

Manitex



TC500.1

50-ton (45, 4 mt) TELESCOPIC CRANE
TC500 SERIES PRODUCT GUIDE

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Effective Date: September 1, 2015

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The photographs, and /or images in this document are for illustrative purposes only and may include optional equipment and accessories and may not include all standard equipment.

Refer to the appropriate Operator's Manual and Load Charts for instructions on the proper use of this equipment to determine allowable crane lifting capacities, assembly and operating procedures.

Failure to follow the appropriate operator's manual or load chart(s) when using our equipment or to otherwise act irresponsibly may result in serious injury or death.

The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale. Manitex makes no other warranty, expressed or implied.

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KEY

	Operator aids
	Cab
	Heating / Air conditioning
	Controls
	Hoist speed
	1 - Main hoist 2 - Auxiliary winch 3 - Recovery winch
	Rope length
	Rope - Standard/optional
	Rope diameter
	Permissible line pull
	Maximum line pull
	Slewing / Allowable slewing range
	Slewing gears
	Slewing brake
	Outriggers / Lifting on outriggers
	2-Person man basket
	Counterweight
	Radio remote control

	Hook block
	Distance from hook to head sheave pin
	Hook and ball
	Hydraulics
	Boom elevation angle
	Max. boom length with extension
	Boom with extension retracted
	Boom angle
	Telescoping mode
	Working radius
	Boom length
	Hydraulic actuated boom
	Full power mechanical synchronized
	Boom head / Hook block dimension
	Main boom with auxiliary head
	Tip height



THE TC500 SERIES TELESCOPIC CRANE

Versatile. Affordable. User friendly.

The TC500 series telescopic cranes are built to meet the wide-ranging needs of owner operators who may use it for residential construction one day and bridge work the next. No matter what the task, the 50-ton line of telescopic cranes is designed to get you to the job and on the job quickly.

With it, you can:

- Go from Free-Swing to No-Free Swing with a push of a button.
- Set up quickly with radio outrigger controls
- Operate comfortably and confidently in its tiltable cab
- A92.2 Dual Rating Option - Multi-use for lifting and aerial platform applications

Other features include:

- 50-ton capacity @ 6 ft. radius
- 4 & 5-section proportional boom
- Optional telescopic jib
- 204 ft. maximum tip height (with optional telescopic jib)
- Tiltable cab
- Out-and-down outriggers
- Remote outrigger controls

NEW COMBINED RADIO REMOTE

NEW CAB

TELEMETRICS



RADIO CONTROLS

One control to operate the outriggers, winch controls and the boom.

RADIO OUTRIGGER CONTROLS

Operate the outriggers remotely, with a clear view of the machine, using radio outrigger controls we call ROC Solid.



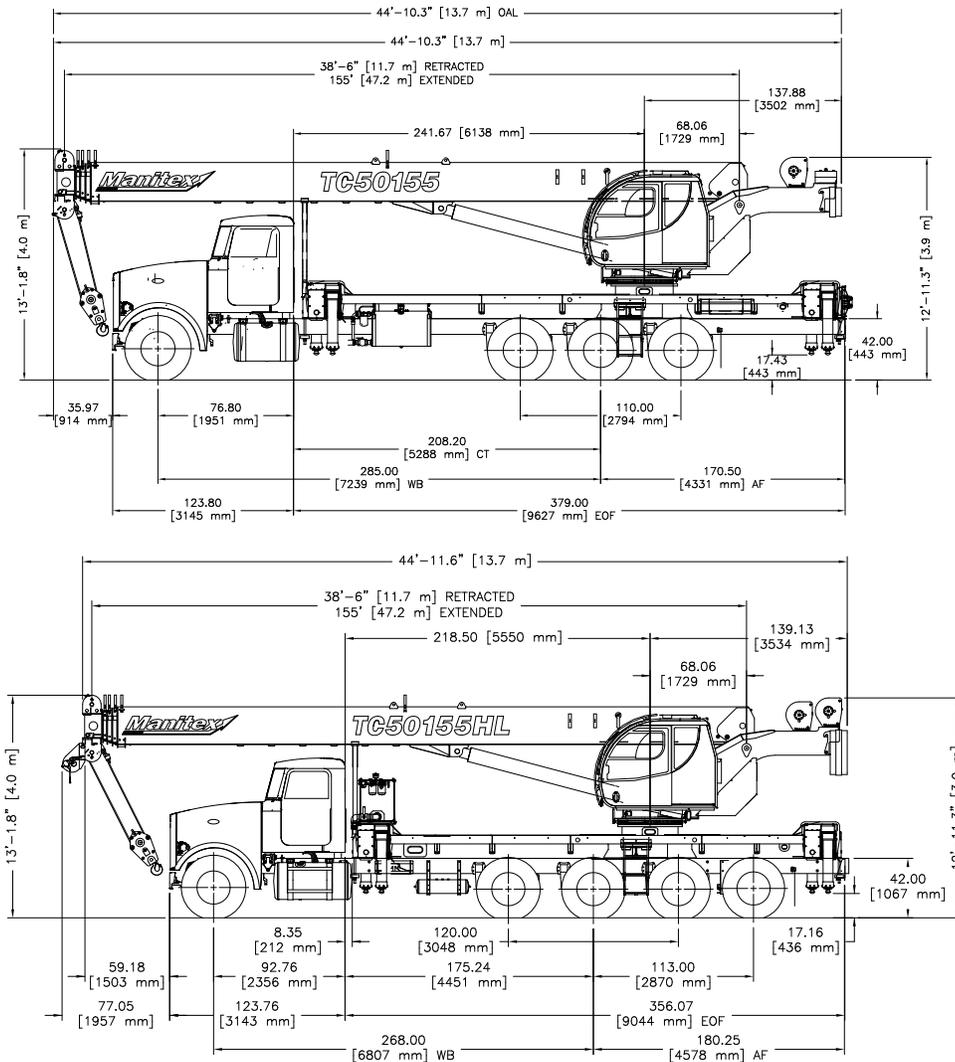
All cabs now come equipped with Heat and AC with 200% more air flow. Adjustable cab tilt speed and crane functions. USB ports for quick software updates or phone charging. More leg space and only one display unit needed for both crane and chassis operations.



