

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.



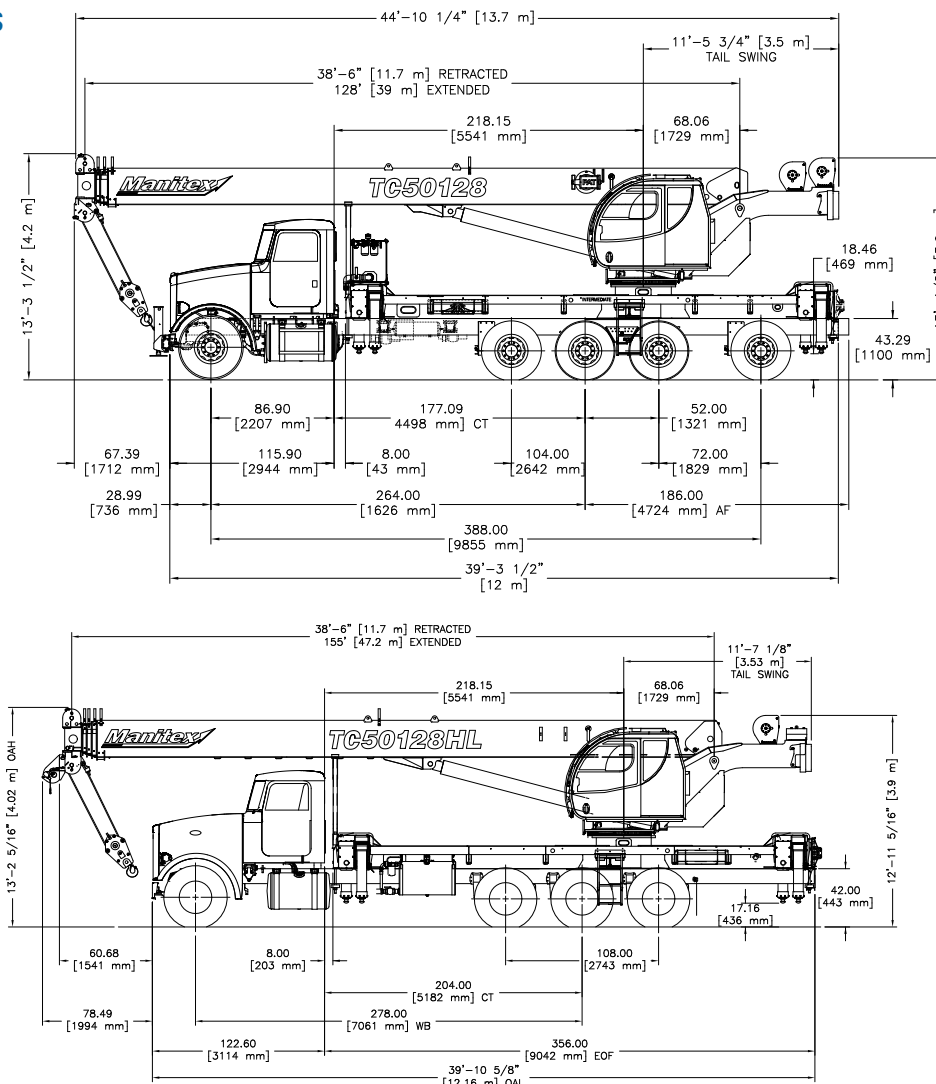
All cabs now come equipped with Heat and AC with 200% more air flow. Adjustable cab tilt speed and crane functions. USB ports for quick software updates or phone charging. More leg space and only one display unit needed for both crane and chassis operations.



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.

50128 & HL CHASSIS DATA

Dimensions



CHASSIS DATA

Model	50128	50128HL
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 section modulus at 360° area of operation requires front bumper stabilizer.

