—	—	2	1	1
180	54.9	1	1	—	2	1	1
190	57.9	1	—	1	2	1	1
200	61.0	1	1	1	2	1	1
210	64.0	1	—	2	2	1	1
220	67.1	1	—	—	3	1	1
230	70.1	1	1	—	3	1	1
240	73.2	1	—	1	3	1	1
250	76.2	1	1	1	3	1	1
260	79.2	1	—	2	3	1	1

BOOM AND JIB ERECTION

77H Boom Length	No. 16HL Maximum Jib Length
290' Tapered Tip	100'
260' Hammerhead	100'

77H Boom Length	No. 16HL Maximum Jib Length
88.4m Tapered Tip	30.5m
79.2m Hammerhead	30.5m



WEIGHTS

	Lbs.	Kg		Lbs.	Kg
Lifting crane with basic 70 ft. (21.3m) 77H crane boom and 44" (1.118m) shoes	355,780	161,378	Outer bail assembly	2,450	1,110
Components removable for shipment:			A-frame	5,320	2,410
Counterweight	140,000	63,502	Side frames, 44" (1.118m) shoes (2)	71,600	32,480
Boom outer and hammerhead	7,870	3,570	Crawler axles (4)	13,100	5,940
Boom inner	2,540	1,150	Torque tubes (2)	920	420
Telescopic boom stops	300	140	Carbody	28,400	12,880

NOTE: In accordance with varying material situations and the Company's policy of constant product improvement these specifications are subject to change without notice and without incurring responsibility to units previously sold.

GROUND PRESSURE

Lifting crane (equipped as above)	13.0 Lb.in2	.91 Kg/cm2
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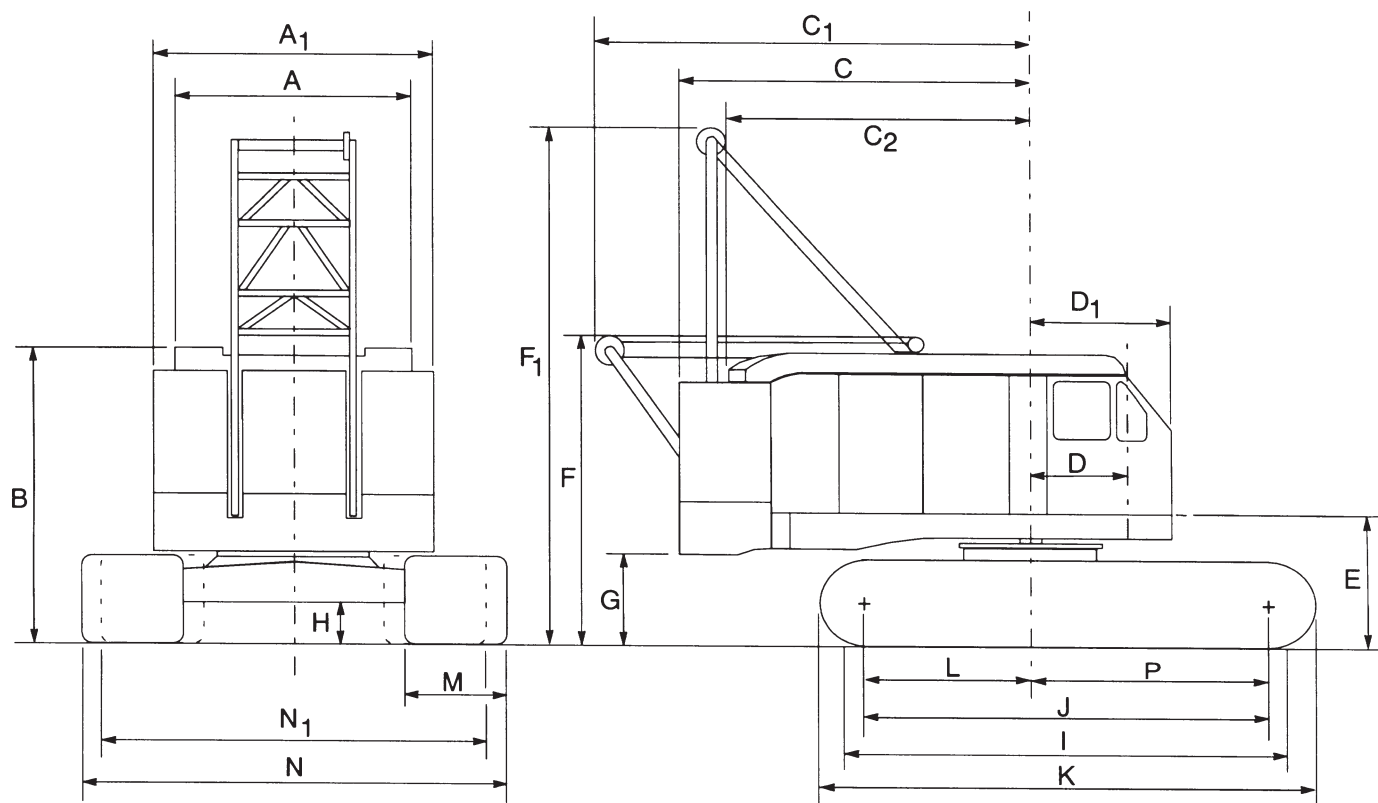
PERFORMANCE

TRAVEL SPEED:	1.1 MPH	1.77 KPH
Friction Swing	2.28 RPM	maximum
Hydrostatic Swing	1.9 RPM	maximum
SINGLE LINE SPEED:		
Crane Hoist	165 FPM	50.3 MPM
Third Drum	192 FPM	58.5 MPM
or	142 FPM	43.3 MPM
LINE PULL:		
Crane Hoist SLP	40,000 lbs.	18,144 Kg
Third Drum SLP	15,000 lbs.	6,804 Kg
or SLP	21,000 lbs.	9,526 Kg

Performance figures are based on machine equipped with standard engine.



