

**Manitex**



**TC500**

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



















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










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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:

- Travel to and between job sites at highway speed on a commercial chassis
- Set up quickly with radio outrigger controls
- Operate comfortably and confidently in its tiltable cab

### Other features include:

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

### RADIO OUTRIGGER CONTROLS

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

### TWO-SPEED PLANETARY HOIST

Increase productivity and minimize downtime. The two-speed planetary hoist lets you change line speed on the fly and minimize rope stacking.

### REMOTE WINCH CONTROL

Lower and raise the hook block quickly. With remote winch control on the TC500 series, the winch can be operated from any location. (OPTIONAL)



Operator cab tilts from 0° to 20° for a comfortable, clear view of the load.

### INCREASE PROFITABILITY

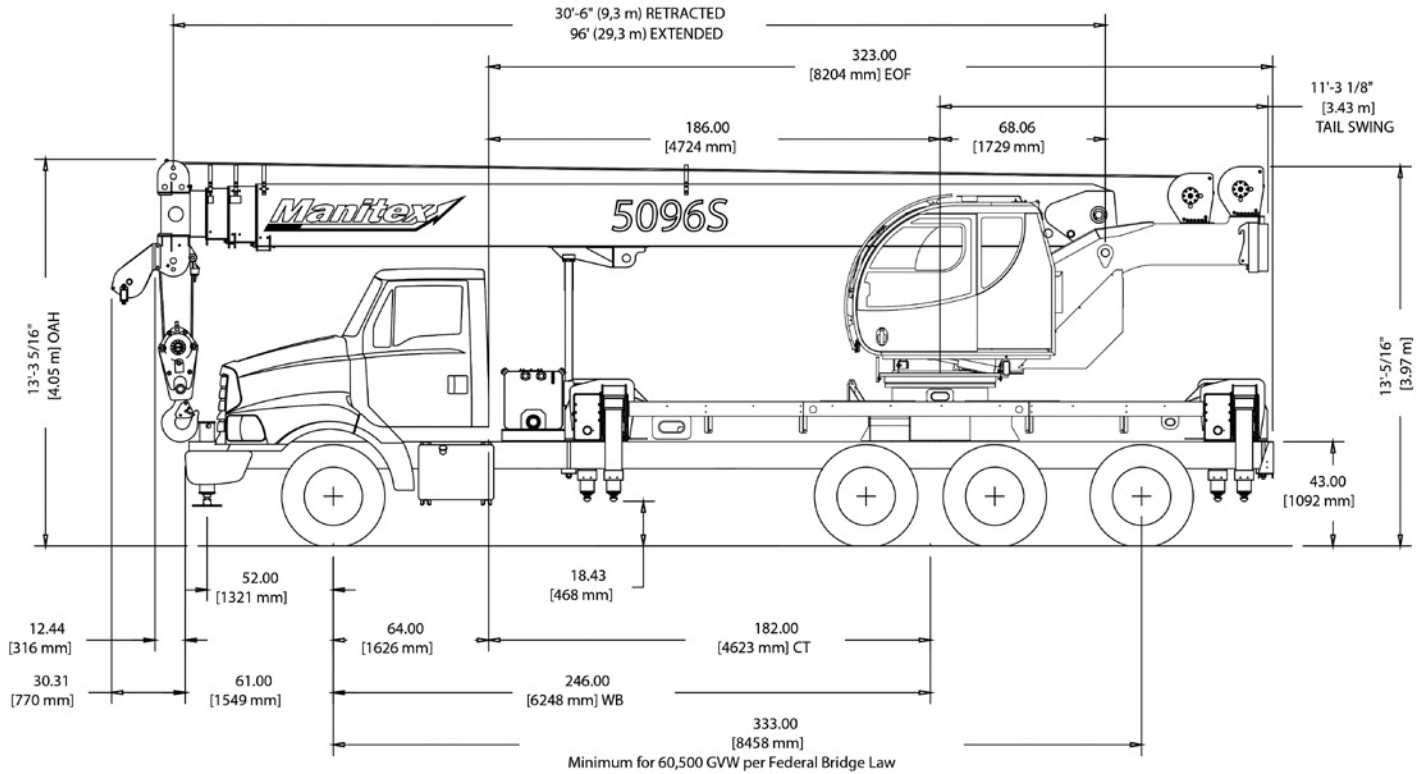
The versatile TC500 series is designed to help both owners and operators make the most of their investment.

