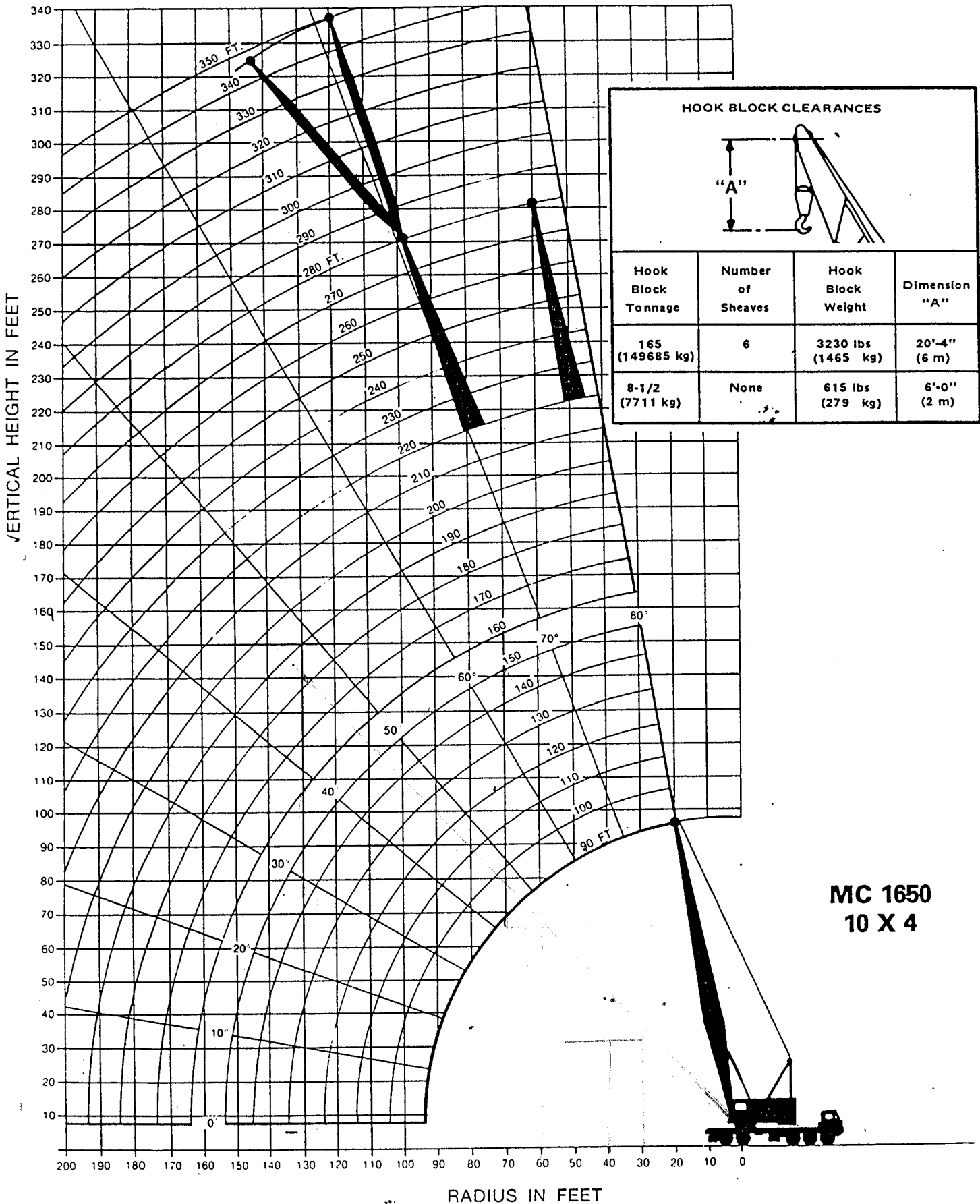


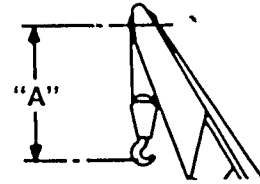
LONG TAPERED PEAK BOOM

165-TON

RANGE DIAGRAM:



HOOK BLOCK CLEARANCES



Hook Block Tonnage	Number of Sheaves	Hook Block Weight	Dimension "A"
165 (149685 kg)	6	3230 lbs (1465 kg)	20'-4" (6 m)
8-1/2 (7711 kg)	None	615 lbs (279 kg)	6'-0" (2 m)

**MC 1650
10 X 4**

MC 165

LONG TAPERED PEAK BOOM

WITH MAXIMUM COUNTERWEIGHT 68,600 lbs (31117 kg)
& BUMPER COUNTERWEIGHT 16,000 lbs (7258 kg)

CAPACITY CHART:

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers	
			Over Rear	Over Side
90 Ft. Boom				
20	79.6	95.5	191600*	191600*
25	76.3	94.5	166600*	166600*
30	73.0	93.1	139000*	139000*
35	69.7	91.4	118900*	118900*
40	66.2	89.4	103700*	98700
45	62.7	87.0	91800*	83400
50	59.1	84.2	81100	72000
60	51.3	77.3	63900	56100
70	42.6	67.9	52400	45700
80	32.1	54.8	44200	38300
90	16.6	32.7	38000	32700
100 Ft. Boom				
25	77.7	104.7	154400*	154400*
30	74.8	103.5	138400*	138400*
35	71.8	102.0	118400*	118400*
40	68.7	100.2	103200*	98400
45	65.6	98.1	91300*	83100
50	62.5	95.7	80800	71700
60	55.8	89.7	63600	55800
70	48.5	81.9	52100	45400
80	40.3	71.7	43800	37900
90	30.4	57.6	37600	32400
100	15.7	34.1	32800	28100
110 Ft. Boom				
25	78.9	114.9	153600*	153600*
30	76.2	113.8	137900*	137900*
35	73.5	112.5	117900*	117900*
40	70.8	110.9	102700*	98100
45	68.0	109.0	90800*	82800
50	65.1	106.8	80500	71400
60	59.2	101.5	63300	55500
70	53.0	94.8	51700	45000
80	46.1	86.3	43500	37600
90	38.4	75.3	37300	32000
100	29.0	60.3	32500	27700
110	15.0	35.5	28000	24300
120 Ft. Boom				
30	77.4	124.1	133600*	133600*
35	74.9	122.9	117400*	117400*
40	72.4	121.4	102200*	97900
45	69.9	119.7	90400*	82500
50	67.3	117.7	80200	71100
60	62.0	113.0	62900	55200
70	56.5	107.1	51400	44700
80	50.5	99.7	43100	37300
90	44.0	90.4	36900	31700
100	36.7	78.7	32100	27400
110	27.7	62.8	28200	23900
120	14.4	36.8	25100	21100
130 Ft. Boom				
30	78.4	134.3	125400*	125400*
35	76.1	133.2	116900*	116900*
40	73.8	131.8	101700*	97600
45	71.5	130.3	89900*	82200
50	69.2	128.5	79900	70800
60	64.4	124.2	62600	54900
70	59.4	118.9	51100	44400
80	54.1	112.3	42800	36900
90	48.4	104.3	36600	31400
100	42.2	94.4	31800	27000
110	35.2	81.9	27900	23600
120	26.6	65.2	24700	20800
130	13.8	38.0	22100	18400
140 Ft. Boom				
35	77.1	143.5	110400*	110400*
40	75.0	142.2	101300*	97300
45	72.9	140.8	89400*	81900
50	70.7	139.1	79600	70500
60	66.3	135.2	62300	54600
70	61.8	130.3	50700	44100
80	57.0	124.4	42500	36600
90	52.0	117.3	36200	31000
100	46.6	108.7	31400	26700
110	40.6	98.2	27500	23300
120	33.9	85.0	24400	20400
130	25.6	67.5	21700	18100
140	13.3	39.2	19500	16100

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers	
			Over Rear	Over Side
150 Ft. Boom				
35	78.0	153.7	103600*	103600*
40	76.0	152.6	97900*	97000
45	74.0	151.2	88900*	81600
50	72.0	149.7	79200	70200
60	68.0	146.1	62000	54200
70	63.8	141.6	50400	43700
80	59.4	136.2	42100	36300
90	54.9	129.7	35900	30700
100	50.1	122.0	31100	26400
110	44.9	112.9	27200	22900
120	39.2	101.8	24000	20100
130	32.7	88.0	21400	17700
140	24.7	69.7	19100	15800
150	12.8	40.3	17200	14100
160 Ft. Boom				
40	76.9	162.8	91100*	91100*
45	75.1	161.6	86300*	81300
50	73.2	160.2	78800*	69900
60	69.4	156.8	61600	53900
80	61.5	147.7	41800	35900
100	53.0	134.8	30700	26000
120	43.4	116.9	23700	19700
140	31.6	90.9	18800	15400
160	12.4	41.4	15200	12200
170 Ft. Boom				
40	77.7	173.1	85700*	85700*
45	76.0	171.9	81200*	81000*
50	74.2	170.6	77000*	69600
60	70.7	167.4	61300	53600
80	63.4	158.9	41400	35600
100	55.5	147.1	30400	25700
120	46.9	131.0	23300	19400
140	36.7	108.7	18400	15100
160	23.2	74.0	14800	11900
180 Ft. Boom				
40	78.4	183.3	80600*	80600*
45	76.8	182.2	76300*	76300*
50	75.1	181.0	72100*	69300
60	71.8	178.0	61000	53300
80	64.9	170.1	41100	35300
100	57.7	159.1	30000	25300
120	49.8	144.4	23000	19000
140	40.8	124.6	18100	14700
160	29.8	96.4	14500	11500
180	11.7	43.6	11700	9100
190 Ft. Boom				
40	79.0	193.5	76100*	76100*
45	77.5	192.5	71600*	71600*
50	75.9	191.3	67000*	67000*
60	72.8	188.5	60600*	53000
80	66.3	181.0	40800	34900
100	59.6	170.8	29700	25000
120	52.3	157.3	22600	18700
140	44.2	139.4	17700	14400
160	34.7	115.1	14100	11200
180	21.9	78.0	11400	8800
200 Ft. Boom				
45	78.1	202.7	66600*	66600*
50	76.6	201.6	63000*	63000*
60	73.7	198.9	56900*	52700
80	67.6	191.9	40400	34600
100	61.2	182.3	29300	24600
120	54.5	169.7	22300	18400
140	47.1	153.4	17400	14000
160	38.6	131.8	13800	10800
180	28.2	101.5	11000	8400
200	11.1	45.5	8800	6500
210 Ft. Boom				
45	78.7	212.9	62800*	62800*
50	77.3	211.8	59500*	59500*
60	74.5	209.3	53500*	52400
80	68.7	202.7	40100	34300
100	62.7	193.6	29000	24300
120	56.4	181.9	21900	18000
140	49.5	166.8	17000	13700
160	41.9	147.3	13400	10500
180	32.9	121.2	10600	8000
200	20.8	81.7	8500	6100