AMERICAN MODEL 9310A CRAWLER CRANE



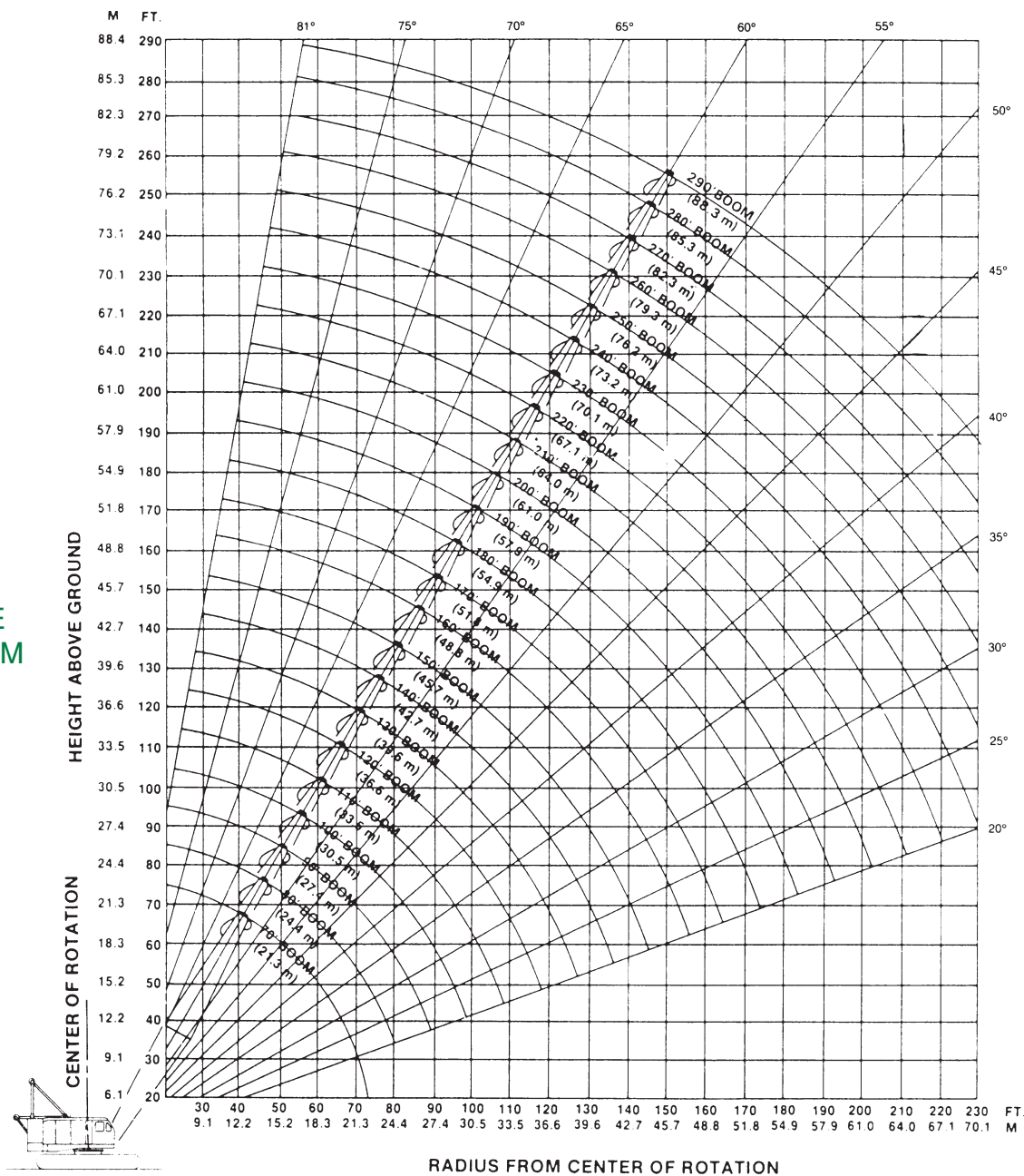
9310A GENERAL DIMENSIONS

	FT	MM
A Width of cab	11'-0"	3353
A ₁ Width over counterweight	13'-2"	4013
B Height over cab	13'-7 1/8"	4143
C Tailswing	17'-0"	5182
C ₁ Tailswing with A-frame, lowered	24'-9"	7544
C ₂ Tailswing less A-frame and counterweight	14'-11"	4546
D Center of rotation to center of boom foot	5'-0 3/4"	1544
D ₁ Center of pivot to front of cab	6'-10 1/2"	2095
E Ground to center boom foot	6'-9 1/8"	2061
F Height over A-frame, lowered - cwt. on	14'-8 5/8"	4485
F Height over A-frame, lowered - cwt. off	14'-9 7/8"	4518
F ₁ Height over A-frame, raised	30'-4 7/8"	9268
G Ground to bottom of counterweight	4'-4 3/8"	1330
H Minimum ground clearance under crawler base	1'-9"	533
I Crawler bearing length	25'-6"	7772
J Center to center crawler tumblers	24'-2"	7366
K Overall length of crawlers	28'-2"	8585
L Center of rotation to center of drive tumbler	11'-0 1/4"	3359
M Width of tread shoes	44'-0"	1118
N Overall width over crawlers - extended	20'-7"	6274
N ₁ Overall width over crawlers - retracted	13'-1 3/4"	5511
P Center of rotation to center of idler tumbler	13'-1 3/4"	4007



AMERICAN MODEL 9310A CRAWLER CRANE WORKING RANGES

BOOM
ANGLE
DIAGRAM



FORM No. 9310-A-77H-CR-2

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