- Travel to and between jobs at highway speed.
- Minimize maintenance costs with replaceable, self-lubricating boom slider pads and sealed, multi-disc wet brakes on the hoist and swing system.
- Minimize repair costs with first-up auto retract feature of front bumper stabilizer that prevents drive-away damage.

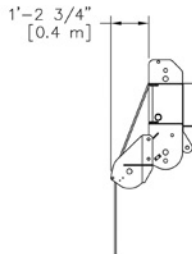


# 5096S CHASSIS DATA

## Dimensions



## Auxiliary Sheave Head



## CHASSIS DATA

Model	5096S
Frame section modulus at 180/360° area of operation*	27.0 in <sup>3</sup> 120,000 psi 827,371 kPa

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

## CRANE WEIGHT

	5096S
Crane	35,755 lbs. (16,218 kg)
Jib fixed	1,510 lbs. (685 kg)
Jib telescopic	1,870 lbs. (848 kg)
Aluminum Platform	621 lbs. (282 kg)

## TRUCK AXLE WEIGHT

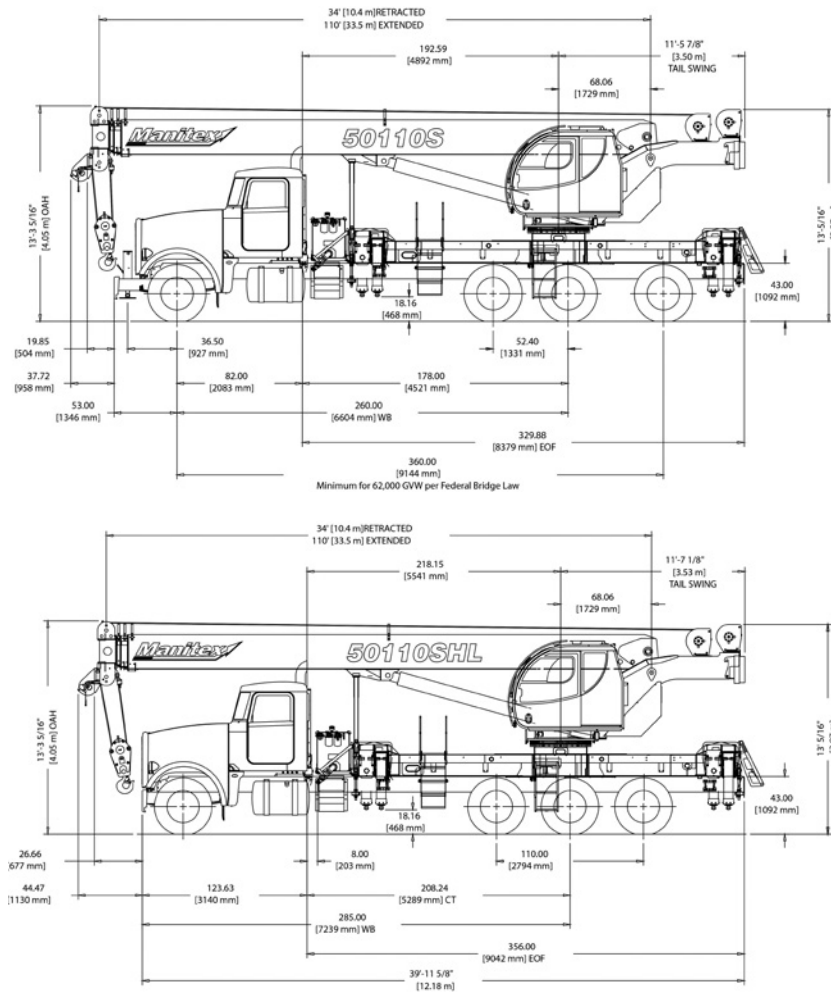
	5096S
Min. truck axle W - Front**	9,100 lbs. (4,127 kg)
Min. truck axle W - Rear**	11,150 lbs. (5,057 kg)
Nominal Frame W	34 in. (864 mm)

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

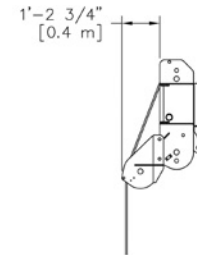
Notes: Additional axles required for federal bridge legal configuration - consult ManiTex. ManiTex highly recommends the addition of a front stabilizer and it may be required on some installations - consult ManiTex.