A modem has been added to the crane PLC system to aid troubleshooting machines in the field. Crane software updates can now be uploaded to the machine without having to send a technician to the field! GPS ready for tracking through the Manitex web portal.

50155 & HL CHASSIS DATA

Dimensions



CHASSIS DATA

Model	50155	50155HL
Frame section modulus at 180/360° area of operation*	27.0 in ³ 110,000 psi, 758,423 kPa	27.0 in ³ 110,000 psi, 758,423 kPa

* Frame selection modulus at 360° area of operation requires front bumper stabilizer.

TRUCK AXLE WEIGHT

Model	50155	50155HL
Min. truck axle W - Front**	10,750 lbs. (4,876 kg)	9,500 lbs. (4,309 kg)
Min. truck axle W - Rear**	12,300 lbs. (5,579 kg)	13,400 lbs. (6,078 kg)
Nominal Frame W	34 in. (864 mm)	34 in. (864 mm)

** Minimum chassis weight is required to meet 85% stability requirements. Chassis data is general - not for engineering. Some dimensions depend on truck selection.

CRANE WEIGHT

Model	50155	50155HL
Crane	39,175 lbs. (17,796 kg)	45,605 lbs. (20,686 kg)
Jib fixed	1,510 lbs. (685 kg)	1,510 lbs. (685 kg)
Jib telescopic	N/A	N/A
Aluminum Platforms	621 lbs. (282 kg)	621 lbs. (282 kg)

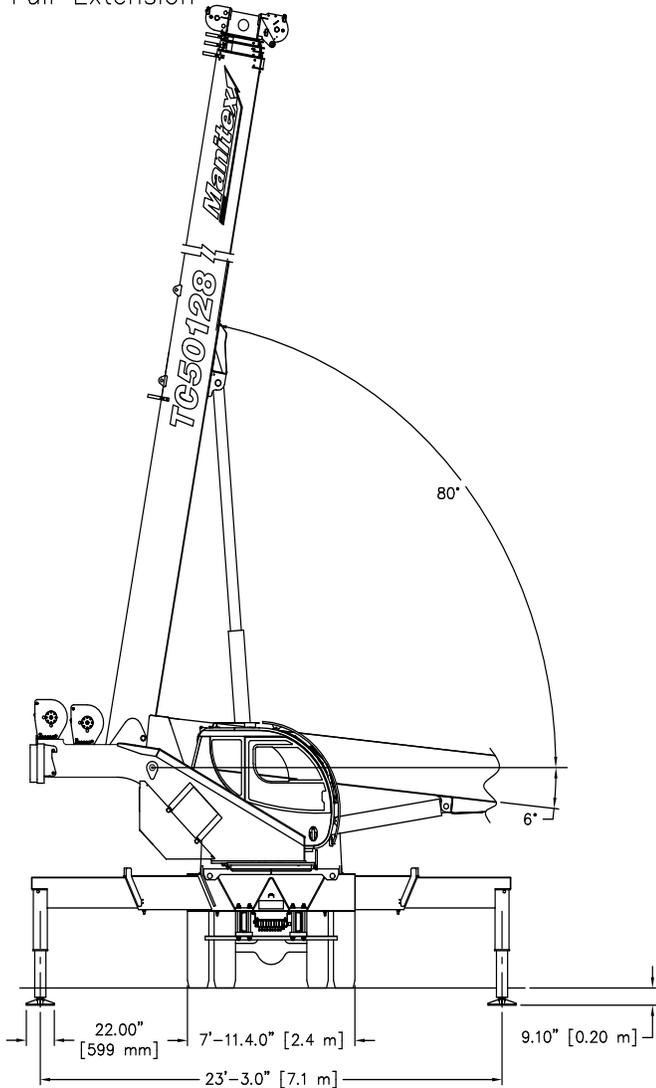
Notes: Additional axles required for federal bridge legal configuration - consult Manitex. Manitex highly recommends the addition of a front stabilizer and it may be required on some installations - consult Manitex.

