



MODEL 9310 CRAWLER CRANE WITH 92HT BOOM

RATINGS IN POUNDS

With 92HT Tubular Chord Boom and "S-S" Counterweight (135,000 Lbs.)

Boom Length	Radius In Feet	Boom Angle Degrees	Lift Ratings	Feet From Boom Point to Ground
70 feet	17	81.4	450,000	76
	20	78.9	336,160	75
	25	74.7	230,260	74
	30	70.4	174,040	73
	35	65.9	139,260	71
	40	61.3	115,620	68
	50	51.3	85,320	61
	60	39.5	66,930	51
70	23.2	54,430	34	
80 feet	18	81.8	410,490	86
	20	80.3	336,090	86
	25	76.6	230,130	85
	30	72.9	173,850	83
	35	69.1	139,050	81
	40	65.2	115,410	79
	50	56.9	85,080	74
	60	47.7	66,700	66
70	36.8	54,200	55	
80	21.6	45,180	36	
90 feet	20	81.4	335,900	96
	25	78.2	229,840	95
	30	74.9	173,520	94
	35	71.5	138,700	92
	40	68.1	115,050	90
	50	61.0	84,690	85
	60	53.3	66,320	79
	70	44.8	53,810	70
80	34.6	44,800	58	
90	20.3	38,060	38	
100 feet	21	81.7	307,590	106
	25	79.4	229,570	105
	30	76.4	173,210	104
	35	73.4	138,360	103
	40	70.4	114,720	101
	50	64.2	84,330	97
	60	57.5	65,970	91
	70	50.4	53,450	84
	80	42.3	44,450	74
	90	32.7	37,760	61
100	19.2	32,400	40	
110 feet	22	81.9	283,490	116
	25	80.3	229,260	115
	30	77.7	172,820	114
	35	75.0	137,990	113
	40	72.3	114,340	112
	50	66.7	83,930	108
	60	60.8	65,580	103
	70	54.6	53,060	96
	80	47.9	44,040	88
	90	40.2	37,400	78
100	31.1	32,050	64	
110	18.3	27,730	41	
120 feet	24	81.6	244,740	125
	25	81.1	229,230	125
	30	78.7	172,820	124
	35	76.3	137,960	123
	40	73.8	114,340	122
	50	68.7	83,910	119
	60	63.5	65,600	114
	70	58.0	53,070	108
	80	52.1	44,060	101
	90	45.7	37,450	93
	100	38.4	32,120	81
	110	29.7	27,820	66
120	17.4	24,280	43	

Boom Length	Radius In Feet	Boom Angle Degrees	Lift Ratings	Feet From Boom Point to Ground
130 feet	25	81.8	228,900	135
	30	79.6	172,450	135
	35	77.4	137,590	134
	40	75.1	113,960	132
	50	70.4	83,510	129
	60	65.7	65,190	125
	70	60.7	52,660	120
	80	55.5	43,640	114
	90	49.9	37,060	106
	100	43.8	31,720	97
140 feet	110	36.8	27,430	85
	120	28.5	23,910	69
	130	16.7	20,950	44
	27	81.6	202,390	145
	30	80.4	172,040	145
	35	78.3	137,150	144
	40	76.2	113,520	143
150 feet	50	71.9	83,030	140
	60	67.5	64,720	136
	70	63.0	52,180	131
	80	58.3	43,150	126
	90	53.3	36,600	119
	100	47.9	31,260	111
	110	42.1	26,970	101
	120	35.4	23,440	88
	130	27.4	20,490	71
	140	16.1	17,980	46
160 feet	28	81.8	190,860	155
	30	81.0	171,640	155
	35	79.1	136,750	154
	40	77.1	113,110	153
	50	73.1	82,580	150
	60	69.1	64,280	147
	70	64.9	51,720	143
	80	60.6	42,690	137
	90	56.1	36,160	131
	100	51.3	30,830	124
	110	46.2	26,540	115
	120	40.6	23,010	104
	130	34.2	20,070	91
	140	26.5	17,570	74
	150	15.5	15,410	47
170 feet	29	81.9	180,380	165
	30	81.6	171,230	165
	35	79.8	136,320	164
	40	77.9	112,680	163
	50	74.2	82,130	161
	60	70.5	63,830	158
	70	66.6	51,260	154
	80	62.6	42,230	149
	90	58.5	35,710	143
	100	54.1	30,380	136
	110	49.6	26,090	129
	120	44.6	22,560	119
130	39.2	19,620	108	
140	33.0	17,120	94	
150	25.6	14,970	76	
160	15.0	13,100	48	
170 feet	31	81.7	162,670	175
	35	80.4	136,110	174
	40	78.6	112,490	173
	50	75.2	81,920	171
	60	71.6	63,650	168
	70	68.1	51,080	164
	80	64.4	42,030	160

Boom Length	Radius In Feet	Boom Angle Degrees	Lift Ratings	Feet From Boom Point to Ground
170 feet (cont.)	90	60.5	35,560	155
	100	56.6	30,220	149
	110	52.4	25,930	141
	120	48.0	22,410	133
	130	43.2	19,470	123
	140	38.0	16,970	111
	150	32.0	14,820	97
	160	24.8	12,970	78
170	14.5	11,330	49	
180 feet	32	81.9	155,070	185
	35	80.9	135,700	184
	40	79.3	112,080	184
	50	76.0	81,480	181
	60	72.7	63,210	179
	70	69.3	50,630	175
	80	65.9	41,580	171
	90	62.3	35,120	166
	100	58.6	29,780	160
	110	54.8	25,490	154
	120	50.8	21,970	146
	130	46.5	19,030	137
	140	41.9	16,520	127
150	36.9	14,380	115	
160	31.1	12,520	100	
170	24.1	10,890	80	
180	14.1	9,450	51	
190 feet	33	82.0	147,660	195
	35	81.4	135,270	195
	40	79.9	111,630	194
	50	76.8	81,000	192
	60	73.6	62,730	189
	70	70.5	50,140	186
	80	67.2	41,080	182
	90	63.9	34,630	177
	100	60.5	29,290	172
	110	56.9	25,000	166
	120	53.2	21,480	159
	130	49.3	18,530	151
	140	45.2	16,030	142
150	40.7	13,880	131	
160	35.8	12,020	118	
170	30.2	10,390	102	
180	23.4	8,950	82	
190	13.7	7,680	52	
200 feet	35	81.8	134,840	205
	40	80.4	111,210	204
	50	77.4	80,540	202
	60	74.5	62,280	199
	70	71.5	49,670	196
	80	68.4	40,600	193
	90	65.3	34,180	188
	100	62.1	28,830	183
	110	58.8	24,530	178
	120	55.4	21,010	171
	130	51.8	18,050	164
	140	48.0	15,560	155
	150	44.0	13,420	146
160	39.7	11,550	134	
170	34.9	9,920	121	
180	29.4	8,480	105	
190	22.8	7,200	84	
200	13.4	6,060	53	
210 feet	36	81.9	128,880	215
	40	80.8	110,770	214
	50	78.1	80,550	212
	60	75.2	61,810	210

RATINGS IN POUNDS (cont.)

With 92HT Tubular Chord Boom and "S-S" Counterweight (135,000 Lbs.)