# 50110S & SHL CHASSIS DATA

## Dimensions



## Auxiliary Sheave Head



## CHASSIS DATA

Model	50110S	50110SHL
Frame section modulus at 180/360° area of operation*	27.0 in <sup>3</sup> 120,000 psi, 827,371 kPa	27.0 in <sup>3</sup> 120,000 psi, 827,371 kPa

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

## TRUCK AXLE WEIGHT

Model	50110S	50110SHL
Min. truck axle W - Front**	9,000 lbs. (4,173 kg)	10,700 lbs. (4,853 kg)
Min. truck axle W - Rear**	10,600 lbs. (4,808 kg)	15,200 lbs. (6,894 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

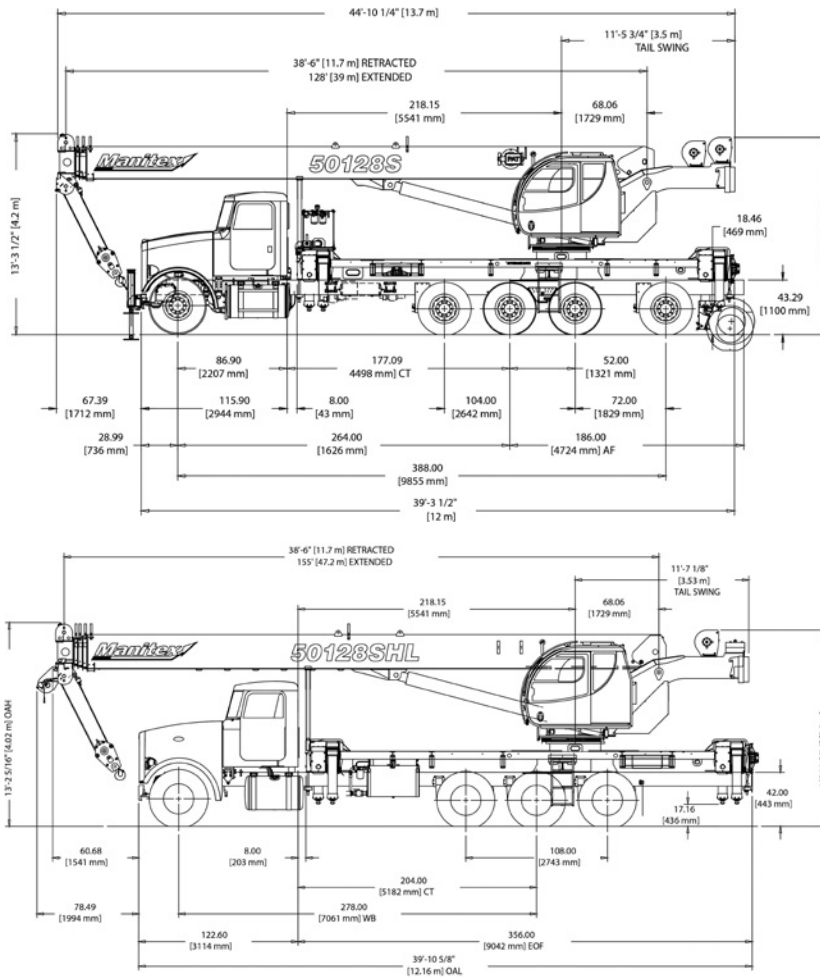
Model	50110S	50110SHL
Crane	37,422 lbs. (16,974 kg)	43,846 lbs. (19,888 kg)
Jib fixed	1,510 lbs. (685 kg)	1,510 lbs. (685 kg)
Jib telescopic	1,870 lbs. (848 kg)	1,870 lbs. (848 kg)
Aluminum Platforms	621 lbs. (282 kg)	621 lbs. (282 kg)

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.

