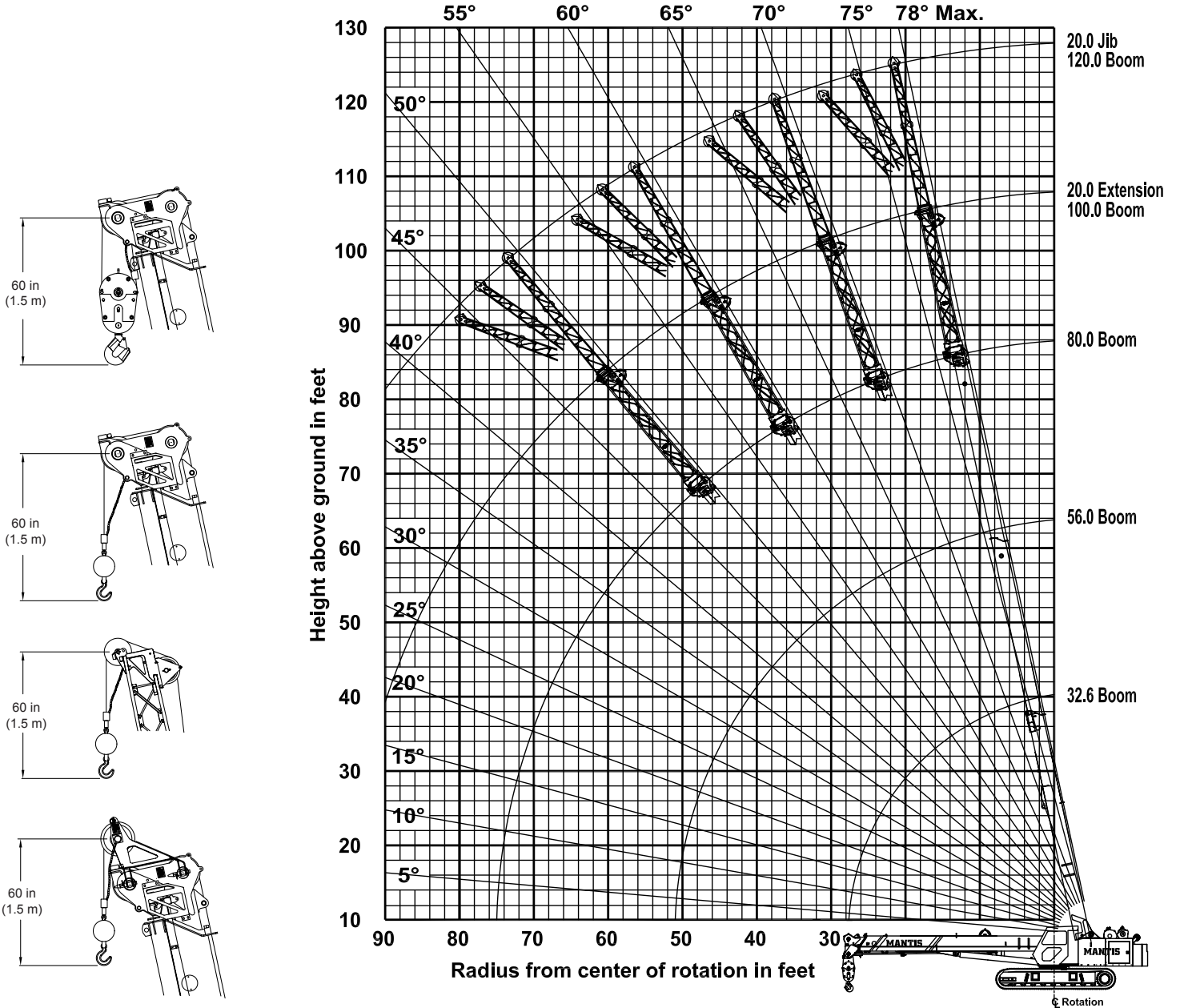




# LOAD CHARTS

## MANTIS® 6010LP 30 TON TELE-BOOM CRAWLER CRANE

80 FT MAIN BOOM, 20 FT EXTENSION & 20 FT JIB



**CAUTION**

THESE CHART VALUES ARE ONLY A GUIDE AND MUST NOT BE USED TO OPERATE THE CRANE. USE ONLY THE IN CAB LOAD CHARTS AND OPERATOR'S MANUAL FURNISHED WITH THE CRANE.