Boom Length	Radius In Feet	Boom Angle Degrees	Lift Ratings	Feet From Boom Point to Ground
210 feet (cont.)	70	72.4	49,190	207
	80	69.5	40,110	203
	90	66.6	33,710	199
	100	63.5	28,350	195
	110	60.4	24,060	189
	120	57.2	20,530	183
	130	53.9	17,590	176
	140	50.4	15,080	169
	150	46.8	12,930	160
	160	42.9	11,070	150
	170	38.6	9,440	138
	180	34.0	8,000	124
	190	28.7	6,720	108
200	22.3	5,580	86	
210	13.0	4,550	54	
220 feet	38	81.8	119,150	225
	40	81.3	110,490	224
	50	78.6	80,280	222
	60	75.9	61,540	220
	70	73.2	48,920	217
	80	70.5	40,320	214
	90	67.7	33,470	210
	100	64.8	28,110	206
	110	61.9	23,810	201
	120	58.9	20,280	195
	130	55.8	17,340	189
	140	52.6	14,830	181
	150	49.2	12,690	173
160	45.6	10,820	164	
170	41.8	9,200	153	
180	37.7	7,760	141	
190	33.2	6,470	127	
200	28.0	5,330	110	
210	21.7	4,300	88	
230 feet	39	81.9	114,270	234
	40	81.6	110,080	234
	50	79.1	79,850	233
	60	76.6	61,090	230
	70	74.0	48,470	228
	80	71.4	39,870	225
	90	68.7	33,010	221
	100	66.0	27,650	217
	110	63.2	23,350	212
	120	60.4	19,810	207
	130	57.5	16,870	201

Boom Length	Radius In Feet	Boom Angle Degrees	Lift Ratings	Feet From Boom Point to Ground	
230 feet (cont.)	140	54.4	14,360	194	
	150	51.3	12,220	186	
	160	48.0	10,360	178	
	170	44.6	8,720	168	
	180	40.9	7,280	157	
	190	36.9	6,000	145	
	200	32.4	4,860	130	
	210	27.4	3,840	113	
	240 feet	40	82.0	109,640	244
		50	79.6	79,410	243
60		77.1	60,630	241	
70		74.7	47,980	238	
80		72.2	39,400	235	
90		69.6	32,530	232	
100		67.1	27,170	228	
110		64.4	22,860	223	
120		61.7	19,320	218	
130		59.0	16,370	212	
140		56.1	13,870	206	
150		53.2	11,720	199	
160		50.1	9,850	191	
170	46.9	8,220	182		
180	43.6	6,780	172		
190	39.9	5,490	161		
200	36.0	4,350	148		
250 feet	42	81.9	101,570	254	
	50	80.0	78,970	253	
	60	77.6	60,170	251	
	70	75.3	47,500	249	
	80	72.9	38,940	246	
	90	70.5	32,070	242	
	100	68.0	26,700	239	
	110	65.5	22,380	234	
	120	63.0	18,850	229	
	130	60.4	15,890	224	
	140	57.7	13,390	218	
	150	54.9	11,230	211	
	160	52.1	9,370	204	
170	49.1	7,740	196		
180	45.9	6,290	186		
190	42.6	5,010	176		
200	39.1	3,860	164		
260 feet	43	81.9	97,640	264	
	50	80.4	78,520	263	
	60	78.1	59,700	261	

Boom Length	Radius In Feet	Boom Angle Degrees	Lift Ratings	Feet From Boom Point to Ground
260 feet (cont.)	70	75.9	47,020	259
	80	73.6	38,480	256
	90	71.3	31,600	253
	100	68.9	26,220	249
	110	66.5	21,900	245
	120	64.1	18,370	241
	130	61.6	15,410	235
	140	59.1	12,900	230
	150	56.4	10,750	223
	160	53.8	8,880	216
270 feet	170	51.0	7,250	209
	180	48.1	5,800	200
	190	45.0	4,520	191
	45	81.8	87,910	274
	50	80.7	78,200	273
	60	78.6	59,380	271
	70	76.4	46,700	269
	80	74.2	38,170	267
	90	72.0	31,290	264
	100	69.7	25,920	260
	110	67.4	21,600	256
	120	65.1	18,060	252
	130	62.8	15,100	247
140	60.3	12,590	241	
150	57.9	10,450	235	
160	55.3	8,580	229	
170	52.7	6,940	221	
180	49.9	5,500	213	
190	47.1	4,220	205	
280 feet	46	81.9	81,420	284
	50	81.1	77,780	283
	60	79.0	58,930	282
	70	76.9	46,230	279
	80	74.8	37,730	277
	90	72.6	30,840	274
	100	70.5	25,460	271
	110	68.3	21,140	267
	120	66.1	17,590	263
	130	63.8	14,630	258
	140	61.5	12,130	253
	150	59.1	9,970	247
	160	56.7	8,100	241
170	54.2	6,470	234	
180	51.6	5,020	226	
190	49.0	3,740	218	

RATINGS IN KILOGRAMS

With 92HT Tubular Chord Boom and "S-S" Counterweight (61236 Kgs.)

Boom Length	Radius In Meters	Boom Angle Degrees	Lift Ratings	Meters From Boom Point to Ground
21.3 meters	5.0	81.9	204110	23
	5.5	80.5	185260	23
	6.0	79.2	156980	23
	7.0	76.4	119900	22
	8.0	73.6	96690	22
	9.0	70.8	80820	22
	10.0	67.9	69290	21
	12.0	61.9	53600	20
	14.0	55.5	43400	19
	16.0	48.6	36300	18
24.4 meters	5.4	82.0	192220	26
	6.0	80.5	156950	26
	7.0	78.1	119850	25
	8.0	75.7	96620	25
	9.0	73.3	80740	25
	10.0	70.8	69210	25
	12.0	65.7	53510	24
	14.0	60.4	43290	23
	16.0	54.7	36200	21
	18.0	48.6	30900	20
27.4 meters	5.9	81.8	161880	29
	7.0	81.6	156870	29
	7.0	79.5	119740	29
	8.0	77.3	96480	28
	9.0	75.2	80590	28
	10.0	73.0	69050	28
	12.0	68.6	53350	27
	14.0	63.9	43120	26
	16.0	59.1	36030	25
	18.0	54.1	30730	24
30.5 meters	6.3	81.9	143530	32
	7.0	80.6	119620	32
	8.0	78.6	96350	31
	9.0	76.7	80450	31
	10.0	74.8	68910	31
	12.0	70.8	53190	30
	14.0	66.7	42960	30
	16.0	62.6	35870	29
	18.0	58.2	30570	27
	20.0	53.6	26480	26
33.5 meters	6.7	81.9	128770	35
	7.0	81.4	119490	35
	8.0	79.7	96200	35
	9.0	77.9	80290	34
	10.0	76.2	68750	34
	12.0	72.6	53030	34
	14.0	69.0	42780	33
	16.0	65.2	35700	32
	18.0	61.4	30400	31
	20.0	57.4	26310	30
36.6 meters	7.1	82.0	116660	38
	8.0	80.6	96180	38
	9.0	78.9	80270	37
	10.0	77.4	68740	37
	12.0	74.1	53030	37
	14.0	70.8	42770	36
	16.0	67.4	35710	35
	18.0	64.0	30400	34
	20.0	60.4	26310	33
	24.0	52.8	20430	31

Boom Length	Radius In Meters	Boom Angle Degrees	Lift Ratings	Meters From Boom Point to Ground
39.6 meters	7.6	81.9	104260	41
	8.0	81.3	96030	41
	9.0	79.8	80110	41
	10.0	78.3	68570	40
	12.0	75.4	52850	40
	14.0	72.3	42590	39
	16.0	69.3	35530	39
	18.0	66.1	30210	38
	20.0	62.9	26130	37
	24.0	56.1	20240	34
42.7 meters	8.0	81.9	95850	44
	9.0	80.6	79930	44
	10.0	79.2	68380	43
	12.0	76.4	52660	43
	14.0	73.6	42380	43
	16.0	70.8	35330	42
	18.0	67.9	30010	41
	20.0	65.0	25910	40
	24.0	58.9	20020	38
	28.0	52.3	16100	35
45.7 meters	8.4	81.9	88740	47
	9.0	81.2	79750	47
	10.0	79.9	68200	47
	12.0	77.4	52470	46
	14.0	74.8	42180	46
	16.0	72.1	35130	45
	18.0	69.5	29810	44
	20.0	66.8	25710	44
	24.0	61.1	19810	42
	28.0	55.2	15900	39
48.8 meters	8.8	82.0	82380	50
	9.0	81.7	79570	50
	10.0	80.6	68020	50
	12.0	78.2	52280	49
	14.0	75.7	41980	49
	16.0	73.3	34930	48
	18.0	70.8	29600	48
	20.0	68.3	25500	47
	24.0	63.1	19600	45
	28.0	57.7	15700	43
51.8 meters	9.3	81.9	75580	53
	10.0	81.1	67920	53
	12.0	78.9	52190	52
	14.0	76.6	41890	52
	16.0	74.3	34850	51
	18.0	72.0	29520	51
	20.0	69.6	25410	50
	24.0	64.8	19510	48
	30.0	57.2	14050	45
	34.0	51.7	11490	42