165 Ton

LONG TAPERED PEAK BOOM
WITH MAXIMUM COUNTERWEIGHT 68,600 lbs (31117 kg)
& BUMPER COUNTERWEIGHT 16,000 lbs (7258 kg)

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers	
			Over Rear	Over Side
220 Ft. Boom				
50	77.9	222.1	56000*	56000*
60	75.2	219.7	50600*	50600*
80	69.7	213.4	38800*	33900
100	64.1	204.8	28600	24000
120	58.1	193.8	21500	17700
140	51.7	179.7	16600	13300
160	44.7	161.9	13000	10100
180	36.8	138.7	10300	7700
200	26.9	106.4	8100	5800
220	10.6	47.4	6300	4200
230 Ft. Boom				
50	78.4	232.3	53100*	53100*
60	75.8	230.0	45600*	45600*
80	70.6	224.0	35000*	33600
100	65.3	215.9	28300	23600
120	59.6	205.5	21200	17300
140	53.7	192.3	16300	13000
160	47.2	175.8	12700	9800
180	40.0	154.8	9900	7300
200	31.4	126.9	7700	5400
220	19.9	85.3	6000	3900
240 Ft. Boom				
50	78.9	242.5	50000*	50000*
60	76.4	240.3	43100*	43100*
80	71.5	234.6	32900*	32900*
100	66.4	226.9	27000*	23300*
120	61.0	217.0	20800	17000
140	55.4	204.6	15900	12600
160	49.4	189.2	12300	9400
180	42.7	169.9	9600	7000
200	35.1	145.2	7400	5100
220	25.7	111.1	5600	3500
240	10.1	49.3	4200	
250 Ft. Boom				
55	78.2	251.7	43100*	43100*
60	77.0	250.6	40300*	40300*
80	72.2	245.1	31900*	31900*
100	67.4	237.7	24700*	22900
120	62.3	228.3	19200*	16600
140	57.0	216.6	15200*	12200
160	51.3	202.2	12000	9100
180	45.2	184.3	9200	6600
200	38.3	161.9	7000	4700
220	30.1	132.4	5300	3100
240	19.1	88.8	3800	
260 Ft. Boom				
55	78.6	261.9	40800*	40800*
60	77.5	260.8	38100*	38100*
80	72.9	255.6	30200*	30200*
100	68.3	248.5	21600*	21600*
120	63.4	239.6	17600*	16300
140	58.4	228.4	14400*	11900
160	53.1	214.8	11200*	8700
180	47.3	198.1	8800*	6300
200	41.0	177.5	6700	4300
220	33.7	151.3	4900	
240	24.7	115.6	3300*	
270 Ft. Boom				
55	79.1	272.1	38500*	38500*
60	78.0	271.1	36000*	36000*
80	73.6	266.0	28300*	28300*
100	69.1	259.3	20000*	20000*
120	64.5	250.7	16200*	15900
140	59.7	240.1	13000*	11500
160	54.6	227.2	10100*	8300
180	49.2	211.5	7700*	5900
200	43.4	192.4	5600*	4000
220	36.8	168.7	4100*	