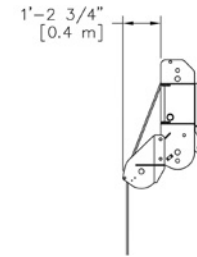
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 50128S & SHL CHASSIS DATA

## Dimensions



## Auxiliary Sheave Head



## CHASSIS DATA

Model	50128S	50128SHL
Frame section modulus at 180/360° area of operation*	27.0 in <sup>3</sup> 110,000 psi, 758,423 kPa	27.0 in <sup>3</sup> 110,000 psi, 758,423 kPa

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

## TRUCK AXLE WEIGHT

Model	50128S	50128SHL
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

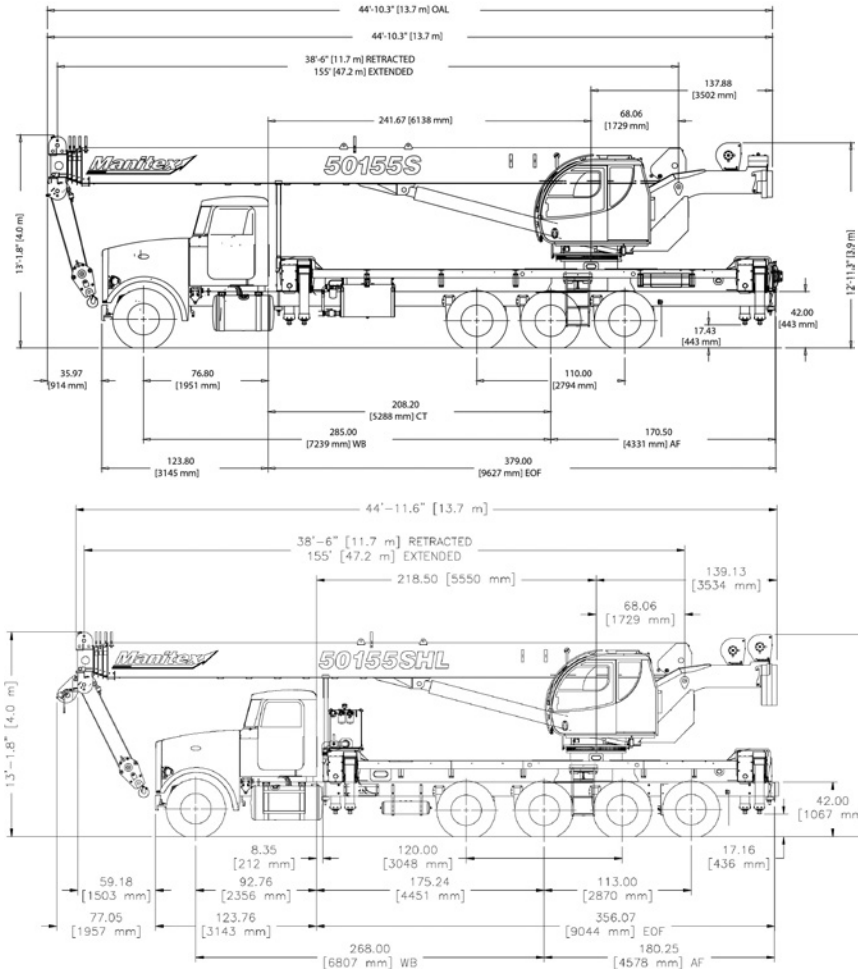
Model	50128S	50128SHL
Crane	38,955 lbs. (17,670 kg)	45,379 lbs. (20,584 kg)
Jib fixed	1,510 lbs. (685 kg)	1,510 lbs. (685 kg)
Jib telescopic	1,870 lbs. (848 kg)	1,870 lbs. (848 kg)
Aluminum Platforms	621 lbs. (282 kg)	621 lbs. (282 kg)

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.