# LOAD CHARTS

## MANTIS® 6010LP 30 TON TELE-BOOM CRAWLER CRANE

### LIFTING CAPACITIES

IN THOUSANDS OF POUNDS; 360°, 75% OF TIPPING, FIRM & LEVEL GROUND

MAIN BOOM with TRACKS FULLY EXTENDED															
11,500 lb COUNTERWEIGHT								ZERO COUNTERWEIGHT							
RADIUS (ft)	MAIN BOOM LENGTH (ft)							MAIN BOOM LENGTH (ft)							RADIUS (ft)
	33.0	41.0	48.0	56.0	64.0	72.0	80.0	33.0	41.0	48.0	56.0	64.0	72.0	80.0	
8	60.0	48.0	47.6*					60.0	48.0	47.6*					8
	71.8°	75.5°	77.9°					71.8°	75.5°	77.9°					
10	60.0	48.0	47.6	44.9*				53.0	48.0	47.6	44.9*				10
	67.9°	72.5°	75.5°	77.6°				67.9°	72.5°	75.5°	77.6°				
12	56.0	48.0	47.6	40.5	34.2*			35.4	35.7	35.9	36.0	34.2*			12
	63.9°	69.4°	73.0°	75.4°	77.3°			63.9°	69.4°	73.0°	75.4°	77.3°			
15	38.5	38.7	38.9	35.4	29.8	26.0	22.8*	23.0	25.3	23.5	23.6	23.6	23.7	22.8*	15
	57.5°	64.7°	69.1°	72.2°	74.5°	76.2°	77.6°	57.5°	64.7°	69.1°	72.2°	74.5°	76.2°	77.6°	
20	24.0	24.2	24.3	24.4	24.0	21.3	18.7	13.9	14.1	14.2	14.3	14.4	14.4	14.5	20
	45.5°	56.2°	62.5°	66.7°	69.7°	72.1°	73.9°	45.5°	56.2°	62.5°	66.7°	69.7°	72.1°	73.9°	
25	16.9	17.2	17.3	17.3	17.4	17.0	15.8	9.4	9.6	9.8	9.9	9.9	10.0	10.0	25
	29.0°	46.6°	55.3°	60.8°	64.8°	67.8°	70.1°	29.0°	46.6°	55.3°	60.8°	64.8°	67.8°	70.1°	
30		13.0	13.1	13.2	13.2	13.3	13.0		7.0	7.1	7.2	7.3	7.3	7.3	30
		34.7°	47.3°	54.6°	59.6°	63.3°	66.2°		34.7°	47.3°	54.6°	59.6°	63.3°	66.2°	
35		10.2	10.3	10.4	10.5	10.5	10.5		5.2	5.4	5.5	5.5	5.6	5.6	35
		14.5°	38.0°	47.8°	54.1°	58.7°	62.1°		14.5°	38.0°	47.8°	54.1°	58.7°	62.1°	
40			8.4	8.5	8.5	8.5	8.6			4.1	4.2	4.3	4.3	4.4	40
			25.5°	40.1°	48.2°	53.8°	57.9°			25.5°	40.1°	48.2°	53.8°	57.9°	
45				7.0	7.1	7.1	7.1				3.3	3.4	3.4	3.4	45
				30.6°	41.6°	48.5°	53.4°				30.6°	41.6°	48.5°	53.4°	
50				5.9	5.9	6.0	6.0				2.6	2.7	2.7	2.7	50
				15.8°	33.8°	42.7°	48.7°				15.8°	33.8°	42.7°	48.7°	
55					5.0	5.1	5.1					2.1	2.1	2.1	55
					23.7°	36.1°	43.5°					23.7°	36.1°	43.5°	
60						4.3	4.4						1.6	1.7	60
						28.1°	37.8°						28.1°	37.8°	
65						3.7	3.7						1.3	1.3	65
						16.4°	31.1°						16.4°	31.1°	
70							3.2							1.0	70
							22.6°							22.6°	
75							2.8							0.7	75
							4.2°							4.2°	

\* Capacity based on maximum obtainable boom angle.