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers	
			Over Rear	Over Side
280 Ft. Boom				
60	78.4	281.3	33800*	33800*
80	74.2	276.4	26100*	26100*
100	69.9	269.9	18500*	18500*
120	65.5	261.7	14700*	14700*
140	60.9	251.6	11500*	11200
160	56.1	239.3	8700*	8000
180	51.0	224.6	6600*	5500
200	45.5	206.7	4600*	3600
220	39.4	184.9	3000*	
Following Load Ratings Include Jib				
290 Ft. Boom				
60	78.8	291.5	30000*	30000*
80	74.8	286.8	20000*	20000*
100	70.6	280.6	17000*	17000*
120	66.4	272.7	13300*	13300*
140	62.0	263.0	10300*	10300*
160	57.4	251.3	7500*	7500*
180	52.6	237.3	5500*	5200
200	47.4	220.5	3600*	3300
300 Ft. Boom				
60	79.2	301.7	30000*	30000*
80	75.3	297.1	20000*	20000*
100	71.3	291.1	15400*	15400*
120	67.2	283.6	11600*	11600*
140	63.0	274.3	8900*	8900*
160	58.6	263.1	6500*	6500*
180	54.0	249.8	4300*	4300*
310 Ft. Boom				
60	79.5	311.9	28200*	28200*
80	75.8	307.5	19200*	19200*
100	71.9	301.7	14700*	14700*
120	68.0	294.4	10600*	10600*
140	63.9	285.5	7600*	7600*
160	59.7	274.7	5400*	5400*
180	55.4	262.0	3300*	3300*
320 Ft. Boom				
60	79.9	322.0	22000*	22000*
80	76.2	317.8	14000*	14000*
100	72.5	312.2	13200*	13200*
120	68.7	305.1	9100*	9100*
140	64.8	296.5	6500*	6500*
160	60.8	286.3	4100*	4100*
330 Ft. Boom				
60	80.2	332.2	15000*	15000*
80	76.6	328.1	10000*	10000*
100	73.0	322.7	10000*	10000*
120	69.4	315.8	8200*	8200*
140	65.6	307.6	5400*	5400*
160	61.7	297.7	3100*	3100*
340 Ft. Boom				
60	80.5	342.3	12000*	12000*
80	77.0	338.3	8000*	8000*
100	73.6	333.1	8000*	8000*
120	70.0	326.5	6900*	6900*
140	66.4	318.5	4000*	4000*
350 Ft. Boom				
60	80.8	352.5	10000*	10000*
80	77.4	348.6	7000*	7000*
100	74.0	343.5	7000*	7000*
110	72.3	340.5	7000*	7000*
120	70.6	337.1	5700*	5700*

L3304

Maximum Rated Load In Pounds

MC 1650

125-TON

Note: Special Application

LONG TAPERED PEAK BOOM

CAPACITY CHART:

WITH STANDARD COUNTERWEIGHT 24,100 lbs (10932 kg)

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers		Without Outriggers	
			Over Rear	Over Side	Over Rear	Over Side
90 Ft. Boom						
20	79.6	95.5	170200*	170200*	61200	55300
25	76.3	94.5	121400	121400	45800	40600
30	73.0	93.1	90100	90100	36200	31700
40	66.2	89.4	58000	58000	24800	21200
50	59.1	84.2	41700	41700	18300	15400
60	51.3	77.3	32000	32000	14000	11600
70	42.6	67.9	25600	25600	11100	9000
80	32.1	54.8	21100	21100	8900	7000
90	16.6	32.7	17700	17700	7200	5500
100 Ft. Boom						
25	77.7	104.7	121200	121200	45400	40300
30	74.8	103.5	88900	88900	35800	31300
40	68.7	100.2	57800	57800	24400	20900
50	62.5	95.7	41400	41400	17900	15000
60	55.8	89.7	31700	31700	13700	11200
70	48.5	81.9	25300	25300	10700	8600
80	40.3	71.7	20800	20800	8500	6700
90	30.4	57.6	17400	17400	6900	5200
100	15.7	34.1	14700	14700	5500	4000
110 Ft. Boom						
25	78.9	114.9	121000	121000	45100	39900
30	76.2	113.8	89700	89700	35500	31000
40	70.8	110.9	57500	57500	24100	20500
50	65.1	106.8	41100	41100	17500	14700
60	59.2	101.5	31400	31400	13300	10900
70	53.0	94.8	25000	25000	10400	8300
80	46.1	86.3	20500	20500	8200	6300
90	38.4	75.3	17100	17100	6500	4800
100	29.0	60.3	14400	14400	5200	3700
110	15.0	35.5	12300	12300	4100	
120 Ft. Boom						
30	77.4	124.1	89400	89400	35100	30600
40	72.4	121.4	57300	57300	23700	20200
50	67.3	117.7	40800	40800	17200	14300
60	62.0	113.0	31100	31100	13000	10500
70	56.5	107.1	24700	24700	10000	7900
80	50.5	99.7	20100	20100	7800	6000
90	44.0	90.4	16700	16700	6100	4500
100	36.7	78.7	14100	14100	4800	3300
110	27.7	62.8	12000	12000	3700	
120	14.4	36.8	10300	10300		
130 Ft. Boom						
30	78.4	134.3	89200	89200	34700	30300
40	73.8	131.8	57000	57000	23400	19900
50	69.2	128.5	40600	40600	16800	14000
60	64.4	124.2	30800	30800	12600	10200
70	59.4	118.9	24400	24400	9700	7600
80	54.1	112.3	19800	19800	7500	5600
90	48.4	104.3	16400	16400	5800	4100
100	42.2	94.4	13800	13800	4500	3000
110	35.2	81.9	11700	11700	3400	
120	26.6	65.2	9900	9900		
130	13.8	38.0	8500	8500		
140 Ft. Boom						
35	77.1	143.5	69900	69900	27800	23900
40	75.0	142.2	56800	56800	23000	19500
50	70.7	139.1	40300	40300	16500	13600
60	66.3	135.2	30500	30500	12300	9900
70	61.8	130.3	24100	24100	9300	7200
80	57.0	124.4	19500	19500	7100	5300
90	52.0	117.3	16100	16100	5400	3800
100	46.6	108.7	13500	13500	4100	
110	40.6	98.2	11200	11200		
120	33.9	85.0	9600	9600		
130	25.6	67.5	8200	8200		
140	13.3	39.2	7000	7000		