Boom Length	Radius In Meters	Boom Angle Degrees	Lift Ratings	Meters From Boom Point to Ground
54.9 meters	9.7	81.9	70920	56
	10.0	81.6	67750	56
	12.0	79.5	52010	56
	14.0	77.4	41690	55
	16.0	75.2	34660	55
	18.0	73.0	29320	54
	20.0	70.8	25210	53
	24.0	66.3	19300	52
	28.0	61.6	15430	50
	32.0	56.8	12480	47
57.9 meters	10.1	82.0	66560	59
	11.0	81.1	58630	59
	12.0	80.1	51810	59
	14.0	78.0	41490	58
	16.0	76.0	34450	58
	18.0	73.9	29110	57
	20.0	71.9	24990	57
	24.0	67.6	19080	55
	28.0	63.3	15210	53
	32.0	58.7	12260	51
61.0 meter	10.5	82.0	62620	62
	11.0	81.5	58430	62
	12.0	80.6	51610	62
	14.0	78.6	41280	61
	16.0	76.7	34250	61
	18.0	74.8	28900	60
	20.0	72.8	24780	60
	24.0	68.8	18860	58
	28.0	64.7	15000	57
	32.0	60.4	12050	55
64.0 meters	11.0	81.9	58240	65
	12.0	81.0	51420	65
	14.0	79.2	41080	64
	16.0	77.4	34050	64
	18.0	75.5	28690	64
	20.0	73.6	24570	63
	24.0	69.9	18640	62
	28.0	66.0	14790	60
	32.0	62.0	11830	58
	36.0	57.8	9590	56
67.1 meters	11.4	81.9	55100	68
	12.0	81.4	51290	68
	14.0	79.7	40950	68
	16.0	77.9	33920	67
	18.0	76.2	28570	67
	20.0	74.4	24440	66
	24.0	70.8	18520	65
	28.0	67.1	14680	63
	32.0	63.4	11720	62
	36.0	59.5	9480	59

RATINGS IN KILOGRAMS (cont.)

With 92HT Tubular Chord Boom and "S-S" Counterweight (61236 Kgs.)

Boom Length	Radius In Meters	Boom Angle Degrees	Lift Ratings	Meters From Boom Point to Ground
67.1 meters (cont.)	44.0	51.1	6280	54
	48.0	46.5	5110	50
	52.0	41.6	4120	46
	56.0	36.1	3290	41
	60.0	29.7	2570	35
	64.0	21.7	1950	26
	66.0	16.4	1670	20
70.1 meters	11.8	82.0	52390	71
	12.0	81.8	51110	71
	14.0	80.1	40750	71
	16.0	78.5	33730	70
	18.0	76.8	28360	70
	20.0	75.1	24240	69
	24.0	71.7	18310	68
	28.0	68.2	14470	67
	32.0	64.6	11520	65
	36.0	60.9	9260	63
	40.0	57.1	7500	60
	44.0	53.1	6070	58
	48.0	48.9	4900	54
	52.0	44.3	3910	51
	56.0	39.4	3070	46
	60.0	33.9	2350	41
64.0	27.4	1740	34	
73.2 meters	12.2	82.0	49680	74
	13.0	81.4	45220	74
	14.0	80.6	40540	74
	16.0	79.0	33520	73
	18.0	77.4	28150	73
	20.0	75.7	24020	72
	24.0	72.5	18090	71
	28.0	69.1	14250	70
	32.0	65.8	11290	68
	36.0	62.3	9040	66

Boom Length	Radius In Meters	Boom Angle Degrees	Lift Ratings	Meters From Boom Point to Ground
73.2 meters (cont.)	40.0	58.6	7270	64
	44.0	54.9	5840	61
	48.0	50.9	4670	58
	52.0	46.8	3680	55
	56.0	42.3	2850	51
	60.0	37.3	2120	46
	62.0	34.6	1800	43
76.2 meters	12.7	81.9	46620	77
	13.0	81.7	45020	77
	14.0	80.9	40330	77
	16.0	79.4	33320	76
	18.0	77.9	27950	76
	20.0	76.3	23810	76
	24.0	73.2	18110	75
	28.0	70.0	14040	73
	32.0	66.8	11080	72
	36.0	63.5	8820	70
	40.0	60.0	7050	68
	44.0	56.5	5620	65
	48.0	52.8	4450	62
	52.0	48.9	3460	59
	56.0	44.7	2630	55
	60.0	40.2	1900	51
79.2 meters	13.1	81.9	44320	80
	14.0	81.3	40120	80
	16.0	79.8	33120	80
	18.0	78.3	27740	79
	20.0	76.9	23600	79
	24.0	73.9	17900	78
	28.0	70.8	13830	76
	32.0	67.7	10860	75
	36.0	64.6	8600	73
	40.0	61.3	6840	71
	44.0	57.9	5410	69

Boom Length	Radius In Meters	Boom Angle Degrees	Lift Ratings	Meters From Boom Point to Ground
79.2 meters (cont.)	48.0	54.4	4230	66
	52.0	50.8	3240	63
	56.0	46.9	2400	59
	60.0	42.8	1680	55
82.3 meters	13.5	82.0	39840	83
	14.0	81.6	39840	83
	16.0	80.2	32980	83
	18.0	78.8	27590	82
	20.0	77.4	23450	82
	24.0	74.5	17770	81
	28.0	71.6	13690	80
	32.0	68.6	10720	78
	36.0	65.6	8470	76
	40.0	62.5	6690	75
	44.0	59.3	5270	72
	48.0	55.9	4090	70
	52.0	52.5	3100	67
	56.0	48.9	2270	64
	58.0	47.0	1890	62
	85.3 meters	13.9	82.0	36880
14.0		81.9	36840	86
15.0		81.2	36130	86
16.0		80.6	32780	86
18.0		79.2	27390	85
20.0		77.8	23240	85
24.0		75.1	17570	84
28.0		72.3	13490	83
32.0		69.4	10510	81
36.0		66.5	8260	80
40.0		63.5	6490	78
44.0		60.5	5050	76
48.0	57.3	3870	73	
52.0	54.1	2880	71	
56.0	50.7	2050	68	

9310.132M

CRANE RATING DATA

Load ratings are in pounds (kilograms) with crawler side frames extended and do not exceed 75% of the load which would cause tipping with crane standing level on firm uniformly supporting surface. Safe loads depend on boom length, radius of operation, ground conditions, wind velocity and proper handling, all of which must be taken into consideration by the user.

"Radius in feet" (meters) is the horizontal distance at crane base level from center of rotation to a vertical line through the center of gravity of the suspended load.

Lifting is approved only in those areas for which ratings are shown in the rating chart. Blocks, slings, buckets, and other load carrying devices are considered part of the load. The weight of the standard hoisting rope has been deducted from the capacities. Retractable A-frame must be in fully raised position for all ratings. Ratings in shaded areas are limited by strength of material, or factors other than stability. Ratings with side frames retracted are available on request.

Main load line is 1½ inch (28.5 mm) diameter EEIPS with 143,000 pounds (64865 kilograms) minimum breaking strength.

Boom suspension line is ¾ inch (22.2 mm) diameter EIPS with 79,600 pounds (36106 kilograms) minimum breaking strength. Boom suspension pendants are 1¾ inch (34.9 mm) diameter EEIPS with 211,000 pounds (95709 kilograms) minimum breaking strength. Boom and jib erection is over the long end of the crawlers with idler tumblers blocked and "S-S" counterweight.

Designed and rated to comply with ANSI Code B30.5.