° Boom angles are stated in degrees.



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# LOAD CHARTS

## MANTIS® 6010LP 30 TON TELE-BOOM CRAWLER CRANE

### LIFTING CAPACITIES

IN THOUSANDS OF POUNDS; 360°, 75% OF TIPPING, FIRM & LEVEL GROUND

MAIN BOOM with TRACKS FULLY RETRACTED			
11,500 lb COUNTERWEIGHT			
RADIUS (ft)	MAIN BOOM LENGTH (ft)		RADIUS (ft)
	33.0	Over 33	
8	60.0	47.6	8
10	49.6	44.9	10
12	36.3	34.2	12
14	25.9	25.9	14
16	21.6	21.6	16
18	17.9	17.9	18
20	15.0	15.0	20
22	12.7	12.7	22
24	11.0	11.0	24
26	9.6	9.6	26
28	8.5	8.5	28
30	7.7	7.7	30
32	7.0	7.0	32
34	6.3	6.3	34
36	5.8	5.8	36
38	5.4	5.4	38
40	5.0	5.0	40
42	4.6	4.6	42
44	4.3	4.3	44
46	4.0	4.0	46
48	3.7	3.7	48
50	3.4	3.4	50
52	3.2	3.2	52
54	2.9	2.9	54
56	2.7	2.7	56
58	2.5	2.5	58
60	2.3	2.3	60
62	2.1	2.1	62
64	1.9	1.9	64
66	1.7	1.7	66
68	1.6	1.6	68
70	1.4	1.4	70

20' EXTENSION & 20' JIB						
with TRACKS FULLY EXTENDED						
11,500 lb COUNTERWEIGHT						
20' EXTENSION			20' JIB			
Boom Angle	Total Boom Length (ft)		Jib Offset Angles			Boom Angle
	53.0 to 91.9	92.0 to ?	0°	15°	30°	
78°	12.4	12.4	6.6	4.0	2.2	78°
75°	10.5	10.5	6.3	4.0	2.1	75°
72°	9.3	9.3	5.6	3.5	2.0	72°
70°	8.6	8.6	5.1	3.2	1.9	70°
68°	8.0	8.0	4.6	3.0	1.8	68°
65°	7.2	6.8	4.2	2.8	1.8	65°
62°	6.6	5.7	3.9	2.6	1.7	62°
60°	6.2	4.9	3.5	2.4	1.7	60°
58°	5.9	4.3	3.2	1.9	1.4	58°
55°	5.5	3.7	2.6	1.3	1.0	55°
52°	5.2	3.2	2.0	0.6	0.4	52°
50°	5.0	2.9	1.5	0.3	0.2	50°
48°	4.4	2.6				48°
45°	4.2	2.3				45°

ZERO DEGREE BOOM ANGLE			
MAXIMUM CAPACITY			
with TRACKS FULLY EXTENDED			
11,500 lb COUNTERWEIGHT			
BOOM LENGTH (ft)	RADIUS (ft)	LOAD (lbs) (x 1000)	BOOM LENGTH (ft)
32.7	27.7	15.4	32.7
40.6	35.6	10.0	40.6
48.4	43.4	7.7	48.4
56.3	51.3	5.7	56.3
64.3	59.2	4.6	64.3
71.1	67.1	3.5	71.1
80.0	75.0	2.8	80.0

WEIGHT REDUCTIONS	
LOAD HANDLING DEVICES	
HOOKBLOCK: 30 Ton - 3 Sheave	760 lbs
OVERHAUL BALL: 12 Ton w/Swivel	162 lbs
OPTIONAL HANDLING DEVICES	
20 ft. Extension - Stowed**	320 lbs
20 ft. Extension - Erected**	1,600 lbs
20 ft. Ext. and 20 ft. Jib - Stowed**	450 lbs
20 ft. Ext. and 20 ft. Jib - Erected**	3,100 lbs
Auxillary Nose Sheave**	160 lbs

\*\* Reduction of main boom capacities.