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers		Without Outriggers	
			Over Rear	Over Side	Over Rear	Over Side
150 Ft. Boom						
35	78.0	153.7	69700	69700	27400	23500
40	76.0	152.6	56500	56500	22700	19200
50	72.0	149.7	40000	40000	16100	13300
60	68.0	146.1	30300	30300	11900	9500
70	63.8	141.6	23800	23800	9000	6900
80	59.4	136.2	19200	19200	6800	4900
90	54.9	129.7	15800	15800	5100	3500
100	50.1	122.0	13200	13200	3800	
110	44.9	112.9	11000	11000		
120	39.2	101.8	9300	9300		
130	32.7	88.0	7900	7900		
140	24.7	69.7	6700	6700		
150	12.8	40.3	5600	5600		
160 Ft. Boom						
40	76.9	162.8	56300	56300	22300	18800
50	73.2	160.2	39700	39700	15800	12900
60	69.4	156.8	30000	30000	11600	9200
80	61.5	147.7	18900	18900	6400	4600
100	53.0	134.8	12800	12800	3400	
120	43.4	116.9	9000	9000		
140	31.6	90.9	6300	6300		
160	12.4	41.4	4400	4400		
170 Ft. Boom						
40	77.7	173.1	56000	56000	21900	18500
50	74.2	170.6	39500	39500	15400	12600
60	70.7	167.4	29700	29700	11200	8800
80	63.4	158.9	18600	18600	6100	4200
100	55.5	147.1	12500	12500	3100	
120	46.9	131.0	8700	8700		
140	36.7	108.7	6000	6000		
160	23.2	74.0	4100	4100		
170	12.1	42.5	3300	3300		
180 Ft. Boom						
40	78.4	183.3	55800	55800	21600	18100
50	75.1	181.0	39200	39200	15100	12200
60	71.8	178.0	29400	29400	10900	8500
80	64.9	170.1	18300	18300	5700	3900
100	57.7	159.1	12200	12200		
120	49.8	144.4	8300	8300		
140	40.8	124.6	5700	5700		
160	29.8	96.4	3700	3700		
190 Ft. Boom						
40	79.0	193.5	55500	55500	21200	17800
50	75.9	191.3	38900	38900	14700	11900
60	72.8	188.5	29100	29100	10500	8100
80	66.3	181.0	18000	18000	5400	3600
100	59.6	170.8	11900	11900		
120	52.3	157.3	8000	8000		
140	44.2	139.4	5300	5300		
160	34.7	115.1	3400	3400		
200 Ft. Boom						
45	78.1	202.7	45700	45700	17200	14100
50	76.6	201.6	38600	38600	14400	11600
60	73.7	198.9	28800	28800	10200	7800
80	67.6	191.9	17700	17700	5000	3200
100	61.2	182.3	11600	11600		
120	54.5	169.7	7700	7700		
140	47.1	153.4	5000	5000		

125-TON

Note: Special Application

LONG TAPERED PEAK BOOM

WITH STANDARD COUNTERWEIGHT 24,100 lbs (10932 kg)