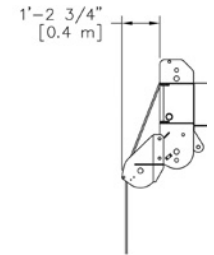
Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 50155S & SHL CHASSIS DATA

## Dimensions



## Auxiliary Sheave Head



## CHASSIS DATA

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

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

## TRUCK AXLE WEIGHT

Model	50155S	50155SHL
Min. truck axle W - Front**	10,750 lbs. (4876 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	50155S	50155SHL
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)

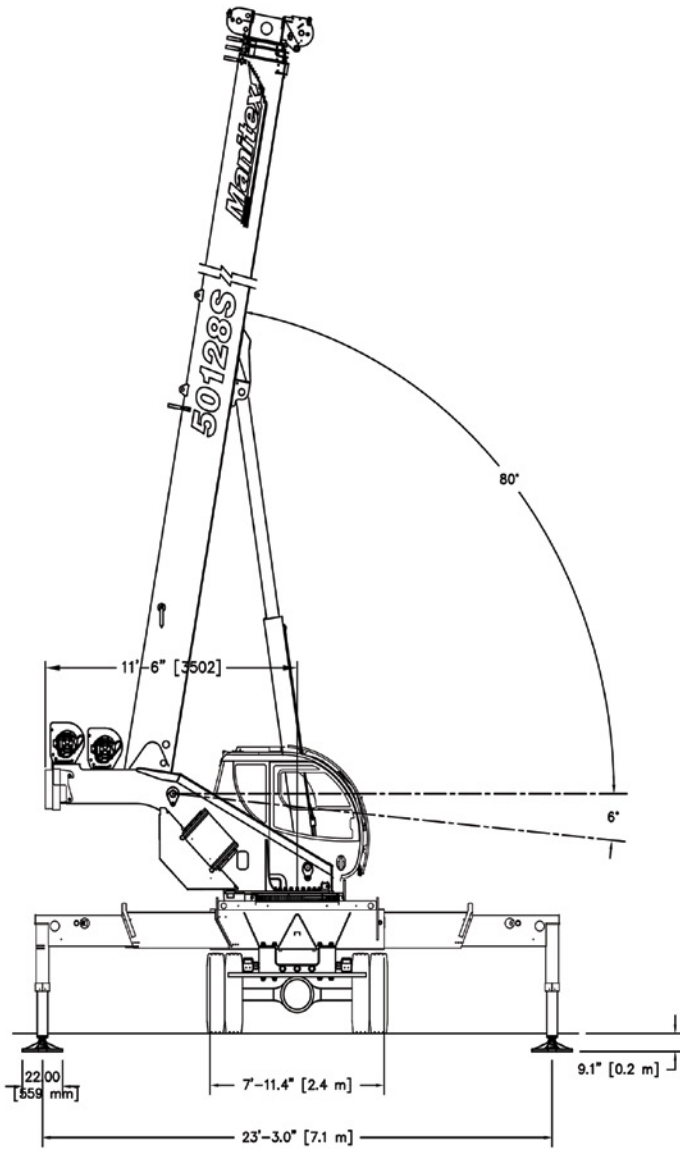
Notes: Additional axles required for federal bridge legal configuration - consult Manitex. Manitex highly recommends the addition of a front stabilizer and it may be required on some installations - consult Manitex.

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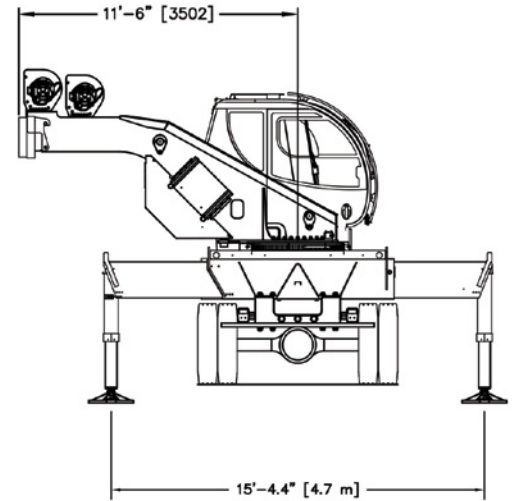


# OUTRIGGER EXTENSION

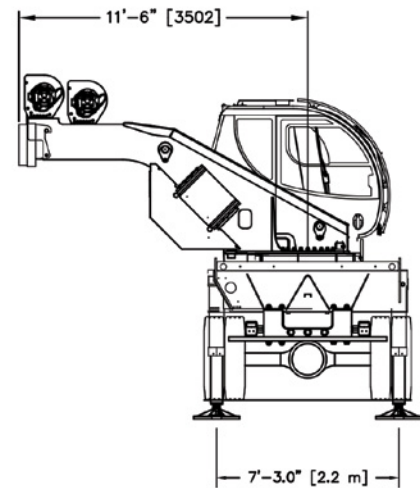
## Full Extension



## Middle 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


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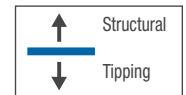
# 5096S LOAD CHART: Main Boom and Jib