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# LOAD CHARTS

## MANTIS® 6010LP 30 TON TELE-BOOM CRAWLER CRANE

### LIFTING CAPACITIES

IN THOUSANDS OF POUNDS; 360°, 75% OF TIPPING, FIRM & LEVEL GROUND

AUXILIARY NOSE SHEAVE with TRACKS FULLY EXTENDED															
11,500 lb COUNTERWEIGHT								ZERO COUNTERWEIGHT							
RADIUS (ft)	MAIN BOOM LENGTH (ft)							MAIN BOOM LENGTH (ft)							RADIUS (ft)
	33.0	41.0	48.0	56.0	64.0	72.0	80.0	33.0	41.0	48.0	56.0	64.0	72.0	80.0	
8	6.0	6.0	6.0					6.0	6.0	6.0					8
	71.8°	75.5°	77.9°					71.8°	75.5°	77.9°					
10	6.0	6.0	6.0	6.0				6.0	6.0	6.0	6.0				10
	67.9°	72.5°	75.5°	77.6°				67.9°	72.5°	75.5°	77.6°				
12	6.0	6.0	6.0	6.0	6.0			6.0	6.0	6.0	6.0	6.0			12
	63.9°	69.4°	73.0°	75.4°	77.3°			63.9°	69.4°	73.0°	75.4°	77.3°			
15	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	15
	57.5°	64.7°	69.1°	72.2°	74.5°	76.2°	77.6°	57.5°	64.7°	69.1°	72.2°	74.5°	76.2°	77.6°	
20	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	20
	45.5°	56.2°	62.5°	66.7°	69.7°	72.1°	73.9°	45.5°	56.2°	62.5°	66.7°	69.7°	72.1°	73.9°	
25	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	25
	29.0°	46.6°	55.3°	60.8°	64.8°	67.8°	70.1°	29.0°	46.6°	55.3°	60.8°	64.8°	67.8°	70.1°	
30		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	30
		34.7°	47.3°	54.6°	59.6°	63.3°	66.2°		34.7°	47.3°	54.6°	59.6°	63.3°	66.2°	
35		6.0	6.0	6.0	6.0	6.0	6.0		5.2	5.4	5.5	5.5	5.6	5.6	35
		14.5°	38.0°	47.8°	54.1°	58.7°	62.1°		14.5°	38.0°	47.8°	54.1°	58.7°	62.1°	
40			6.0	6.0	6.0	6.0	6.0			4.1	4.2	4.3	4.3	4.4	40
			25.5°	40.1°	48.2°	53.8°	57.9°			25.5°	40.1°	48.2°	53.8°	57.9°	
45				6.0	6.0	6.0	6.0				3.3	3.4	3.4	3.4	45
				30.6°	41.6°	48.5°	53.4°				30.6°	41.6°	48.5°	53.4°	
50				5.4	5.5	6.0	6.0				2.6	2.7	2.7	2.7	50
				15.8°	33.8°	42.7°	48.7°				15.8°	33.8°	42.7°	48.7°	
55				4.6	4.7	4.7						2.1	2.1	2.1	55
				23.7°	36.1°	43.5°						23.7°	36.1°	43.5°	
60					4.0	4.0							1.6	1.7	60
					28.1°	37.8°							28.1°	37.8°	
65					3.4	3.4							1.3	1.3	65
					16.4°	31.1°							16.4°	31.1°	
70						2.9								1.0	70
						22.6°								22.6°	
75						2.5								0.7	75
						4.2°								4.2°	