LOAD HOISTING DATA METRIC

Maximum Lifting Capacity in Pounds	Minimum Parts of Load Line	Maximum Hoisting Distance		
		RH Drum With Controlled Load Lowering	LH Drum With Controlled Load Lowering	LH Drum Without Controlled Load Lowering
		Fl.	Fl.	Fl.
450,000	12	69	35	53
449,427	11	76	38	58
405,570	10	83	42	64
367,710	9	93	47	71
326,850	8	104	52	80
285,990	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 1/2" EEIPS load line with 143,000 lbs. minimum breaking strength.

Maximum Lifting Capacity in Kilograms	Minimum Parts of Load Line	Maximum Hoisting Distance		
		RH Drum With Controlled Load Lowering	LH Drum With Controlled Load Lowering	LH Drum Without Controlled Load Lowering
		M	M	M
204,120	12	21.0	10.7	16.2
203,860	11	23.2	11.6	17.7
183,970	10	25.3	12.8	19.5
166,790	9	28.3	14.3	21.6
148,260	8	31.7	15.8	24.4
129,730	7	36.3	18.3	28.0
111,200	6	42.4	21.3	32.6
108,990	5	50.9	25.6	39.3
74,130	4	63.7	32.0	49.1
55,600	3	85.0	50.0	65.5
37,060	2	127.7	64.3	98.5
18,530	1	255.7	128.9	197.2

Based on 28.5 mm dia. load line with 64865 kgs. minimum breaking strength.

HOISTING PERFORMANCE

Function	Single Line Pull At Single Line Speed			
	SLP (Pounds) At SLS (Feet per Minute)		SLP (Kilograms) At SLS (Meters per Minute)	
	First Layer	Sixth Layer	First Layer	Sixth Layer
Lifting Crane	5,000 Lbs. @ 305 FPM	5,000 Lbs. @ 405 FPM	2268 Kgs. @ 93 MPM	2268 Kgs. @ 123 MPM
	10,000 Lbs. @ 298 FPM	10,000 Lbs. @ 380 FPM	4536 Kgs. @ 91 MPM	4536 Kgs. @ 116 MPM
	15,000 Lbs. @ 275 FPM	15,000 Lbs. @ 340 FPM	6804 Kgs. @ 84 MPM	6804 Kgs. @ 104 MPM
	20,000 Lbs. @ 255 FPM	20,000 Lbs. @ 300 FPM	9072 Kgs. @ 78 MPM	9072 Kgs. @ 91 MPM
	25,000 Lbs. @ 232 FPM	25,000 Lbs. @ 257 FPM	11340 Kgs. @ 71 MPM	11340 Kgs. @ 78 MPM
	30,000 Lbs. @ 208 FPM	30,000 Lbs. @ 218 FPM	13608 Kgs. @ 63 MPM	13608 Kgs. @ 66 MPM
	35,000 Lbs. @ 185 FPM	35,000 Lbs. @ 185 FPM	15876 Kgs. @ 56 MPM	15876 Kgs. @ 56 MPM
	40,000 Lbs. @ 165 FPM	40,000 Lbs. @ 160 FPM	18144 Kgs. @ 50 MPM	18144 Kgs. @ 49 MPM

Performance figures are based on machine equipped with standard engine and torque converter.

NOTE: Data applies to standard equipped machine as shipped from the factory. Information is supplied for reference only. In accordance with the Company's policy of constant product improvement these specifications are subject to change without notice and without incurring responsibility to units previously sold.

PERFORMANCE

Travel Speed0.8 MPH (1.29 Km/H)
 Gradeability30%
 Swing Speed 2.28 R.P.M. Max.

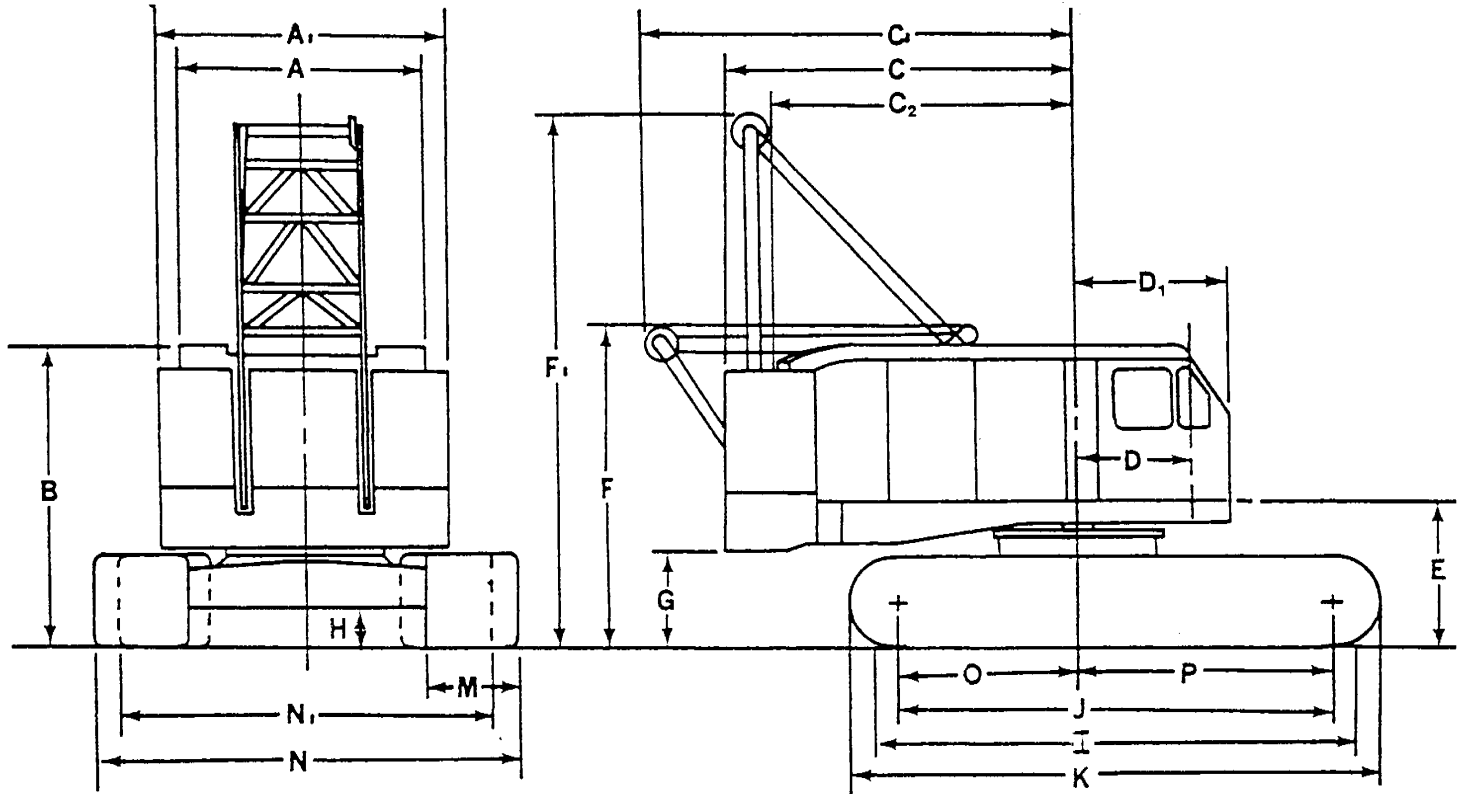
BOOM AND JIB ERECTION

92HT Boom Length		Maximum Jib Length			
Feet	Meters	No. 16HL Jib		No. 30H Jib	
		Feet	Meters	Feet	Meters
280	85.3	0	0	0	0
270	82.3	40	12.2	0	0
260	79.3	90	27.4	35	10.7
250	76.2	100	30.5	65	19.8
240	73.2	100	30.5	95	29.0