TRUCK AXLE WEIGHT

Model	50128	50128HL
Min. truck axle W - Front**	9,100 lbs. (4,127 kg)	11,100 lbs. (5,034 kg)
Min. truck axle W - Rear**	13,985 lbs. (6,344 kg)	12,500 lbs. (5,670 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	50128	50128HL
Crane	38,955 lbs. (17,670 kg)	45,379 lbs. (20,584 kg)
Jib fixed	1,510 lbs. (685 kg)	1,510 lbs. (685 kg)
Jib telescopic	1,870 lbs. (848 kg)	1,870 lbs. (848 kg)
Aluminum Platforms	621 lbs. (282 kg)	621 lbs. (282 kg)

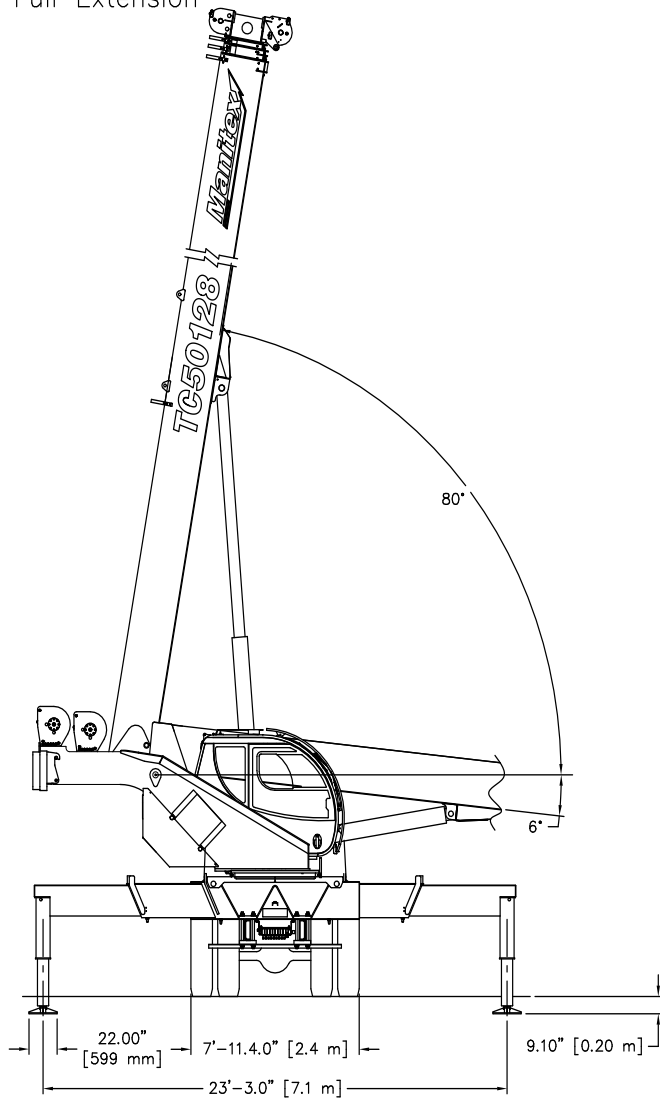
Notes: Additional axles required for federal bridge legal configuration - consult Manitex. Manitex highly recommends the addition of a front stabilizer and it may be required on some installations - consult Manitex.