Lifting Capacities 4-section Boom 38.5 ft. - 78 ft.  
Outriggers Fully Extended

 23.2 ft. (7.07 m) (100%)

 360°

MAIN BOOM LMI CODE #3										
 (ft.)	30.5 ft.		48 ft. (A)		64 ft. (B)		80 ft. (C)		96 ft. (D)	
	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)
6	69	100,000								
8	65	90,400								
10	61	80,000	73	51,000						
12	56	71,800	70	51,000	76	40,000				
15	49	61,700	66	51,000	73	40,000	77	27,500		
20	34	46,100	59	47,000	69	37,700	74	27,500	78	18,000
25			52	36,800	64	30,400	70	24,300	75	18,000
30			44	25,890	59	26,420	66	21,280	72	17,500
35			34	19,320	53	19,830	62	19,050	69	16,240
40			20	15,030	47	15,500	58	15,820	65	14,660
45					40	12,550	53	12,810	62	12,970
50					32	10,320	49	10,580	58	10,730
55					21	8,590	44	8,860	54	9,020
60							38	7,500	50	7,650
65							31	6,380	46	6,540
70							22	5,450	41	5,620
75									36	4,840
80									30	4,170
85									23	3,580
90									8	3,050
DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ = Stowed Jib, EJR = Erected Jib Retracted, EJE = Erected Jib Extended										
SJ	1,080 lbs.		690 lbs.		520 lbs.		410 lbs.		350 lbs.	
EJR	3,050 lbs.		2,680 lbs.		2,520 lbs.		2,420 lbs.		2,360 lbs.	
EJE	3,470 lbs.		2,950 lbs.		2,720 lbs.		2,580 lbs.		2,490 lbs.	