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

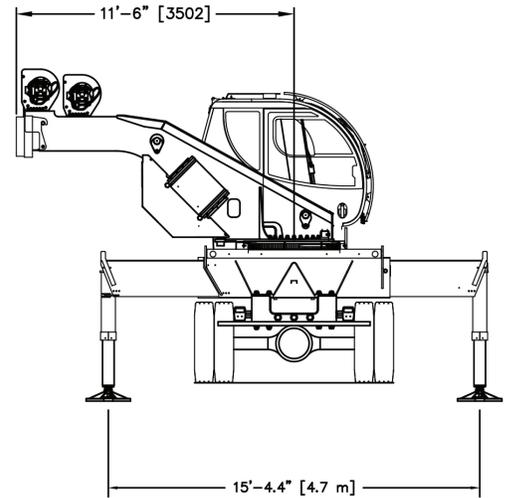
OUTRIGGER EXTENSION

Full Extension

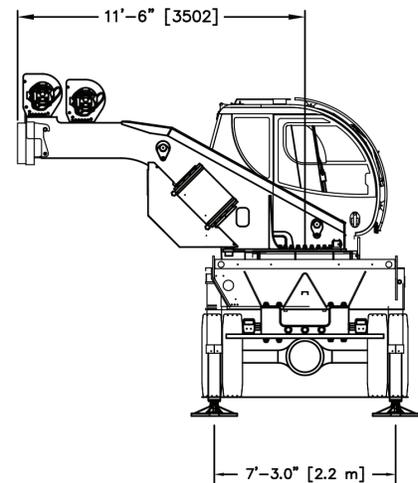
Full Extension



Mid Extension



Full Retraction



SUB FRAME

- Pedestal sub-frame and stabilizers are mounted to chassis by threaded rods and clamp plates
- Sub-frame: Torsion resistant, rigid 4-plate design mounted under crane full length of truck frame
- Rear under-ride protection: Standard on factory mounted cranes

ELECTRICAL SYSTEM

- State-of-the-art, weather-resistant components throughout
- Hermetically sealed enclosure includes power in relays and circuit status LEDs
- 12-24 Volt capability

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

50155 LOAD CHART: Main Boom



Lifting Capacities 5-section Boom 38.5 ft. - 155 ft. Full Outrigger Extension

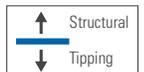
23'-3" (7.07 m) (100%)

Boom Length (ft.)	Boom Length 38.5 ft.			Boom Length 63 ft. (A)			Boom Length 74 ft. (B)			Boom Length 86 ft. (C)			Boom Length 97 ft. (D)		
	(ft.)	CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)	(ft.)	CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)	(ft.)	CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)	(ft.)	CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)	(ft.)	CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)
6	73.5	100,000	100,000												
8	70.5	85,400	85,400												
10	67	75,100	75,100	77	40,000	40,000									
12	64	67,100	67,100	75	40,000	40,000	78	37,700	37,700						
15	58.5	57,700	57,700	72.5	40,000	40,000	75.5	36,340	36,340	78.5	31,000	31,000			
20	49	46,070	46,070	67.5	38,250	38,250	72	33,380	33,380	75	28,200	28,200	77.5	24,120	24,120
25	38	35,280	35,280	62.5	35,040	35,040	67.5	30,620	30,620	71.5	25,970	25,970	74.5	22,200	22,200
30	22.5	27,920	27,490	57	29,140	29,140	63	28,020	28,020	68	23,950	23,950	71	20,480	20,480
35				51.5	23,890	21,500	58.5	24,130	21,830	64	22,080	22,080	68	18,670	18,670
40				45	19,920	16,460	54	20,170	16,770	60.5	20,350	17,010	65	17,210	17,170
45				38	16,810	12,910	48.5	17,060	13,220	56.5	17,250	13,450	61.5	15,920	13,610
50				29.5	14,290	10,280	43	14,570	10,590	52	14,760	10,820	58	14,720	10,970
55				17	12,200	8,210	37	12,510	8,560	47.5	12,710	8,790	54	12,830	8,940
60							29	10,780	6,940	42.5	11,000	7,180	50	11,120	7,320
65							19	9,300	5,600	37	9,540	5,860	46	9,670	6,010
70										30.5	8,280	4,760	41.5	8,420	4,920
75										22.5	7,170	3,830	36.5	7,330	3,990
80										7.5	4,360	2,990	30.5	6,370	3,200
85													23.5	5,520	2,510
90													12	4,140	1,880
SJ	960 lbs.			590 lbs.			500 lbs.			430 lbs.			390 lbs.		
EJ	2,620 lbs.			2,270 lbs.			2,190 lbs.			2,130 lbs.			2,080 lbs.		
	Boom Length 109 ft. (E)			Boom Length 120 ft. (F)			Boom Length 132 ft. (G)			Boom Length 143 ft. (H)			Boom Length 155 ft. (I)		
25	77	18,000	18,000	79	16,260	16,260									
30	74	17,000	17,000	76.5	15,280	15,280	78	13,500	13,500	79.5	11,500	11,500			
35	71.5	15,920	15,920	74	14,270	14,270	76	12,900	12,900	77.5	11,300	11,300	79	9,000	9,000
40	68.5	14,700	14,700	71.5	13,310	13,310	74	12,000	12,000	75.5	11,000	11,000	77	9,000	9,000
45	65.5	13,570	13,570	69	12,410	12,410	71.5	11,300	11,300	73.5	10,460	10,460	75.5	9,000	9,000
50	62.5	12,540	11,100	66	11,600	11,180	69	10,550	10,550	71.5	9,460	9,460	73.5	8,800	8,800
55	59.5	11,580	9,060	63.5	10,840	9,150	67	9,610	9,220	69.5	8,880	8,880	71.5	8,320	8,320
60	56	10,690	7,440	60.5	9,960	7,530	64.5	9,000	7,600	67.5	8,330	7,650	69.5	7,820	7,700
65	53	9,770	6,130	57.5	9,230	6,210	62	8,430	6,280	65	7,800	6,330	67.5	7,340	6,380
70	49	8,530	5,040	54.5	8,550	5,120	59	7,880	5,190	62.5	7,300	5,240	65.5	6,880	5,290
75	45.5	7,440	4,120	51.5	7,520	4,200	56.5	7,390	4,270	60.5	6,820	4,320	63.5	6,410	4,360
80	41.5	6,490	3,330	48	6,570	3,410	53.5	6,630	3,480	58	6,360	3,530	61.5	5,980	3,570
85	37	5,650	2,640	44.5	5,730	2,730	50.5	5,790	2,800	55.5	5,830	2,850	59	5,560	2,890
90	32	4,890	2,040	41	4,980	2,130	47.5	5,040	2,200	52.5	5,090	2,250	57	5,120	2,300
95	25.5	4,210	1,510	36.5	4,300	1,610	44.5	4,370	1,680	50	4,420	1,730	54.5	4,460	1,770
100	17	3,590	1,030	32	3,700	1,140	41	3,770	1,210	47	3,820	1,260	52	3,850	1,310
105				26	3,140		37	3,220		44	3,270	850	49.5	3,310	890
110				19	2,630		33	2,720		40.5	2,770		47	2,810	
115							28	2,250		37	2,310		44	2,360	
120							22	1,830		33	1,890		41	1,940	
125							12	860		28.5	1,500		37.5	1,550	
130										23	1,140		34	1,190	
SJ	340 lbs.			310 lbs.			280 lbs.			260 lbs.			240 lbs.		
EJ	2,050 lbs.			2,020 lbs.			1,990 lbs.			1,970 lbs.			1,950 lbs.		