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

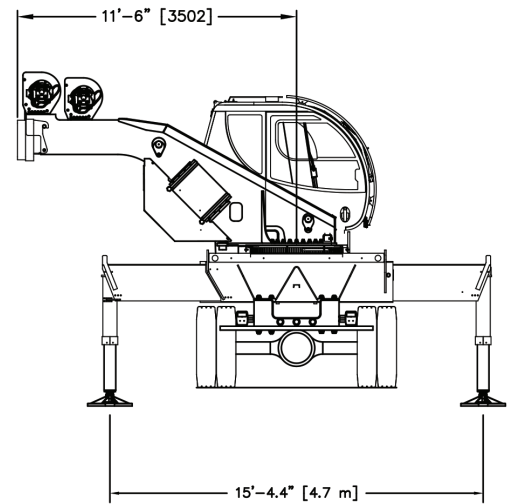
OUTRIGGER EXTENSION

Full Extension

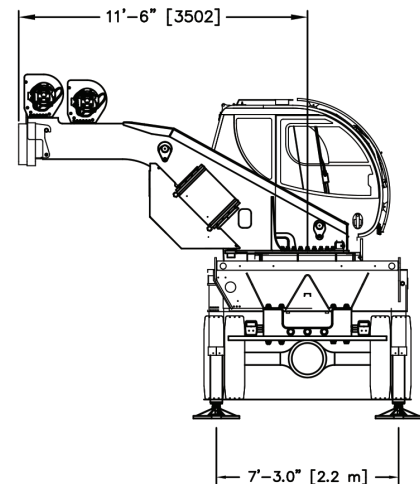
Full Extension



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

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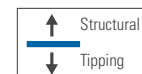
50128 LOAD CHART: Main Boom

Lifting Capacities 4-section Boom 38.5 ft. - 128 ft. - Full Outrigger Extension

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

 (ft.)	Boom Length 38.5 ft.			Boom Length 53 ft. (A)			Boom Length 66 ft. (B)			Boom Length 78 ft. (C)		
	 (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	86,600	86,600									
10	67	76,400	76,400	74.5	51,000	51,000	78	51,000	51,000			
12	64	68,400	68,400	72.5	51,000	51,000	76.5	51,000	51,000	79	41,710	41,710
15	59	59,000	59,000	68.5	51,000	51,000	73.5	46,650	46,650	77	37,880	37,880
20	49.5	47,670	47,670	62.5	45,700	45,700	69	39,300	39,300	73	32,140	32,140
25	38.5	36,900	36,900	56	37,680	37,680	64	33,450	33,450	69	27,890	27,890
30	23.5	29,590	26,680	49.5	30,410	27,890	59	29,140	28,440	65	24,230	24,230
35				41.5	25,170	20,650	54	25,490	21,160	61	21,310	21,310
40				32	20,620	15,940	48	21,090	16,440	56.5	19,160	16,730
45				18.5	16,770	12,610	42	17,270	13,130	52	17,070	13,410
50							34.5	14,390	10,670	46.5	14,660	10,950
55							25	12,140	8,760	41	12,420	9,050
60							7	9,790	7,200	35	10,620	7,540
65										27	9,140	6,300
70										16	7,890	5,260
SJ		1,230 lbs.			890 lbs.			720 lbs.			610 lbs.	
EJR		2,840 lbs.			2,620 lbs.			2,500 lbs.			2,430 lbs.	
EJE		3,170 lbs.			2,860 lbs.			2,700 lbs.			2,600 lbs.	

 (ft.)	Boom Length 91 ft. (D)			Boom Length 103 ft. (E)			Boom Length 116 ft. (F)			Boom Length 128 ft. (G)		
	 (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.)
15	79	30,000	30,000									
20	76	26,010	26,010	78.5	22,790	22,790						
25	72.5	22,620	22,620	75.5	20,160	20,160	78	17,660	17,660			
30	69.5	20,000	20,000	72.5	18,080	18,080	75.5	16,060	16,060	77.5	13,000	13,000
35	66	17,710	17,710	70.5	16,070	16,070	73	14,480	14,480	75.5	12,760	12,760
40	62.5	15,740	15,740	67.5	14,360	14,360	70.5	13,050	13,050	73	11,760	11,760
45	59	14,050	13,620	64	12,900	12,900	68	11,780	11,780	71	10,800	10,800
50	55	12,620	11,150	60.5	11,610	11,290	65	10,640	10,640	68.5	10,000	10,000
55	50.5	11,380	9,250	57	10,500	9,380	62	9,890	9,490	66	9,130	9,130
60	46.5	10,340	7,740	53.5	9,760	7,870	59	8,970	7,970	63.5	8,320	8,050
65	41.5	9,340	6,510	50	8,860	6,640	56	8,160	6,740	60.5	7,570	6,820
70	36.5	8,110	5,490	46	8,060	5,620	53	7,430	5,720	58	6,910	5,790
75	30	7,060	4,620	41.5	7,190	4,750	49.5	6,780	4,860	55	6,300	4,930
80	22	6,160	3,870	37	6,300	4,020	46	6,180	4,120	52	5,750	4,190
85	7	5,290	3,200	31.5	5,520	3,380	42.5	5,620	3,480	49	5,250	3,550
90				25	4,830	2,810	38	4,940	2,920	46	4,790	3,000
95				15.5	4,210	2,300	33.5	4,340	2,430	42	4,370	2,510
100							28.5	3,800	1,990	38.5	3,870	2,070
105							21.5	3,310	1,590	34	3,390	1,680
110							7.5	2,860	1,220	29.5	2,960	1,320
115										23.5	2,560	1,000
120										15	2,200	
SJ		520 lbs.			460 lbs.			410 lbs.			370 lbs.	
EJR		2,370 lbs.			2,330 lbs.			2,300 lbs.			2,280 lbs.	
EJE		2,520 lbs.			2,460 lbs.			2,410 lbs.			2,380 lbs.	



DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS

SJ = Stowed Jib,
EJR = Erected Jib Retracted,
EJE = Erected Jib Extended

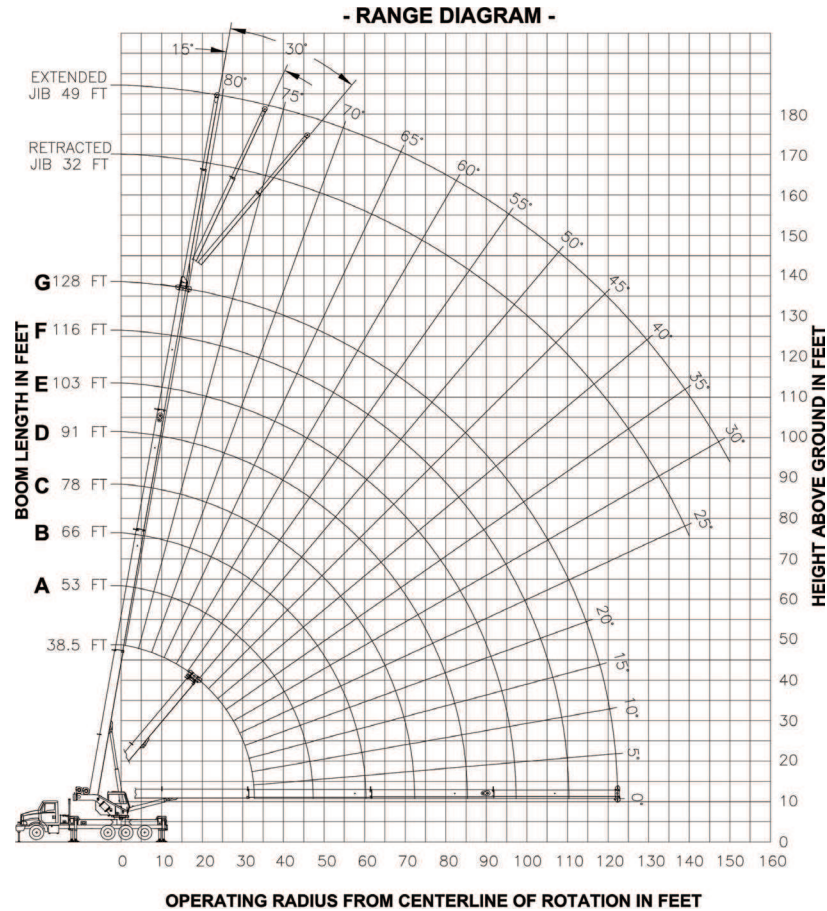
NOTES:

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

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50128 BOOM DIAGRAM & JIB LOAD CAPACITIES

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

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

32 FT. RETRACTED JIB LOAD CAPACITIES								
(ft.)	0° Offset			15° Offset			30° Offset	
	Over rear (lbs.)	Full 360° (lbs.)		Over rear (lbs.)	Full 360° (lbs.)		Over rear (lbs.)	Full 360° (lbs.)
35	78	5,400						
40	76.5	5,400						
45	75	5,400						
50	73.5	5,400						
55	72	5,400						
60	70	5,400						
65	68.5	5,400						
70	66.5	5,210						
75	64.5	4,740						
80	62.5	4,300						
85	60.5	3,890						
90	58	3,510						
95	55.5	3,160						
100	53	2,820						
105	50.5	2,520						
110	48	2,230						
115	45.5	1,960						
120	42.5	1,700						
125	39.5	1,470						
130	36.5	1,240						
135	32.5	1,030						
140	28.5	840						