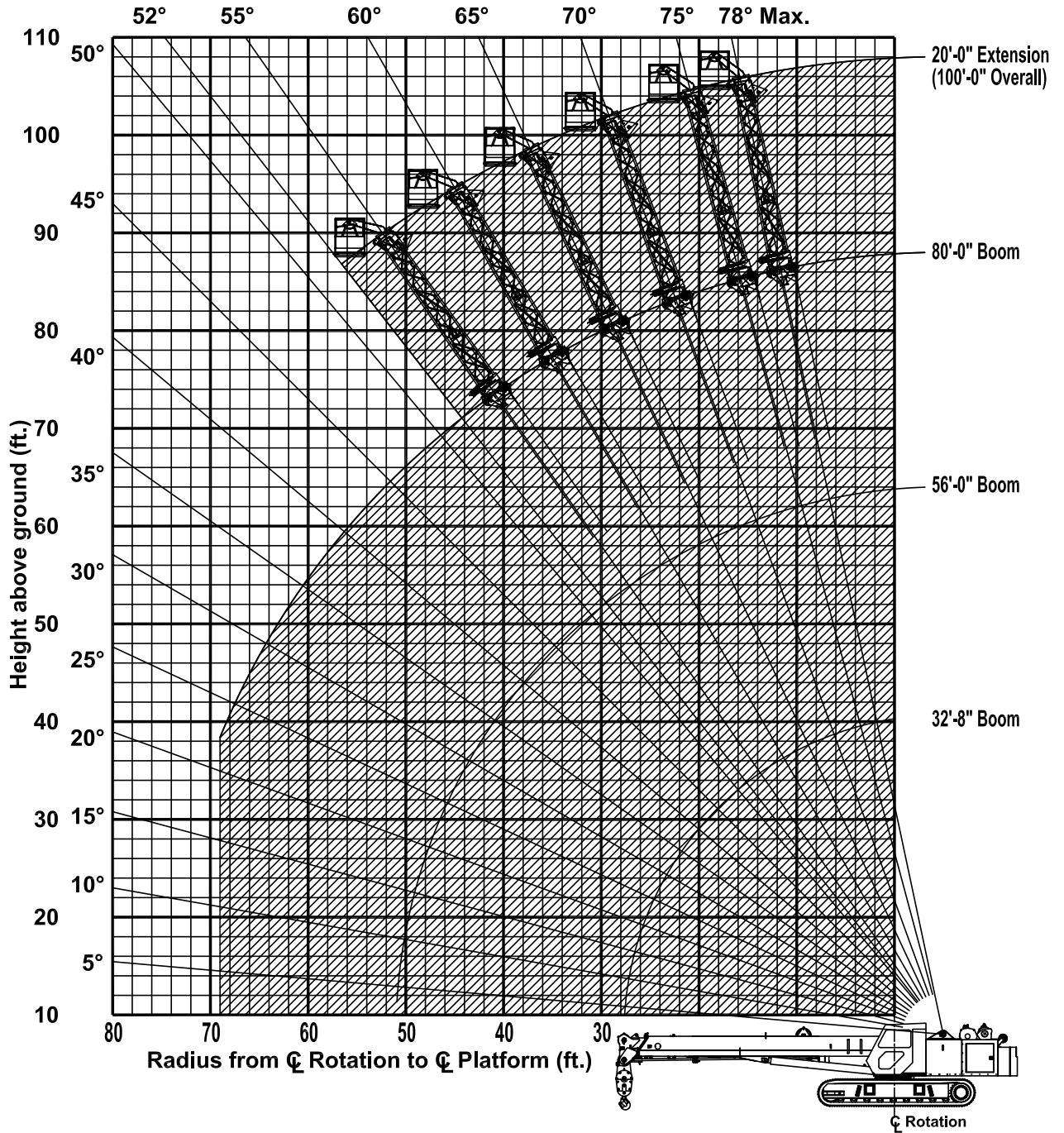
° Boom angles are stated in degrees.