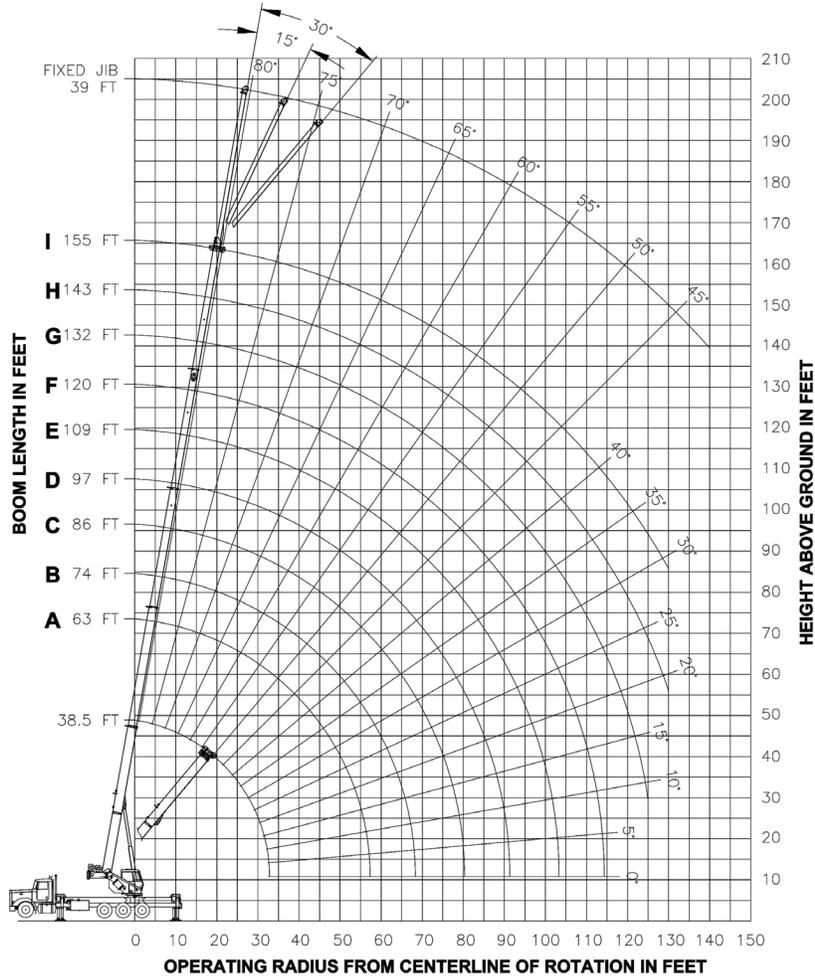
NOTES:

- All "on outriggers" loads are based on 85% tipping
- Loads based on crane on outriggers
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ
 = Stowed Jib, EJ= Erected Jib



50155 BOOM DIAGRAM & JIB LOAD CAPACITIES



39 FT. FIXED JIB LOAD CAPACITIES									
Boom Length (ft.)	0° Offset		15° Offset			30° Offset			
	Over rear (lbs.)	Full 360° (lbs.)							
40	80	4,000	4,000						
45	78	4,000	4,000						
50	77.5	4,000	4,000	80	4,000	4,000			
55	75.5	4,000	4,000	78	4,000	4,000			
60	74	4,000	4,000	76.5	4,000	4,000	80	4,000	4,000
65	72.5	4,000	4,000	75	4,000	4,000	78	4,000	4,000
70	71	4,000	4,000	73.5	4,000	4,000	76	4,000	4,000
75	69.5	4,000	4,000	72	4,000	4,000	74.5	3,880	3,880
80	68	4,000	4,000	71	3,940	3,940	73	3,730	3,730
85	66.5	3,860	3,360	69.5	3,780	3,780	71.5	3,570	3,570
90	65	3,720	2,750	67.5	3,630	3,350	70	3,430	3,430
95	63.5	3,430	2,210	66	3,480	2,760	68	3,290	3,230
100	61.5	3,150	1,740	64.5	3,340	2,250	66.5	3,160	2,670
105	60	2,880	1,310	62.5	3,180	1,780	65	3,030	2,170
110	58	2,610	930	61	2,880	1,370	63	2,920	1,720
115	56	2,360		59	2,610	990	61	2,800	1,310
120	54.5	2,130		57	2,350		59	2,570	940
125	52.5	1,840		55	2,110		57	2,290	
130	50.5	1,490		53	1,830		55	2,040	
135	48.5	1,160		51	1,480		53	1,710	
140	46	860		48.5	1,150		50.5	1,350	
145				46.5	840		48	1,020	

23'-3" (7.07 m) (100%)

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

50155HL LOAD CHART: Main Boom

Lifting Capacities 5-section Boom 38.5 ft. - 155 ft. Full Outrigger Extension

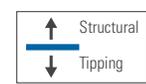
 23'-3" (7.07 m) (100%)