49 FT. EXTENDED JIB LOAD CAPACITIES								
(ft.)	0° Offset			15° Offset			30° Offset	
	Over rear (lbs.)	Full 360° (lbs.)		Over rear (lbs.)	Full 360° (lbs.)		Over rear (lbs.)	Full 360° (lbs.)
40	78	4,300						
45	76.5	4,300						
50	75	4,300						
55	73.5	4,300						
60	72	4,300						
65	70.5	4,300						
70	69	4,300						
75	67.5	4,300						
80	66	4,240						
85	64.5	4,030						
90	63	3,740						
95	61	3,430						
100	59	3,120						
105	57	2,840						
110	54.5	2,560						
115	52	2,310						
120	49.5	2,070						
125	47	1,840						
130	44.5	1,630						
135	42	1,430						
140	39.5	1,240						
145	36.5	1,060						
150	33	900						
155								

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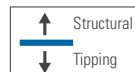
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Lifting Capacities 4-section Boom 38.5 ft. - 128 ft. - Full Outrigger Extension

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 (ft.)	Boom Length 38.5 ft.			Boom Length 53 ft. (A)			Boom Length 66 ft. (B)			Boom Length 78 ft. (C)		
		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	86,600	86,600									
10	67	76,400	76,400	74.5	51,000	51,000	78	51,000	51,000			
12	64	68,400	68,400	72.5	51,000	51,000	76.5	51,000	51,000	79	41,710	41,710
15	59	59,000	59,000	68.5	51,000	51,000	73.5	46,650	46,650	77	37,880	37,880
20	49.5	47,700	47,700	62.5	45,700	45,700	69	39,300	39,300	73	32,140	32,140
25	38.5	38,300	38,300	56	38,400	38,400	64	33,450	33,450	69	27,890	27,890
30	23.5	30,200	30,200	49.5	31,590	31,590	59	29,140	29,140	65	24,230	24,230
35				41.5	26,180	23,590	54	25,490	24,100	61	21,310	21,310
40				32	22,080	18,360	48	22,480	18,860	56.5	19,160	19,150
45				18.5	18,340	14,670	42	19,280	15,190	52	17,070	15,470
50							34.5	16,710	12,460	46.5	15,330	12,740
55							25	14,420	10,350	41	13,850	10,630
60							7	9,790	8,620	35	12,560	8,960
65										27	11,000	7,590
70										16	9,600	6,440
SJ		1,230 lbs.			890 lbs.			720 lbs.			610 lbs.	
EJR		2,840 lbs.			2,620 lbs.			2,500 lbs.			2,430 lbs.	
EJE		3,170 lbs.			2,860 lbs.			2,700 lbs.			2,600 lbs.	