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## MANTIS® 6010LP 30 TON TELE-BOOM CRAWLER CRANE

### MANTIS WP-750 WORK PLATFORM



Limits of operation: Maximum load capacity = 750 lb    Maximum radius when mounted on main boom = 68 ft

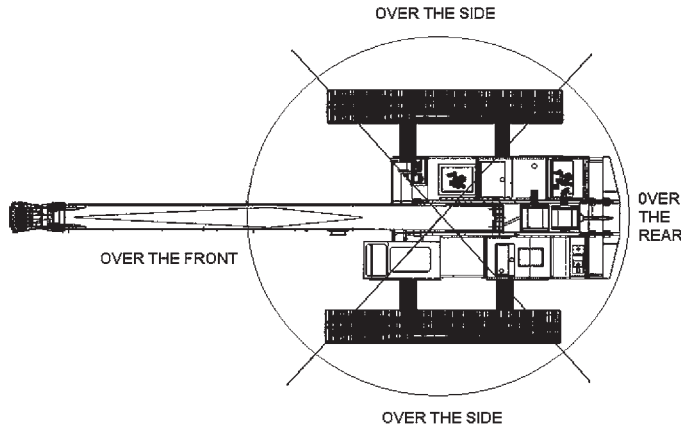


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# LOAD CHARTS

## MANTIS® 6010LP 30 TON TELE-BOOM CRAWLER CRANE



MANTIS MODEL 6010LP				
WIRE ROPE LINE PULL CAPACITIES				
PARTS OF LINE	MAIN WINCH (pounds)	AUX WINCH (pounds)	PARTS OF LINE	MAIN WINCH (pounds)
1	9,600	9,600	5	48,000
2	19,200	19,200	6	57,600
3	28,800	N/A	7	67,200
4	38,400	N/A		

9/16 inch diameter wire rope, 6 x 37 Class, EIP, IWRC

**PLEASE READ, UNDERSTAND, AND FOLLOW THE MANUALS FURNISHED WITH THE CRANE (OPERATOR'S AND SAFETY) AS WELL AS THE CAPACITY LIMITATIONS AND GENERAL CONDITIONS LISTED BELOW PRIOR TO OPERATION OF THE CRANE. FAILURE TO DO SO MAY RESULT IN AN ACCIDENT.**

### Capacity Limitations and General Conditions:

- This MANTIS CRANE as manufactured, meets the requirements of ANSI B30.5 (2000). Structure and stability have been tested in accordance with SAE J1063 and SAE J765, respectively. Modifications to the crane or use of optional equipment other than specified by the manufacturer can result in a reduction of capacity.
- The main boom and auxiliary boom head lifting capacities are determined by boom length and load radius. The extension and jib lifting capacities are determined by boom angle.
- Rated capacity loads given are maximum covered by the manufacturer's warranty and are based on a freely suspended load with NO allowance for factors such as out-of-level operation, supporting surface conditions, hazardous surroundings, experience of personnel, etc. The operator shall establish practical working loads based on prevailing operating conditions, such as, but not limited to the above.
- All rated capacity loads shown apply to original equipment as supplied by SpanDeck, Inc.
- All rated capacity loads appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.
- All rated capacity loads appearing below the bold line are based on stability and do not exceed 75% of tipping.
- Deductions from rated capacities must be made for the weight of the hook block, headache ball, slings, spreader bar, and any other suspended equipment. See Lifting Capacity Deduction Chart for load handling devices supplied by SpanDeck, Inc.
- A properly calibrated and maintained Load Moment Indicator (LMI) system will indicate boom mounted and other suspended equipment.
- When making lifts where capacities may be within a zone limited by structural strength, the operator shall determine that the weight of the load is known within plus or minus (+/-) ten percent (10%) before making lift.
- It is permissible to attempt to telescope boom with a load within the limits of rated capacities. However, boom telescope system hydraulic pressure, and/or boom lubrication may affect operation.
- Side pull on boom is extremely dangerous and must be avoided.
- DO NOT** exceed manufacturer's maximum specified reeving.
- DO NOT** lift load or extend boom without proper configuration of crane per load chart selected.
- DO NOT** attempt to lift any load when wind speed exceeds 20 mph.

Load moment indicating and anti-two block systems are operator aids and must never be used in lieu of job site lift planning calculations by the operator which must take into account ground conditions, weather and all other environmental factors prevailing at the time of the lift. Prices and specifications are subject to change at any time without prior notice and are for factory installation at the time of original manufacture. F.O.B Plant; Richlands, VA 24641. Illustrations and photographs may show optional equipment. Supercedes all previous issues. Please see [www.mantiscranes.com](http://www.mantiscranes.com) for most current information.



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