Boom Length (ft.)	Boom Length 38.5 ft.			Boom Length 63 ft. (A)			Boom Length 74 ft. (B)			Boom Length 86 ft. (C)			Boom Length 97 ft. (D)		
		CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)		CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)		CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)		CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)		CODE 1 Over Rear (lbs.)	CODE 3 Full 360° (lbs.)
6	73.5	100,000	100,000												
8	70.5	85,400	85,400												
10	67	75,100	75,100	77	40,000	40,000									
12	64	67,100	67,100	75	40,000	40,000	78	37,700	37,700						
15	58.8	57,700	57,700	72.5	40,000	40,000	75.5	36,340	36,340	78.5	31,000	31,000			
20	49	46,200	46,200	67.5	38,250	38,250	72	33,380	33,380	75	28,200	28,200	77.5	24,120	24,120
25	38	37,290	37,290	62.5	35,040	35,040	67.5	30,620	30,620	71.5	25,970	25,970	74.5	22,200	22,200
30	22.5	28,580	28,580	57	30,700	30,700	63	28,020	28,020	68	23,950	23,950	71	20,480	20,480
35				51.5	25,340	25,140	58.5	25,580	25,470	64	22,080	22,080	68	18,670	18,670
40				45	21,000	19,460	54	21,440	19,780	60.5	20,370	20,010	65	17,210	17,170
45				38	17,940	15,470	48.5	18,200	15,780	56.5	18,380	16,010	61.5	15,920	15,920
50				29.5	15,320	12,500	43	15,590	12,820	52	15,780	13,040	58	14,720	13,190
55				17	12,420	10,180	37	13,440	10,530	47.5	13,640	10,760	54	13,620	10,900
60							29	11,640	8,700	42.5	11,850	8,940	50	11,980	9,090
65							19	10,030	7,200	37	10,330	7,460	46	10,460	7,610
70										30.5	9,010	6,220	41.5	9,150	6,380
75										22.5	7,860	5,170	36.5	8,020	5,340
80										7.5	4,360	4,230	30.5	7,020	4,450
85													23.5	6,120	3,670
90													12	4,140	2,970
SJ	960 lbs.			590 lbs.			500 lbs.			430 lbs.			390 lbs.		
EJ	2,620 lbs.			2,270 lbs.			2,190 lbs.			2,130 lbs.			2,080 lbs.		
	Boom Length 109 ft. (E)			Boom Length 120 ft. (F)			Boom Length 132 ft. (G)			Boom Length 143 ft. (H)			Boom Length 155 ft. (I)		
25	77	18,000	18,000	79	16,260	16,260									
30	74	17,000	17,000	76.5	15,280	15,280	78	13,500	13,500	79.5	11,500	11,500			
35	71.5	15,920	15,920	74	14,270	14,270	76	12,900	12,900	77.5	11,300	11,300	79	9,000	9,000
40	68.5	14,700	14,700	71.5	13,310	13,310	74	12,000	12,000	75.5	11,000	11,000	77	9,000	9,000
45	65.5	13,570	13,570	69	12,410	12,410	71.5	11,300	11,300	73.5	10,460	10,460	75.5	9,000	9,000
50	62.5	12,540	12,540	66	11,600	11,600	69	10,550	10,550	71.5	9,460	9,460	73.5	8,800	8,800
55	59.5	11,580	11,020	63.5	10,840	10,840	67	9,610	9,610	69.5	8,880	8,880	71.5	8,320	8,320
60	56	10,690	9,210	60.5	9,960	9,290	64.5	9,000	9,000	67.5	8,330	8,330	69.5	7,820	7,820
65	53	9,870	7,730	57.5	9,230	7,810	62	8,430	7,880	65	7,800	7,800	67.5	7,340	7,340
70	49	9,150	6,500	54.5	8,550	6,580	59	7,880	6,650	62.5	7,300	6,700	65.5	6,880	6,750
75	45.5	8,130	5,460	51.5	7,930	5,540	56.5	7,390	5,610	60.5	6,820	5,660	63.5	6,410	5,710
80	41.5	7,130	4,570	48	7,210	4,660	53.5	6,880	4,730	58	6,360	4,780	61.5	5,980	4,820
85	37	6,250	3,800	44.5	6,330	3,890	50.5	6,360	3,960	55.5	5,940	4,010	59	5,560	4,050
90	32	5,470	3,130	41	5,550	3,220	47.5	5,620	3,290	52.5	5,540	3,340	57	5,170	3,380
95	25.5	4,750	2,530	36.5	4,850	2,630	44.5	4,920	2,700	50	4,960	2,750	54.5	4,780	2,790
100	17	3,830	1,990	32	4,210	2,100	41	4,280	2,180	47	4,330	2,230	52	4,370	2,270
105				26	3,630	1,620	37	3,710	1,710	44	3,760	1,760	49.5	3,800	1,800
110				19	3,030	1,190	33	3,190	1,280	40.5	3,240	1,340	47	3,280	1,380
115							28	2,700	900	37	2,760	950	44	2,800	1,000
120							22	2,260		33	2,320		41	2,370	
125							12	860		28.5	1,910		37.5	1,960	
130										23	1,530		34	1,590	
135										14.5	1,170		29.5	1,240	
SJ	340 lbs.			310 lbs.			280 lbs.			260 lbs.			240 lbs.		
EJ	2,050 lbs.			2,020 lbs.			1,990 lbs.			1,970 lbs.			1,950 lbs.		

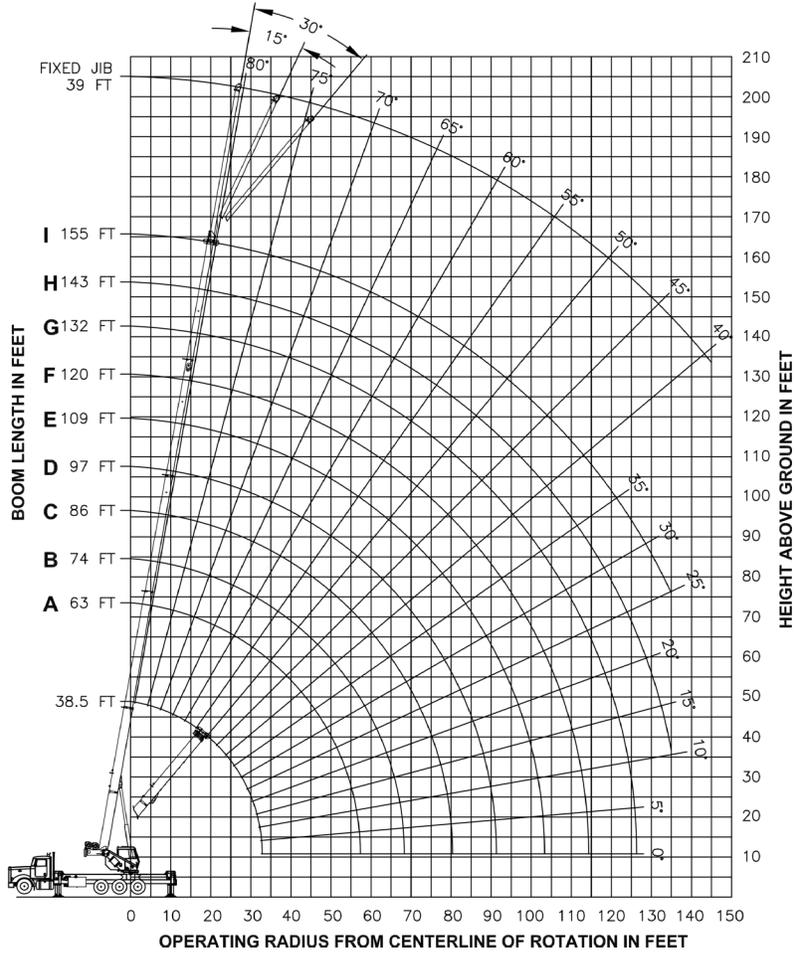
NOTES:

- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads based on crane on outriggers
- Loads below heavy line are based on tipping rating

DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ
 = Stowed Jib, EJ= Erected Jib



50155HL BOOM DIAGRAM & JIB LOAD CAPACITIES



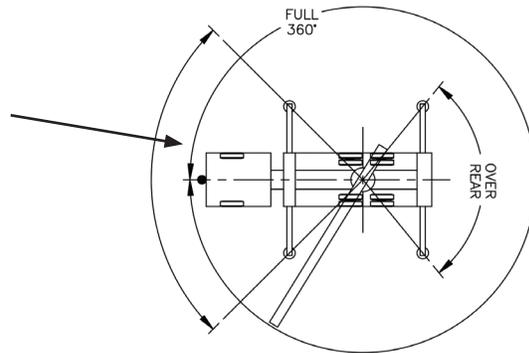
39 FT. FIXED JIB LOAD CAPACITIES									
Boom Length (ft.)	0° Offset		15° Offset			30° Offset			
	Over rear (lbs.)	Full 360° (lbs.)							
40	80	4,000	4,000						
45	78	4,000	4,000						
50	77.5	4,000	4,000	80	4,000	4,000			
55	75.5	4,000	4,000	78	4,000	4,000			
60	74	4,000	4,000	76.5	4,000	4,000	80	4,000	4,000
65	72.5	4,000	4,000	75	4,000	4,000	78	4,000	4,000
70	71	4,000	4,000	73.5	4,000	4,000	76	4,000	4,000
75	69.5	4,000	4,000	72	4,000	4,000	74.5	3,880	3,880
80	68	4,000	4,000	71	3,940	3,940	73	3,730	3,730
85	66.5	3,860	3,360	69.5	3,780	3,780	71.5	3,570	3,570
90	65	3,720	3,720	67.5	3,630	3,630	70	3,430	3,430
95	63.5	3,430	3,240	66	3,480	3,480	68	3,290	3,290
100	61.5	3,150	2,700	64.5	3,340	3,210	66.5	3,160	3,160
105	60	2,880	2,230	62.5	3,180	2,700	65	3,030	3,030
110	58	2,610	1,800	61	2,880	2,230	63	2,920	2,590
115	56	2,360	1,410	59	2,610	1,810	61	2,800	2,140
120	54.5	2,130	1,060	57	2,350	1,430	59	2,570	1,730
125	52.5	1,900		55	2,110	1,080	57	2,290	1,350
130	50.5	1,690		53	1,880		55	2,040	1,000
135	48.5	1,490		51	1,660		53	1,810	
140	46	1,230		48.5	1,460		50.5	1,590	
145	43.5	930		46.5	1,200		48	1,380	
150				44	890		45.5	1,050	

23'-3" (7.07 m) (100%)

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

AREA OF OPERATION

In order to take advantage of full 360° operation, the front bumper stabilizer must be set in accordance to the manual before working in this area.



Deductions from rated loads for load handling devices supplied by Manitex

Auxiliary block	50 lbs. (22.7 kg)
Overhaul ball	See overhaul ball mfr. nameplate
Load blocks	See load block mfr. nameplate
Hose reel	260 lbs. (117.9 kg)
Swing around jib (stowed)	See load chart

WARNING: Lifting off the main boom point while the jib is erected is not intended nor approved.



REEVING DIAGRAM

ALLOWABLE LINE PULL										WARNING
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	8 PART LINE	9 PART LINE	10 PART LINE	
										<p>ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.</p> <p>REFER TO THE OWNER'S MANUAL.</p> <p>KEEP AT LEAST 3 WRAPS OF LOAD LINE ON THE DRUM AT ALL TIMES.</p>
10000 LBS	20000 LBS	30000 LBS	40000 LBS	50000 LBS	60000 LBS	70000 LBS	80000 LBS	90000 LBS	100000 LBS	

Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

TECHNICAL DESCRIPTIONS

Boom



Boom lengths: Proportional boom

- 4-section 96 ft. (29 m)
- 4-section 110 ft. (33,5 m)
- 4-section 128 ft. (39 m)
- 5-section 155 ft. (47 m)

4-Sheave load quick reeve boom point with 2 idler reeve boom points.

Self lubricating slider pads



Boom max. tip height 5096: 105.2 ft. (32,1 m)

Boom max. tip height 50110: 119 ft. (36,3 m)

Boom max. tip height 50128: 131.9 ft (40,2 m)

Boom max. tip height 50155: 163.4 ft (49,8 m)



Boom angle (min/max): -6° / 80°

Rotation



Ball-bearing swing circle with external gear Double-reduction planetary gearbox driven by hydraulic motor



Slewing brake: Spring-applied pressure released automatic brake and Free Swing and Non-Free Swing selection from the operator's keypad.