 (ft.)	Boom Length 91 ft. (D)			Boom Length 103 ft. (E)			Boom Length 116 ft. (F)			Boom Length 128 ft. (G)		
		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.)
15	79	30,000	30,000									
20	76	26,010	26,010	78.5	22,790	22,790						
25	72.5	22,620	22,620	75.5	20,160	20,160	78	17,660	17,660			
30	69.5	20,000	20,000	72.5	18,080	18,080	75.5	16,060	16,060	77.5	13,000	13,000
35	66	17,710	17,710	70.5	16,070	16,070	73	14,480	14,480	75.5	12,760	12,760
40	62.5	15,740	15,740	67.5	14,360	14,360	70.5	13,050	13,050	73	11,760	11,760
45	59	14,050	14,050	64	12,900	12,900	68	11,780	11,780	71	10,800	10,800
50	55	12,620	12,620	60.5	11,610	11,610	65	10,640	10,640	68.5	10,000	10,000
55	50.5	11,380	10,830	57	10,500	10,500	62	9,890	9,890	66	9,130	9,130
60	46.5	10,340	9,160	53.5	9,760	9,290	59	8,970	8,970	63.5	8,320	8,320
65	41.5	9,630	7,800	50	8,860	7,930	56	8,160	8,030	60.5	7,570	7,570
70	36.5	8,770	6,660	46	8,060	6,790	53	7,430	6,900	58	6,910	6,910
75	30	8,000	5,700	41.5	7,350	5,840	49.5	6,780	5,940	55	6,300	6,010
80	22	7,320	4,880	37	6,720	5,020	46	6,180	5,130	52	5,750	5,200
85	7	5,290	4,140	31.5	6,140	4,310	42.5	5,650	4,420	49	5,250	4,490
90				25	5,630	3,690	38	5,160	3,800	46	4,790	3,870
95				15.5	5,160	3,130	33.5	4,720	3,260	42	4,370	3,330
100							28.5	4,310	2,770	38.5	3,980	2,850
105							21.5	3,940	2,330	34	3,620	2,410
110							7.5	3,610	1,920	29.5	3,300	2,020
115										23.5	2,990	1,660
120										15	2,710	1,330
SJ		520 lbs.			460 lbs.			410 lbs.			370 lbs.	
EJR		2,370 lbs.			2,330 lbs.			2,300 lbs.			2,280 lbs.	
EJE		2,520 lbs.			2,460 lbs.			2,410 lbs.			2,380 lbs.	



DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS

SJ = Stowed Jib,
EJR = Erected Jib Retracted,
EJE = Erected Jib Extended

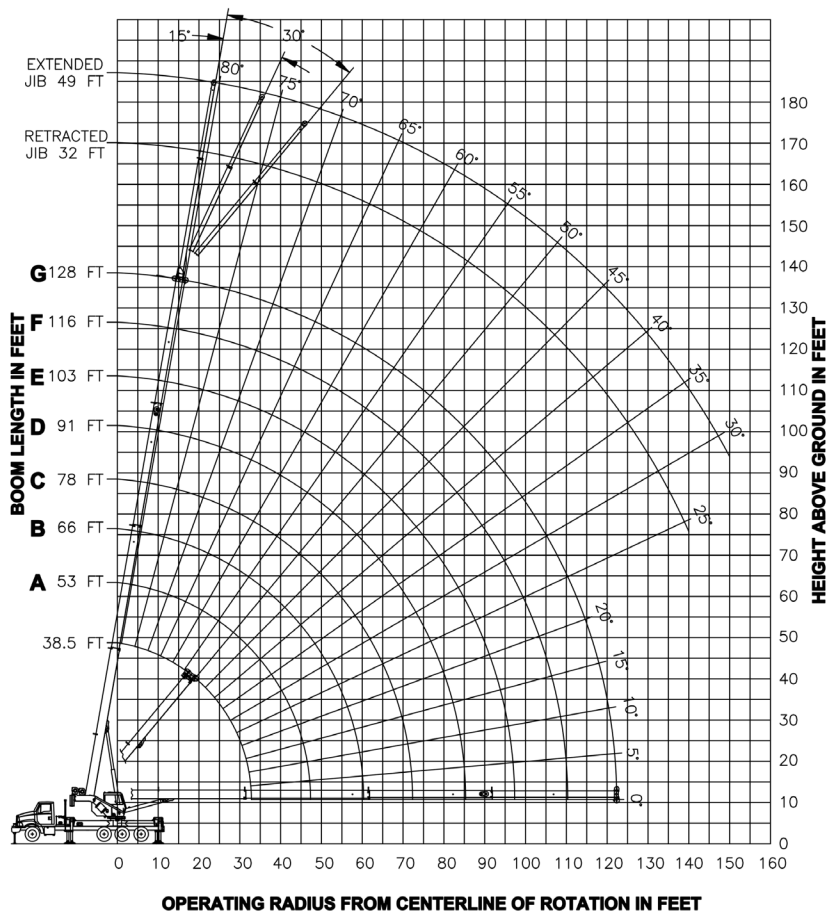
NOTES:

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

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50128HL BOOM DIAGRAM & JIB LOAD CAPACITIES

////////



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

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

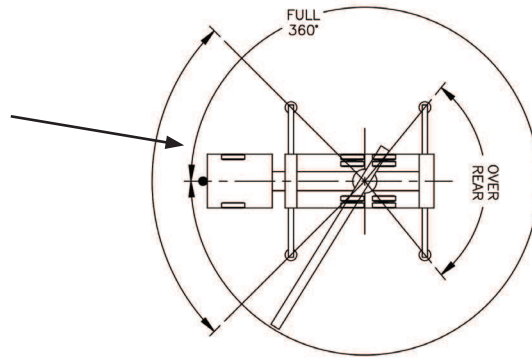
32 FT. RETRACTED JIB LOAD CAPACITIES								
Boom Length (ft.)	0° Offset		15° Offset		30° Offset		Over rear (lbs.)	Full 360° (lbs.)
	Over rear (lbs.)	Full 360° (lbs.)	Over rear (lbs.)	Full 360° (lbs.)	Over rear (lbs.)	Full 360° (lbs.)		
35	78	5,400						
40	76.5	5,400	79.5	5,400				
45	75	5,400	78	5,400				
50	73.5	5,400	76.5	5,400	79	5,400	5,400	5,400
55	72	5,400	74.5	5,400	77	5,400	5,400	5,400
60	70	5,400	73	5,400	75	5,400	5,400	5,400
65	68.5	5,400	71	5,400	73	5,240	5,240	5,240
70	66.5	5,210	69	5,230	71.5	4,990	4,990	4,990
75	64.5	4,740	67	4,970	69.5	4,750	4,750	4,750
80	62.5	4,300	65	4,570	67.5	4,520	4,520	4,520
85	60.5	3,890	63	4,140	65	4,310	4,310	4,310
90	58	3,510	61	3,740	63	3,930	3,930	3,930
95	55.5	3,160	58.5	3,360	60.5	3,540	3,540	3,540
100	53	2,820	56	3,010	58	3,170	3,170	3,170
105	50.5	2,520	53.5	2,690	55.5	2,830	2,700	2,700
110	48	2,230	50.5	2,390	52.5	2,510	2,250	2,250
115	45.5	1,960	48	2,100	49.5	2,210	1,850	1,850
120	42.5	1,700	45	1,830	46.5	1,920	1,480	1,480
125	39.5	1,470	42	1,580	43	1,660	1,130	1,130
130	36.5	1,240	38.5	1,350	39.5	1,400		
135	32.5	1,030	34.5	1,120	35.5	1,160		
140	28.5	840	30.5	910	30.5	920		

49 FT. EXTENDED JIB LOAD CAPACITIES								
Boom Length (ft.)	0° Offset		15° Offset		30° Offset		Over rear (lbs.)	Full 360° (lbs.)
	Over rear (lbs.)	Full 360° (lbs.)	Over rear (lbs.)	Full 360° (lbs.)	Over rear (lbs.)	Full 360° (lbs.)		
40	78	4,300	4,300					
45	76.5	4,300	4,300					
50	75	4,300	4,300	79.5	4,300	4,300		
55	73.5	4,300	4,300	78	4,300	4,300		
60	72	4,300	4,300	76.5	4,300	4,300	79.5	3,700
65	70.5	4,300	4,300	75	4,300	4,300	78	3,590
70	69	4,300	4,300	73.5	4,230	4,230	76	3,490
75	67.5	4,300	4,300	71.5	4,080	4,080	74	3,390
80	66	4,240	4,240	70	3,930	3,930	72.5	3,300
85	64.5	4,030	4,030	68.5	3,760	3,760	70.5	3,220
90	63	3,740	3,740	66.5	3,590	3,590	69	3,140
95	61	3,430	3,430	64.5	3,420	3,420	67	3,070
100	59	3,120	3,120	62.5	3,270	3,270	65	3,000
105	57	2,840	2,820	60.5	3,100	3,100	63	2,940
110	54.5	2,560	2,420	58	2,810	2,810	61	2,880
115	52	2,310	2,060	56	2,540	2,420	58.5	2,720
120	49.5	2,070	1,740	53.5	2,280	2,070	56	2,450
125	47	1,840	1,440	51	2,040	1,740	53.5	2,190
130	44.5	1,630	1,170	48	1,810	1,440	50.5	1,940
135	42	1,430	920	45.5	1,590	1,160	47.5	1,700
140	39.5	1,240		42.5	1,390	900	44.5	1,480
145	36.5	1,060		39.5	1,190		41	1,260
150	33	900		36	1,000		37	1,050
155				32	820		32.5	850