92HT BOOM COMPOSITION

Boom Length		30 Fl. (9.2 M)	20 Fl. (6.1 M)	10 Fl. (3.0 M)	50 Fl. (15.2M)	40 Fl. (12.2 M)
Fl.	M	92HT Inner	92HT Center	92ST Center	92ST Center	92H Outer
70	21.3	1	—	—	—	1
80	24.4	1	—	1	—	1
90	27.4	1	1	—	—	1
100	30.5	1	1	1	—	1
110	33.5	1	1	2	—	1
120	36.6	1	—	—	1	1
130	39.6	1	—	1	1	1
140	42.7	1	1	—	1	1
150	45.7	1	1	1	1	1
160	48.8	1	1	2	1	1
170	51.8	1	—	—	2	1
180	54.9	1	—	1	2	1
190	57.9	1	1	—	2	1
200	61.0	1	1	1	2	1
210	64.0	1	1	2	2	1
220	67.1	1	—	—	3	1
230	70.1	1	—	1	3	1
240	73.2	1	1	—	3	1
250	76.2	1	1	1	3	1
260	79.3	1	1	2	3	1
270	82.3	1	—	—	4	1
280	85.3	1	—	1	4	1

AMERICAN MODEL 9310 CRAWLER CRANE



GENERAL DIMENSIONS

	Ft.	MM					
A.	Width of cab	11'0"	3353	I.	Crawler bearing length	25'6"	7772
A ₁ .	Width over counterweight	13'2"	4013	J.	Center to center crawler tumblers	24'2"	7366
B.	Height over cab	13'7-1.8"	4143	K.	Overall length of crawlers	28'2"	8585
C.	Tailswing over counterweight	17'0"	5181	M.	Width of tread shoes	44"	1117
C ₁ .	Tailswing over A-frame, lowered	24'9"	7544	N.	Overall width over crawlers —		
C ₂ .	Tailswing less A-frame and counterweight	14'11"	4546		Extended:		
D.	Center of pivot to center of boom foot	5'0-3/4"	1543		With 44" (1117 mm) shoes	20'7"	6274
D ₁ .	Center of pivot to front of cab	6'10-1/2"	2095		With 50" (1270 mm) shoes	21'1"	6428
E.	Ground to center boom foot	6'9-1/8"	2060	N ₁ .	Overall width over crawlers —		
F.	Height over A-frame, lowered —				Retracted:		
F ₁ .	Height over A-frame, lowered —				With 44" (1117 mm) shoes	18'1"	5513
F ₂ .	Height over A-frame, raised	30'3-5/8"	9236		With 50" (1270 mm) shoes	18'7"	5664
G.	Ground to bottom of counterweight	4'4-3/8"	1330	O.	Center of rotation to center of drive tumbler	11'0-1/4"	3353
H.	Minimum ground clearance under crawler base	1'9"	533	P.	Center of rotation to center of idler tumbler	13'1-3/4"	4007

WEIGHTS

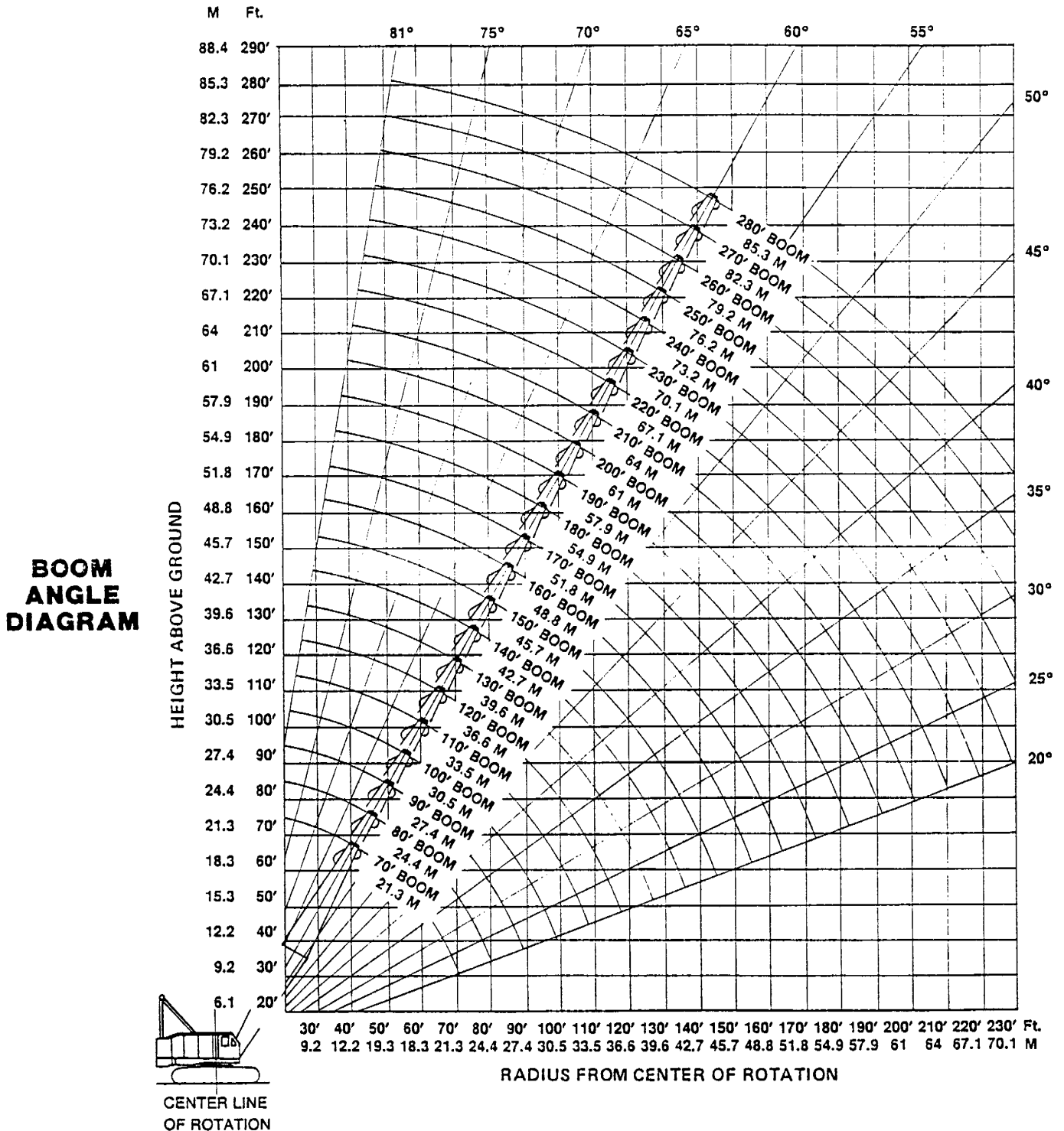
	Lbs.	Kgs.			
Lifting crane with basic 70 ft. crane boom	362,700	164520	Telescopic boom stops	300	136
Components removable for shipment:			Outer bail assembly	2,450	1111
Counterweight	135,000	61236	A-frame	5,320	2413
Boom outer	10,070	4567	Side frames, 50" (1270 mm) shoes (2)	75,300	34156
Boom inner	8,560	3882	Crawler axles (4)	13,100	5942
			Torque tubes (2)	920	417
			Carbody	28,400	12882

GROUND PRESSURE

Standard Lift Crane
 With Basic 92HT Boom
 and 44" (1117 mm) Shoes..... 13.0 PSI 9140 Kg/M²

AMERICAN MODEL 9310 CRAWLER CRANE

WORKING RANGES



LIFT RATINGS With 77H Tubular Hammerhead Boom and "S-S" Counterweight (135,000 Lbs.)