Slewing speed: 1.5 - 2 rpm. (nominal)
Boom rotation: 360° continuous

Outriggers



Outriggers: Out-and-down style

Outrigger monitoring system (for verification only)

Outrigger motion alarm

Full extension

- Front and rear: 23.3 ft. (7,1 m)

Middle extension

- Front and rear: 15.4 ft. (4,7 m)

Full retraction

- Front and rear: 7.3 ft. (2,2 m)



ROC Solid - Radio operated handheld controller for outrigger, winches and FBS setup
Crane is shipped with the boom radio remote ready.

Operator aids



Externally routed A2B cable. Color graphic display with LMI crane function cut-offs for overload protection, event recorder and WADS-Work Definition System.
HDRI - Hoist Drum Rotation Indicator

Hoist, Rope and Hook



Maximum theoretical line speed: 453 fpm (138 mpm)



Maximum theoretical bottom-layer line pull: 13,050 lbs. (5,919 kg)



Main winch cable diameter: 5/8 in. (15,9 mm) rotation resistant



Line length: 5096 & 50110 - 400 ft. (122 m)
Line length: 50128 & 50155 - 500 ft. (152 m)



Main winch: Bent axis 2-speed hydraulic motor (activated electrically)

Third Wrap Limiter on both Main and Auxiliary Winch



Hook and Ball: 7T (6,4 mt) capacity hook with heavy-duty swivel and weight is provided for single line operation

Hydraulics



8-bolt direct mounted PTO and SAE C output (factory mounted units only)

1-Section Variable Displacement Piston Pump, SAE C input

Piggy back Fixed Gear Pump

Hydraulic Reservoir capacity: 115 Gallon-155 Gallon
Pump Sections @ 2000 RPM with 100 PSI

- Variable Displacement Pump: 77 GPM (291 lpm)
- Fixed Displacement Gear Pump: 12 GPM (45 lpm)

Tiltable Cab/Cab Controls



Standard features:

Curved glass, 0° to 20° cab tilt, Sliding door, heated cloth seat, 8 seat adjustments, lumbar support, reclining and adjustable head rest, sliding windows, rear pop out window, top hinged hatch, with guard, front and top windshield wipers, heater, air conditioning, 12 volt DC outlet, USB ports, engine monitoring system, E-coated cab (10 year rust warranty)



Controls:

PLC crane controller, CANBUS communication, J1939 truck engine communication, electric hand and foot throttle, twin dual axis joysticks, electric/hydraulic valve actuation, electronic sensor monitoring, Hirschmann/PAT or 3B6 LMI system available, wired ATB and wired wind speed sensors, telematics, GPS monitoring, remote diagnostic capability, Work Area Definition (WADs)

OPTIONS

Boom

Jibs

- 5096, 50110, 50128
 - 2-section telescopic jib: 32 ft. (9,7 m) to 49 ft. (14,9 m)
- 50155S
 - 1-section fixed jib: 39 ft. (11,8 m)

Maximum Boom Length with Jib



- 5096
 - Max boom length with extension: 144.5 ft. (44 m)
- 50110 & 50110HL
 - Max boom length with extension: 159 ft. (48,5m)
- 50128 & 50128HL
 - Max boom length with extension: 177 ft. (53,9m)
- 50155 & 50155HL
 - Max boom length with extension: 194 ft. (59,1m)

Maximum Boom Length with Minimum Extension



- 5096
 - Max boom length with extension retracted: 127.5 ft. (38,9m)
- 50110 & 50110HL
 - Max boom length with extension retracted: 142 ft. (43,2m)
- 50128 & 50128HL
 - Max boom length with extension retracted: 160 ft. (48,8m)
- 50155 & 50155HL
 - Max boom length with extension retracted: 155 ft. (47,2)

Boom

Maximum Tip Height with Maximum Extension



- 5096
 - Max tip height with extension: 153.3 ft. (46,7 m)
 - Max tip height with extension retracted: 136.5 ft. (41,6 m)
- 50110 & 50110HL
 - Max tip height with extension: 167.1 ft. (50,9 m)
 - Max tip height with extension retracted: 150.3 ft. (45,8 m)
- 50128 & 50128HL
 - Max tip height with extension: 184.8 ft. (56,3 m)
 - Max tip height with extension retracted: 168.0 ft. (51,2 m)
- 50155 & 50155HL
 - Max tip height w/ext = 202.4 ft. (61,7 m)
 - Max tip height w/ ext retracted: No telescopic jib for 50155

Hoist, Rope and Hook

Rooster sheave
Wireline options available
2nd overhaul ball available



Auxiliary lower sheave block for 2-9 part lines
Load blocks 1-7, 4-8, 2-8, 9-10 part lines

Hydraulics



Optional Hydraulic Hose Reel for accessories- boom mounted
Optional Front Bumper Stabilizer

Auxiliary Winch



Auxiliary Winch Bent axis 2-speed hydraulic motor (activated electrically)
Third Wrap Limiter on both Main and Auxiliary Winch

Manitex



TC500.1

50-ton (45, 4 mt) TELESCOPIC CRANE
TC500 SERIES PRODUCT GUIDE

UPTime

UPTime is the Manitex commitment to complete support of thousands of units working every day.

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