Boom Radius Feet	Boom Angle Degrees	Boom Peak Height Feet	With Outriggers		Without Outriggers	
			Over Rear	Over Side	Over Rear	Over Side
210 Ft. Boom						
45	78.7	212.9	45500	45500	16900	13800
50	77.3	211.8	38400	38400	14000	11200
60	74.5	209.3	28500	28500	9800	7400
80	68.7	202.7	17400	17400	4700	
100	62.7	193.6	11200	11200		
120	56.4	181.9	7400	7400		
140	49.5	166.8	4700	4700		
220 Ft. Boom						
50	77.9	222.1	38100	38100	13700	10900
60	75.2	219.7	28200	28200	9500	7100
80	69.7	213.4	17100	17100	4300	
100	64.1	204.8	10900	10900		
120	58.1	193.8	7000	7000		
140	51.7	179.7	4400	4400		
230 Ft. Boom						
50	78.4	232.3	37700	37700	13100	10300
60	75.8	230.0	27800	27800	8900	6600
80	70.6	224.0	16700	16700	3800	
100	65.3	215.9	10600	10600		
120	59.6	205.5	6700	6700		
140	53.7	192.3	4000	4000		
240 Ft. Boom						
50	78.9	242.5	37400	37400	12700	9900
60	76.4	240.3	27500	27500	8500	6200
80	71.5	234.6	16400	16400	3500	
100	66.4	226.9	10200	10200		
120	61.0	217.0	6400	6400		
140	55.4	204.6	3700	3700		
250 Ft. Boom						
55	78.2	251.7	31600	31600	10100	7500
60	77.0	250.6	27300	27300	8200	5900
80	72.2	245.1	16100	16100	3100	
100	67.4	237.7	9900	9900		
120	62.3	228.3	6000	6000		
140	57.0	216.6	3300	3300		
Following Load Ratings Include Jib						
260 Ft. Boom						
55	78.6	261.9	30000*	30000*	9700	7200
60	77.5	260.8	27000	27000	7800	5500
80	72.9	255.6	15800	15800		
100	68.3	248.5	9600	9600		
120	63.4	239.6	5700	5700		
270 Ft. Boom						
55	79.1	272.1	15000*	15000*	9400	6900
60	78.0	271.1	15000*	15000*	7500	5200
80	73.6	266.0	10000*	10000*		
100	69.1	259.3	9300	9300		
120	64.5	250.7	5400	5400		
280 Ft. Boom						
60	78.4	281.3	10000*	10000*	7100	4800
80	74.2	276.4	7000*	7000*		
100	69.9	269.9	7000*	7000*		
120	65.5	261.7	5100	5100		

Maximum Rated Load In Pounds

OTTY'S CRANES LTD.

21 Cadillac Place

R.R. #1, Nanaimo, B.C. V9R 5K1

Ph. 753-5633 FAX 753-9641

165 TON CAP.
RUBBER MOUNTED (10X4)

NOTES

1. Crane load ratings in pounds as determined by boom length, radius or boom angle apply to the MC-8165 Moto-Crane only as originally manufactured, equipped and mounted on a 10 x 4 Lorain MC-8165 carrier. **THEY ARE MAXIMUM CRANE LOAD RATINGS.**
2. Operating radius is the horizontal distance from the axis of rotation before loading to the center of the vertical hoist line or tackle with load applied. Crane load ratings are for machines with 24,100 lbs. of standard counterweight or 68,600 lbs. of maximum counterweight and 16,000 lbs. of bumper counterweight and do not exceed 85% of tipping loads. Ratings identified with asterisk (*) are based on the machine's structural competence and not on the machine stability. Weight of hooks, hook blocks, slings and all other handling devices, except hoist rope shall be considered a part of the load. Crane load ratings with outriggers are based on outrigger fully extended and set to a distance of 11'-0" from the longitudinal axis of the carrier to the outrigger float pivot connection and wheels within the boundary of the outriggers. Crane load ratings without outriggers depend on tire capacity and condition of tires inflated to 100 psi.
3. Crane load ratings are based on freely suspended loads with the machine leveled and standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, wind and other factors affecting stability, hazardous surroundings, experience of personnel and proper handling, all of which must be taken into account by the operator. Positioning or operation at radii and boom or jib lengths beyond the maximum and minimum shown is not intended or approved.
4. Before operating this machine, the operator and other personnel should thoroughly read and understand the Operator's Manual and C.I.M.A. Crane User's Safety Manual furnished by the manufacturer.
5. All ratings are with gantry in raised position.
6. Do not exceed the "over-the-rear" capacities when lifting over a corner.
7. Use blocking under front tires or front part of carrier frame if boom and/or load is to be moved forward of front outriggers.
8. The crane, equipped with maximum counterweight, is suitable for lifting crane service only. **OUTRIGGERS MUST BE FULLY EXTENDED. DO NOT SWING OVER THE SIDE WITH THE OUTRIGGERS RAISED OR RETRACTED.**
9. "Without Outriggers" crane load ratings are for over rear and over side as indicated. If loads are to be rotated over the corners of the vehicle, the outriggers should be extended to reduce tire and axle loadings.
10. The crane, equipped with 24,100 lbs. counterweight, is suitable for crane, dragline and clamshell service.
11. The total weight of bucket plus load must not exceed 80% of the "Without Outriggers" crane load ratings up to a maximum of 15,000 lbs. for dragline service and 18,000 lbs. for clamshell service.
12. Boom 190' and over requires mast in addition to raised gantry. Mast with raised gantry may also be used with boom lengths under 190'.
13. More than one part hoist line must be used on any boom when lifting radius is less than 20'-0".
14. Intermediate suspension required for booms 240' and over.
15. Maximum length of boom (without jib)280'.

16. The lengths listed below may be carried over the rear under the following conditions: Straight back or forward movement, outriggers cleared of the ground, gantry erected (25'-0" overall height). For conditions requiring maneuverability reduce boom length by 10'-0".