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

AREA OF OPERATION

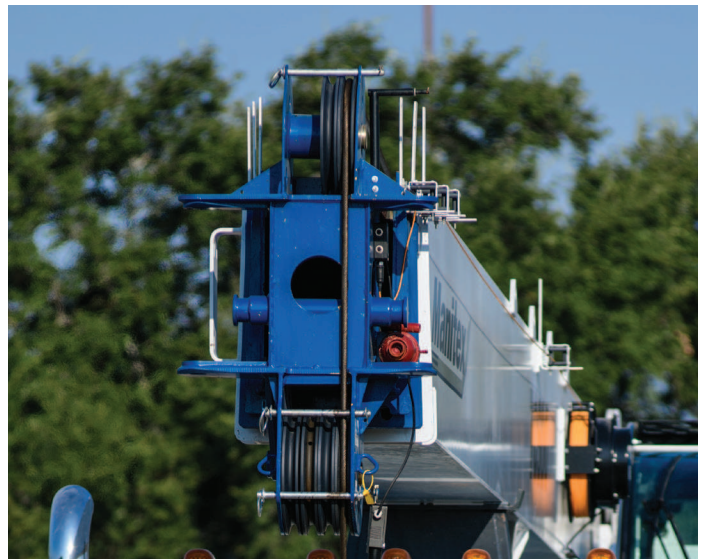
In order to take advantage of full 360° operation, the front bumper stabilizer must be set in accordance to the manual before working in this area.



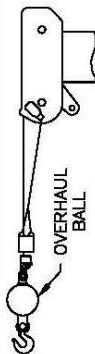
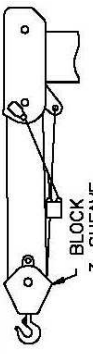
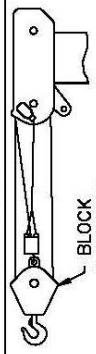
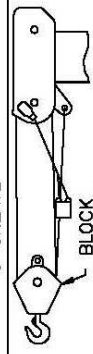
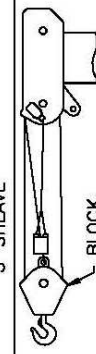
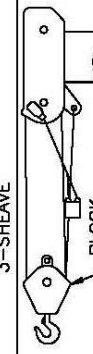
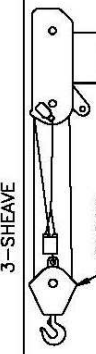
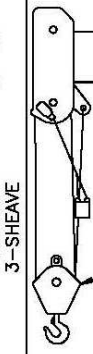
Deductions from rated loads for load handling devices supplied by Manitex

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	
										
10000 LBS	20000 LBS	30000 LBS	40000 LBS	50000 LBS	60000 LBS	70000 LBS	80000 LBS	90000 LBS	100000 LBS	
5/8" 6 X 19 CLASS (3.5:1 SF) 35,000 LBS MIN BREAKING STRENGTH										
5/8" ROT RESISTANT (5:1 SF) 50,000 LBS MIN BREAKING STRENGTH										

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.

MANITEX

3000 South Austin Avenue
Georgetown, Texas 78626

1-877-314-3390 | www.Manitex.com

MTX-TC500.1-PC-EN-V4-0618

Courtesy of CraneMarket.com