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point
70 feet	16	82.8	—	450000	77
	20	79.5	—	335830	77
	25	75.4	—	230370	75
	30	71.1	—	174380	74
	35	66.7	121510	139730	72
	40	62.2	101700	116210	70
	50	52.4	78820	86030	63
	60	41.0	59890	67720	53
	70	25.6	48950	55270	37
80 feet	17	83.0	—	407830	87
	20	80.8	—	335750	87
	25	77.2	—	230220	86
	30	73.5	—	174180	84
	35	69.8	121280	139530	83
	40	65.9	101470	116000	81
	50	57.8	75580	85810	75
	60	48.8	59670	67520	68
	70	38.2	48730	55070	57
	80	23.8	40780	46100	39
90 feet	19	82.5	—	363930	97
	20	81.9	—	335630	97
	25	78.7	—	230060	96
	30	75.4	149700	173980	95
	35	72.1	121030	139310	93
	40	68.7	101220	115780	92
	50	61.7	75320	85570	87
	60	54.2	59420	67280	81
	70	45.8	48480	54840	72
	80	35.9	40550	45870	60
90	22.4	34600	39180	41	
100 feet	20	82.7	—	327760	107
	25	79.8	—	229820	106
	30	76.9	149390	173710	105
	35	73.9	120720	139040	104
	40	70.9	100920	115510	102
	50	64.8	74990	85260	98
	60	58.2	59120	66990	93
	70	51.2	48170	54540	85
	80	43.3	40240	45570	76
	90	34.0	34340	38930	63
100	21.2	29580	33600	43	
110 feet	21	82.8	—	296210	117
	25	80.7	—	229590	116
	30	78.1	149090	173440	115
	35	75.4	120410	138760	114
	40	72.7	100610	115220	113
	50	67.2	74670	84950	109
	60	61.4	58810	66700	104
	70	55.3	47860	54240	98
	80	48.6	39930	45270	90
	90	41.2	34070	38660	80
100	32.3	29320	33340	66	
110	20.1	25480	29060	45	
120 feet	22	82.9	—	262380	127
	25	81.5	194030	229400	126
	30	79.1	148830	173220	126
	35	76.7	120150	138520	124
	40	74.2	100370	115000	123

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point
120 feet cont.	50	69.2	74400	84700	120
	60	64.0	58570	66460	115
	70	58.5	47610	54000	110
	80	52.7	39670	45020	103
	90	46.4	33850	38450	94
	100	39.3	29110	33140	83
	120	19.2	22120	25340	47
130 feet	24	82.6	206120	232640	137
	25	82.2	193710	229140	137
	30	79.9	148490	172920	136
	35	77.7	119810	138210	135
	40	75.4	100030	114680	134
	50	70.8	74040	84350	131
	60	66.1	58210	66120	127
	70	61.2	47250	53640	122
	80	56.0	39300	44660	115
	90	50.5	33520	38130	108
	100	44.5	28780	32810	99
120	29.6	21790	25030	71	
130	18.4	19150	22090	48	
140 feet	25	82.7	193400	205950	147
	30	80.7	148170	172630	146
	35	78.6	119470	137900	145
	40	76.5	99700	114380	144
	50	72.3	73680	84010	141
	60	67.9	57870	65790	137
	70	63.4	46900	53310	133
	80	58.7	38960	44320	127
	90	53.8	33190	37810	121
	100	48.5	28450	32500	112
	120	36.2	21480	24720	90
140	17.7	16580	19280	50	
150 feet	26	82.8	182320	183100	157
	30	81.3	147810	172310	156
	35	79.4	119110	137570	155
	40	77.4	99330	114030	154
	50	73.5	73300	83650	152
	60	69.5	57500	65430	148
	70	65.3	46520	52940	144
	80	61.0	38560	43940	139
	90	56.6	32830	37450	133
	100	51.8	28080	32130	125
	120	41.2	21110	24360	106
140	27.5	16230	18940	76	
150	17.1	14300	16800	51	
160 feet	27	82.9	163790	163790	167
	30	81.8	147460	163790	166
	35	80.0	118760	137240	165
	40	78.2	98990	113710	164
	50	74.5	72930	83290	162
	60	70.8	57130	65080	159
	70	67.0	46150	52580	155
	80	63.0	38190	43580	150
	90	58.9	32470	37100	145
	100	54.6	27730	31790	138
	120	45.2	20770	24020	121
	140	33.8	15880	18590	96
	160	16.5	12280	14600	53

(Continued)

LIFT RATINGS (cont.)

*With 77H Tubular Hammerhead Boom

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point
170 feet	28	83.0	147330	147330	176
	30	82.3	147330	147330	176
	35	80.6	118450	136950	175
	40	78.9	98690	113420	175
	50	75.5	72600	82980	172
	60	72.0	56820	64780	169
	70	68.4	45830	52260	166
	80	64.7	37860	43260	161
	90	60.9	32160	36800	156
	100	57.0	27430	31490	150
	120	48.5	20450	23710	135
	140	38.6	15580	18290	113
160	25.7	11980	14300	81	
170	16.0	10500	12670	54	
180 feet	30	82.7	133870	133870	186
	35	81.1	118080	133870	186
	40	79.5	98320	113090	185
	50	76.3	72210	82600	183
	60	73.0	56440	64410	180
	70	69.6	45440	51880	176
	80	66.2	37470	42870	172
	90	62.7	31800	36440	168
	100	59.0	27050	31120	162
	120	51.2	20070	23340	148
	140	42.5	15210	17920	129
	160	31.8	11600	13930	102
180	15.5	8830	10870	55	
190 feet	31	82.8	120130	120130	196
	35	81.6	117730	120130	196
	40	80.1	97970	112760	195
	50	77.0	71830	82240	193
	60	73.9	56070	64050	190
	70	70.7	45060	51520	187
	80	67.5	37070	42490	183
	90	64.2	31430	36080	179
	100	60.8	26680	30760	174
	120	53.6	19700	22970	161
	140	45.7	14830	17550	143
	160	36.4	11230	13570	120
180	24.3	8470	10510	85	
190	15.1	7320	9240	57	
200 feet	32	82.9	109570	109570	206
	35	82.0	109570	109570	206
	40	80.6	97610	109570	205
	50	77.7	71440	81870	203
	60	74.7	55680	63680	201
	70	71.7	44660	51130	198
	80	68.7	36670	42090	194
	90	65.6	31040	35700	190
	100	62.4	26300	30380	185
	120	55.7	19310	22580	173
	140	48.4	14440	17170	157
	160	40.2	10840	13180	136
180	30.1	8080	10120	108	
200	14.7	5880	7700	58	
210 feet	33	83.0	99900	99900	216
	35	82.4	99900	99900	216
	40	81.0	97240	99900	215
	50	78.3	71060	81500	213
	60	75.5	55300	63310	211
	70	72.6	44270	50750	208
	80	69.8	36280	41710	205
	90	66.8	30670	35340	201
	100	63.8	25920	30010	196
	120	57.6	18940	22220	185
	140	50.8	14060	16790	170
	160	43.3	10450	12790	152
180	34.6	7690	9730	126	
200	23.1	5500	7320	89	
210	14.3	4580	6300	59	
220 feet	35	82.8	91700	91700	226
	40	81.4	91700	91700	225
	50	78.8	70710	81160	224
	60	76.1	54970	62990	221
	70	73.5	43920	50410	219