24,100 Lbs. Counterweight	68,600 Lbs. Counterweight & 16,000 Lbs. Bumper Cwtl.
120' boom without jib	160' boom without jib
100' boom and 30' jib	150' boom and 30' jib
90' boom and 70' jib	140' boom and 50' jib
	130' boom and 70' jib
Speed restricted to 5 mph	Speed restricted to low-low gear

17. With gantry in lowered position or gantry lowered and mast pinned to the base section (13'-4 1/2" overall height less jib) (19'-0" with jib), the following maximum boom lengths may be carried over the back without outriggers (Standard Counterweight or Maximum Counterweight):

120' boom without jib
90' boom and 70' jib
Speed restricted to 5 mph (Std. Counterweight)
Speed restricted to low-low gear

18. With outriggers set and mast and gantry in raised position, the following maximum boom lengths may be raised unassisted from the horizontal over the rear:

24,100 Lbs. Counterweight	68,600 Lbs. Counterweight & 16,000 Lbs. Bumper Cwtl.
190' boom without jib	270' boom without jib
170' boom and 50' jib	240' boom and 30' jib
160' boom and 70' jib	230' boom and 70' jib

19. For boom and jib combinations longer than those shown in Note 18 and up to:

24,100 Lbs. Counterweight	68,600 Lbs. Counterweight & 16,000 Lbs. Bumper Cwtl.
250' boom without jib	280' boom without jib
230' boom and 30' jib	280' boom and 70' jib
220' boom and 50' jib	
210' boom and 70' jib	

Rear auxiliary outriggers are required.

20. When working with boom lengths that required auxiliary outriggers for erection do not exceed the radii as shown on crane load rating chart.

21. Rear auxiliary outriggers are for raising and lowering long booms only. Never lift loads with auxiliary outriggers set.

22. Hoist Cable Reaving:

Number of Parts of Hoist Lines	1	2	3	4	5	6	7
Maximum Loads (Lbs.)	27500	55000	82500	110000	137500	165000	191600
Use 1" diameter hoist cable (6 x 25, IWRC) of 51.7 tons breaking strength.							

23. Crane load ratings are based on the use of dual pairs of 1-1/4" diameter swaged pendants (6 x 25, IWRC) of 87 tons breaking strength and 20 parts of 3/4" diameter derricking cable (6 x 30G, IWRC) of 28.1 tons breaking strength.

NOTES FOR JIB APPLICATION

MC 1650

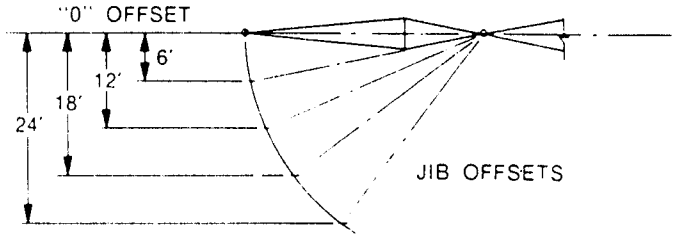
1. Jibs may be used straight or offset. 30' jib is of two-piece design and may be extended to 70' with center sections. The following data apply:

Jib Lgh	Radius	Max. Lgh. of Boom Incl. Jib		Jib Offset and Max. Load Ratings (Lbs.)						Weight of Jib and Backstays
		Std. Cwt.	Max. Cwt.	0 Ft.	6 Ft.	12 Ft.	18 Ft.	24 Ft.		
30 Ft	Up thru 70' Over 70'	260 Ft.	310 Ft.	30000 20000	30000 20000	30000 20000			2230 lbs	
40 Ft	Up thru 70' Over 70'	260 Ft.	320 Ft.	22000 14000	22000 14000	22000 14000	16000 10000		2600 lbs	
50 Ft	Up thru 70' Over 70'	270 Ft.	330 Ft.	15000 10000	15000 10000	15000 10000	14000 9000	12000 8000	2810 lbs	
60 Ft	Up thru 70' Over 70'	270 Ft.	340 Ft.	12000 8000	12000 8000	11000 7500	10000 7000	9000 6000	3150 lbs	
70 Ft	Up thru 70' Over 70'	280 Ft.	350 Ft.	10000 7000	9000 6500	8000 6000	7000 5500	6000 4500	3400 lbs	

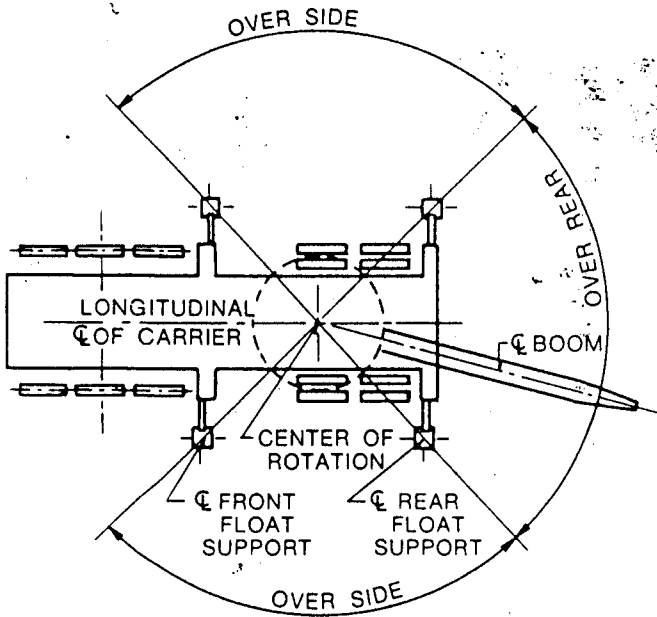
2. Load ratings for jibs are the same as for the boom length which is equal to the length of main boom plus jib but in no case may they exceed the capacities shown above.