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point
220 feet cont.	80	70.7	35920	41350	215
	90	67.9	30330	35010	212
	100	65.1	25570	29670	207
	120	59.2	18600	21880	197
	140	52.9	13710	16450	183
	160	46.0	10110	12450	166
	180	38.2	7340	9390	143
200	28.6	5150	6970	113	
220	14.0	3400	5040	60	
230 feet	36	82.8	84050	84050	236
	40	81.8	84050	84050	235
	50	79.3	70300	80770	234
	60	76.8	54580	62610	232
	70	74.2	43530	50020	229
	80	71.6	35510	40960	226
	90	68.9	29950	34630	222
	100	66.2	25190	29290	218
	120	60.7	18200	21480	208
	140	54.8	13310	16050	195
	160	48.4	9710	12060	179
	180	41.3	6950	9000	159
200	33.0	4760	6580	132	
220	22.0	3790	4630	93	
230	13.7	3790	3790	61	
240 feet	37	82.9	75920	75920	246
	40	82.2	75920	75920	246
	50	79.7	70470	75920	244
	60	77.3	54200	62250	242
	70	74.9	43140	49640	239
	80	72.4	35130	40580	236
	90	69.9	29570	34260	233
	100	67.3	24810	28920	229
	120	62.0	17810	21100	220
	140	56.4	12930	15670	208
	160	50.5	9330	11680	193
	180	44.0	6550	8610	174
200	36.5	4370	6190	150	
220	27.4	4370	4230	118	
250 feet	38	82.9	70020	70020	256
	40	82.5	70020	70020	256
	50	80.2	69930	69930	254
	60	77.8	53810	61870	252
	70	75.5	42730	49250	250
	80	73.1	34720	40180	247
	90	70.7	29190	33880	244
	100	68.2	24420	28530	240
	120	63.2	17420	20710	231
	140	58.0	12520	15270	220
	160	52.4	8920	11270	206
	180	46.3	6150	8210	188
200	39.5	3960	5790	166	
220	31.6	3960	3830	138	
260 feet	39	83.0	64630	64630	266
	40	82.8	64570	64570	266
	50	80.5	64360	64360	264
	60	78.3	53430	61490	262
	70	76.0	42340	48870	260
	80	73.8	34320	39790	257
	90	71.5	28800	33500	254
	100	69.1	24030	28150	251
	120	64.3	17020	20320	242
	140	59.3	12130	14890	231
	160	54.0	8520	10880	218
	180	48.4	5750	7820	202
200	42.1	3550	5390	182	
220	35.0	3550	3430	157	

9310.27

LIFT RATINGS With 77H Tubular Tapered Tip Boom and "S-S" Counterweight (135,000 Lbs.)

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point	
100 feet	21	80.8		243800	105	
	25	78.5		232400	105	
	30	75.6		176600	104	
	35	72.6		142100	102	
	40	69.6		118710	100	
	50	63.3		88630	96	
	60	56.7	62620	70480	90	
	70	49.5	51750	58100	83	
	80	41.5	43880	49200	73	
	90	31.9	37920	42500	60	
	100	18.3	33340	37350	38	
110 feet	23	80.6		243670	115	
	25	79.6		232120	115	
	30	76.9		176290	114	
	35	74.2		141780	113	
	40	71.5		118400	111	
	50	65.9	78030	88290	107	
	60	60.0	62270	70150	102	
	70	53.8	51400	57770	96	
	80	47.1	43520	48860	87	
	90	39.5	37560	42150	77	
	100	30.3	33020	37040	62	
110	17.5	29240	32820	40		
120 feet	24	80.9		243530	125	
	25	80.4		231840	125	
	30	78.0		175980	124	
	35	75.6		141480	123	
	40	73.1		118080	122	
	50	68.0	77690	87970	118	
	60	62.8	61940	69830	113	
	70	57.2	51070	57450	108	
	80	51.4	43190	48530	100	
	90	44.9	37220	41810	92	
	100	37.7	32710	36740	80	
	120	16.7	25810	29040	41	
130 feet	26	80.7		217680	135	
	30	78.9		175630	134	
	35	76.7		141120	133	
	40	74.4	103110	117740	132	
	50	69.8	77290	87590	129	
	60	65.0	61570	69470	125	
	70	60.0	50680	57070	119	
	80	54.8	42800	48160	113	
	90	49.2	36830	41440	105	
	100	43.1	32350	36390	96	
	120	27.9	25460	28690	68	
	130	16.0	22850	25790	43	
	140 feet	27	81.0		201070	145
30		79.7		175290	145	
35		77.7		140780	144	
40		75.5	102750	117400	142	
50		71.3	76920	87230	139	
60		66.9	61210	69120	136	
70		62.4	50320	56720	131	
80		57.6	42440	47800	125	
90		52.6	36460	41070	118	
100		47.3	32010	36050	110	
120		34.8	25120	28360	87	
140		15.5	20300	23000	44	
150 feet		29	80.8		182200	155
		30	80.4		174980	155
	35	78.5	122070	140470	154	
	40	76.5	102430	117090	153	
	50	72.6	76580	86910	150	
	60	68.5	60900	68820	146	
	70	64.3	50010	56410	142	
	80	60.0	42110	47480	137	
	90	55.5	36140	40750	130	
	100	50.7	31720	35770	123	
	120	40.0	24820	28070	103	
	140	25.9	20000	22710	72	
	150	14.9	18110	20600	45	
	160 feet	31	80.7	143420	165090	165
		35	79.2	121670	140100	164
40		77.4	102050	116730	163	
50		73.7	76180	86520	160	
60		69.9	60510	68450	157	

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point	
160 feet cont.	70	66.1	49610	56030	153	
	80	62.1	41710	47090	148	
	90	57.9	35740	40360	142	
	100	53.6	31340	35390	136	
	120	44.1	24440	27690	118	
	140	32.5	19620	22330	93	
	160	14.5	16080	18400	47	
170 feet	32	80.9	137200	148370	175	
	35	79.9	121290	139740	174	
	40	78.1	101680	116380	173	
	50	74.7	75790	86150	171	
	60	71.1	60130	68080	168	
	70	67.5	49220	55640	164	
	80	63.8	41330	46710	159	
	90	60.0	35680	40310	154	
	100	56.1	30970	35030	148	
	120	47.5	24070	27330	132	
	140	37.5	19250	21960	110	
160	24.3	15700	18030	77		
170	14.0	14270	16440	48		
180 feet	34	80.7	125790	135170	184	
	35	80.4	120880	135170	184	
	40	78.8	101280	116010	183	
	50	75.5	75370	85740	181	
	60	72.2	59730	67690	178	
	70	68.9	48810	55250	175	
	80	65.4	40910	46300	170	
	90	61.8	35280	39920	165	
	100	58.2	30580	34640	160	
	120	50.3	23680	26940	145	
	140	41.4	18850	21570	126	
	160	30.6	15310	17630	98	
180	13.6	12590	14630	49		
190 feet	35	80.9	120490	122910	194	
	40	79.4	100900	115640	194	
	50	76.3	74970	85360	191	
	60	73.2	59340	67310	189	
	70	70.0	48410	54860	185	
	80	66.8	40510	45910	181	
	90	63.4	34900	39550	177	
	100	60.0	30200	34280	171	
	120	52.8	23300	26560	158	
	140	44.7	18470	21190	141	
	160	35.4	14920	17250	117	
	180	23.0	12200	14240	81	
	190	13.3	11080	13000	50	
	200 feet	37	80.8	111690	111690	204
40		79.9	100550	111690	204	
50		77.0	74610	85000	202	
60		74.1	58990	66970	199	
70		71.1	48060	54510	196	
80		68.0	40150	45560	192	
90		64.9	34570	39220	188	
100		61.7	29860	33940	183	
120		54.9	22950	26220	170	
140		47.6	18130	20860	154	
160		39.2	14580	16910	133	
180		29.0	11860	13900	104	
200		12.9	9720	11540	51	
210 feet		38	81.0	101820	101820	214
		40	80.4	100140	101820	214
	50	77.6	74190	84610	212	
	60	74.8	58580	66580	209	
	70	72.0	47650	54120	206	
	80	69.1	39730	45150	203	
	90	66.1	34170	38830	199	
	100	63.1	29460	33550	194	
	120	56.8	22550	25830	183	
	140	50.0	17730	20460	168	
	160	42.5	14170	16510	149	
	180	33.6	11440	13490	123	
	200	21.8	9300	11120	85	
	210	12.6	8410	10130	53	

(Continued)

LIFT RATINGS (cont.)

^With 77H Tubular Tapered Tip Boom

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point
220 feet	40	80.9	93680	93680	224
	50	78.2	73790	84220	222
	60	75.5	58190	66190	220
	70	72.8	47250	53730	217
	80	70.1	39320	44750	214
	90	67.3	33790	38460	210
	100	64.4	29080	33170	205
	120	58.5	22160	25440	194
	140	52.2	17340	20070	181
	160	45.2	13780	16120	163
	180	37.3	11050	13100	140
	200	27.6	8890	10720	109
220	12.3	7180	8820	54	
230 feet	42	80.8	86060	86060	234
	50	78.7	73360	83800	232
	60	76.2	57780	65790	230
	70	73.6	46840	53320	227
	80	71.0	38900	44340	224
	90	68.3	33390	38060	221
	100	65.6	28670	32770	216
	120	60.0	21760	25040	206
	140	54.1	16930	19670	193
	160	47.7	13360	15710	177
	180	40.5	10630	12680	156
	200	23.1	8480	10310	129
	220	20.9	6750	8390	89
	230	12.0	6020	7590	55
240 feet	43	80.9	77490	77490	244
	50	79.2	73500	77490	243
	60	76.8	57390	65410	240
	70	74.3	46430	52920	238
	80	71.8	38490	43930	235
	90	69.3	33000	37680	231
	100	66.7	28290	32390	227
	120	61.4	21360	24650	217
	140	55.8	16530	19270	205
	160	49.8	12960	15310	190
	180	43.2	10230	12290	171
	200	35.7	8070	9900	147
	220	26.4	6340	7980	114
	240	11.8	4940	6430	56
250 feet	45	80.8	71730	71730	254
	50	79.6	71520	71520	253
	60	77.3	57020	65050	251
	70	74.9	46050	52550	248
	80	72.6	38110	43560	245
	90	70.1	32640	37330	242
	100	67.7	27920	32030	238
	120	62.6	20990	24290	229
	140	57.3	16160	18910	217
	160	51.7	12600	14950	203
	180	45.6	9860	11920	185
	200	38.8	7710	9540	163
	220	30.7	5960	7610	134
	240	20.0	4540	6040	92
250	11.6	3950	5380	57	
260 feet	46	80.9	66000	66000	264
	50	80.0	65820	65820	263
	60	77.8	56610	64660	261
	70	75.5	45630	52150	259

Boom Length (Feet)	Radius In Feet	Boom Angle Degrees	Side Frames Retracted (Lbs.)	Side Frames Extended (Lbs.)	Ft. From Boom Point
260 feet cont.	80	73.2	37690	43150	256
	90	70.9	32240	36940	252
	100	68.6	27520	31640	249
	120	63.8	20590	23890	240
	140	58.7	15750	18500	229
	160	53.4	12180	14540	216
	180	47.7	9450	11510	199
	200	41.4	7290	9120	179
	220	34.2	5540	7190	153
	240	25.4	4110	5610	118
	260	11.3	2950	4320	58
	270 feet	48	80.8	60860	60860
50		80.4	60830	60830	273
60		78.3	56210	60110	271
70		76.1	45230	51750	269
80		73.9	37280	42750	266
90		71.7	31850	36550	263
100		69.4	27120	31240	260
120		64.8	20190	23490	251
140		60.0	15360	18110	241
160		55.0	11790	14150	228
180		49.6	9040	11110	212
200		43.8	6890	8720	194
220		37.2	5130	6790	170
240		29.5	3700	5200	140
260	19.2	—	3890	96	
270	11.1	—	3340	59	
280 feet	49	81.0	56400	56400	283
	50	80.8	56210	56210	283
	60	78.7	55510	55510	281
	70	76.6	44810	51350	279
	80	74.5	36860	42330	277
	90	72.3	31450	36160	274
	100	70.2	26720	30850	270
	120	65.8	19780	23090	262
	140	61.2	14940	17700	252
	160	56.4	11370	13730	240
	180	51.3	8630	10690	225
	200	45.9	6460	8300	208
	220	39.9	4710	6360	186
	240	33.0	3280	4780	159
260	24.4	—	3460	123	
290 feet	51	80.9	51900	51900	293
	60	79.1	51230	51230	292
	70	77.1	44400	50080	289
	80	75.0	36440	41920	287
	90	73.0	31050	35760	284
	100	70.9	26320	30450	281
	120	66.7	19380	22690	273
	140	62.3	14530	17290	263
	160	57.7	10960	13330	252
	180	52.9	8220	10290	238
	200	47.8	6050	7890	221
	220	42.2	4300	5960	201
240	35.9	2850	4360	177	
260	28.5	—	3040	145	

9310.64

LIFT RATINGS With 77H Tubular Hammerhead Boom and "S-S" Counterweight (61,240 Kgs.)

METRIC

Boom Length (Meters)	Radius In Meters	Boom Angle Degrees	Side Frames Retracted (Kgs.)	Side Frames Extended (Kgs.)	Meters From Boom Point
21.3 meters	5.1	82.2	—	204120	23.5
	6.0	79.8	—	156800	23.4
	7.0	77.1	—	119890	23.2
	8.0	74.3	—	96770	22.9
	9.0	71.5	—	80970	22.6
	10.0	68.7	—	69490	22.2

Boom Length (Meters)	Radius In Meters	Boom Angle Degrees	Side Frames Retracted (Kgs.)	Side Frames Extended (Kgs.)	Meters From Boom Point
21.3 meters (cont.)	12.0	62.8	47110	53860	21.3
	14.0	56.5	38420	43700	20.1
	16.0	49.8	32330	36640	18.6
	18.0	42.2	27730	31360	16.6
	20.0	33.2	24160	27300	13.9

(Continued)

LOAD HOISTING DATA

METRIC

Maximum Lifting Capacity In Pounds	Minimum Parts of Load Line	Maximum Hoisting Distance		
		RH Drum With Controlled Load Lowering	LH Drum With Controlled Load Lowering	LH Drum Without Controlled Load Lowering
		Ft.	Ft.	Ft.
450,000	12	69	35	53
449,427	11	76	38	58
405,570	10	83	42	64
367,710	9	93	47	71
326,850	8	104	52	80
285,990	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	LH Drum With Controlled Load Lowering	LH Drum Without Controlled Load Lowering
		M	M	M
204,120	12	21.0	10.7	16.2
203,860	11	23.2	11.6	17.7
183,970	10	25.3	12.8	19.5
166,790	9	28.3	14.3	21.6
148,260	8	31.7	15.8	24.4
129,730	7	36.3	18.3	28.0
111,200	6	42.4	21.3	32.6
108,990	5	50.9	25.6	39.3
74,130	4	63.7	32.0	49.1
55,600	3	85.0	50.0	65.5
37,060	2	127.7	64.3	98.5
18,530	1	255.7	128.9	197.2

Based on 28.6 mm Super Grade rope.

77H TAPERED TIP BOOM COMPOSITION

Boom Length		30 Ft. (9.2m)	10 Ft. (3.1m)	20 Ft. (6.1m)	50 Ft. (15.3m)	40 Ft. (12.2m)	30 Ft. (9.2m)
		77S Inner	77S Center	77S Center	77S Center	77H Outer Base	77H Outer
Ft.	m						
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. (9.2m)	10 Ft. (3.1m)	20 Ft. (6.1m)	50 Ft. (15.3m)	40 Ft. (12.2m)	Hammer-head Tip
		77S Inner	77S Center	77S Center	77S Center	77H Outer Base	
Ft.	m						
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

METRIC

77H Boom Length	No. 16HL Maximum Jib Length
290' Tapered Tip	80'
280' Tapered Tip	100'
260' Hammerhead	100'

77H Boom Length	No. 16HL Maximum Jib Length
88m Tapered Tip	24m
85m Tapered Tip	30m
79m Hammerhead	30m

WEIGHTS

	LBS.	KG
Lifting crane with basic 70 ft. (21.3m)		
77H crane boom and 44" (1.118m) shoes	350,780	159110
Components removable for shipment:		
Counterweight	135,000	61240
Boom outer and hammerhead	7,870	3570
Boom inner	2,540	1150
Telescopic boom stops	300	140

	LBS.	KG
Outer bail assembly	2,450	1110
A-frame	5,320	2410
Side frames, 44" (1.118m) shoes (2)	71,600	32480
Crawler axles (4)	13,100	5940
Torque tubes (2)	920	420
Carbody	28,400	12880

GROUND PRESSURE

Lifting crane (equipped as above)	13.0 Lb/in ² .91 Kg/cm ²
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NOTE: In accordance with varying material situations and the Company's policy of constant product improvement these specifications subject to change without notice and without incurring responsibility to units previously sold.