3. With jib installed, load ratings over main boom head must be reduced as follows:

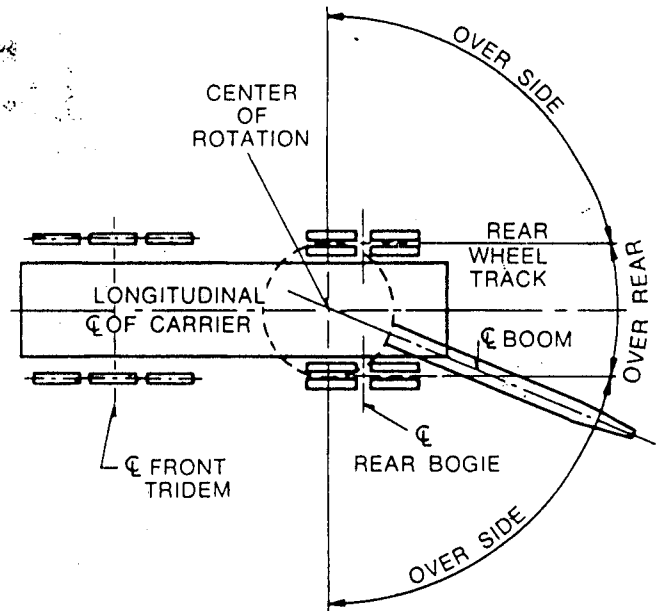
- 2320 lbs. for 30 ft. jib
- 2750 lbs. for 40 ft. jib
- 3020 lbs. for 50 ft. jib
- 3450 lbs. for 60 ft. jib
- 3750 lbs. for 70 ft. jib



CRANE WORKING AREAS



Carrier With Outriggers



Carrier Without Outriggers

SCOTTY'S CRANES LTD.
 21 Cadillac Place
 R.R. #1, Nanaimo, B.C. V9R 5K1
 Ph. 753-5633 FAX 753-9641

LOAD DISTRIBUTION AND WEIGHTS

		Gross Weight	Turntable Facing Front		Turntable Facing Rear	
			Front	Rear	Front	Rear
1.	Basic Carrier					
	Less: Front and Rear Outriggers Complete	53010	25760	27250		
2.	Add: Front Outrigger Boxes & Beams	+ 7700	+ 4210	+ 3490		
	Add: Front Vertical Cylinders & Floats	+ 2600	+ 1420	+ 1180		
3.	Add: Rear Outrigger Boxes & Beams	+ 7700	- 2285	+ 9985		
	Add: Rear Vertical Cylinders & Floats	+ 2600	- 770	+ 3370		
	Total	73610	28335	45275		
4.	Add: Basic Crane Upperstructure	+ 50300	- 5530	+ 55830	+ 20370	+ 29930
5.	Add: Counterweight — Standard	+ 24100	- 10710	+ 34810	+ 17940	+ 6160
6.	Add: Counterweight — Maximum	+ 44500	- 24750	+ 69250	+ 38100	+ 6400
7.	Add: Bumper Counterweight	+ 16000	+ 23986	- 7985	+ 23985	- 7985
8.	Add: Load Hoist Cable, Front Drum	+ 1720	+ 150	+ 1570	+ 360	+ 1360
9.	Add: 30' Boom Base, Floating Harness, Boom Hoist Cable & Boom Stops	+ 7460	+ 9070	- 1610	- 6870	+ 14330
10.	Add: 3' H.H. Boom Peak	+ 3700	+ 6580	- 2880	- 5480	+ 9180
11.	Add: 28'-0" Mast	+ 1500	+ 1390	+ 110	- 940	+ 2440
12.	Add: P.L.L. Front Drum	+ 550	+ 50	+ 500	+ 140	+ 410
13.	Add: P.L.L. Rear Drum	+ 650	- 20	+ 570	+ 190	+ 360
14.	Add: 3rd Drum	+ 1600	+ 240	+ 1360	+ 240	+ 1360
15.	Add: GM8V-71N Engine w/Torque Converter	0	0	0	0	0
16.	Add: GM8V-71N Engine to Carrier	- 330	- 400	+ 70	- 400	+ 70
17.	Add: 165 Ton, 6 Sheave Hook Block to Boom Peak	+ 3230	+ 5875	- 2645	- 4925	+ 8155
18.	Add: Undecking Device on Carrier	+ 3135	+ 615	+ 2520	+ 615	+ 2520

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