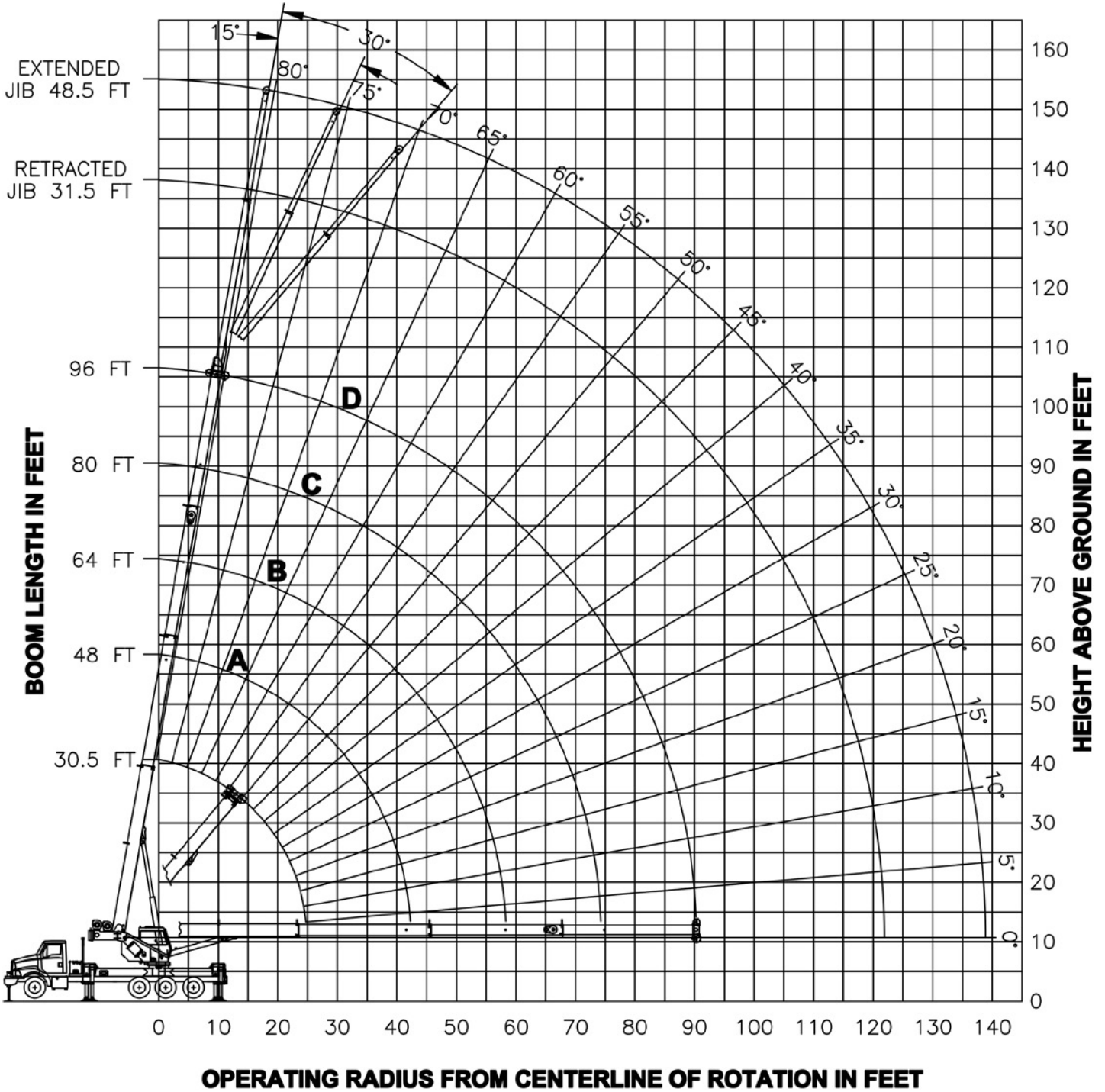


**NOTES:**

- All loads rated at 360° pick
- 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

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


# 5096S BOOM DIAGRAM




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# 50110S LOAD CHART: Main Boom and Jib

Lifting Capacities 4-section Boom 34 ft. - 110 ft.  
1 or 2-section Jib 32 ft. - 49 ft. - Full Outrigger Extension

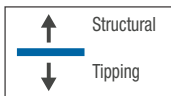
 23.2 ft. (7.1 m) (100%)

 360°

MAIN BOOM LMI CODE #3												
 (ft.)	34 ft.		50 ft. (A)		65 ft. (B)		80 ft. (C)		95 ft. (D)		110 ft. (E)	
	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)
6	71	100,000										
8	67.5	88,500										
10	63.5	78,200	73	51,000								
12	60	70,200	70.5	51,000	76	40,000						
15	53.5	60,600	67	51,000	73	40,000	77	28,230				
20	42	46,100	60.5	46,600	68.5	38,810	73.5	28,230	76.5	20,000		
25	26.5	35,800	53.5	36,600	63.5	33,150	69.5	24,350	73.5	20,000	76.5	15,500
30			45.5	25,730	58.5	26,280	65.5	21,280	70.5	18,680	74	15,500
35			36.5	19,090	53	19,610	61.5	19,000	67.5	16,580	71.5	14,660
40			25	14,760	47	15,280	57.5	15,560	64	14,820	69	13,270
45					40.5	12,240	53	12,510	60.5	12,690	66	11,960
50					32.5	9,980	48	10,250	57	10,420	63	10,540
55					22.5	8,230	43	8,510	53	8,680	60	8,800
60							37	7,130	49	7,300	56.5	7,410
65							30	6,000	44.5	6,170	53.5	6,280
70							21	5,050	40	5,240	50	5,350
75									34.5	4,440	46	4,560
80									28	3,770	42	3,880
85									20	3,170	37.5	3,300
90											33	2,790
95											27	2,330
100											19	1,920


  


DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ = Stowed Jib, EJR = Erected Jib Retracted, EJE = Erected Jib Extended						
<b>SJ</b>	1,150 lbs.	780 lbs.	600 lbs.	490 lbs.	420 lbs.	360 lbs.
<b>EJR</b>	2,940 lbs.	2,650 lbs.	2,510 lbs.	2,420 lbs.	2,360 lbs.	2,320 lbs.
<b>EJE</b>	3,320 lbs.	2,910 lbs.	2,710 lbs.	2,580 lbs.	2,500 lbs.	2,430 lbs.



**NOTES:**

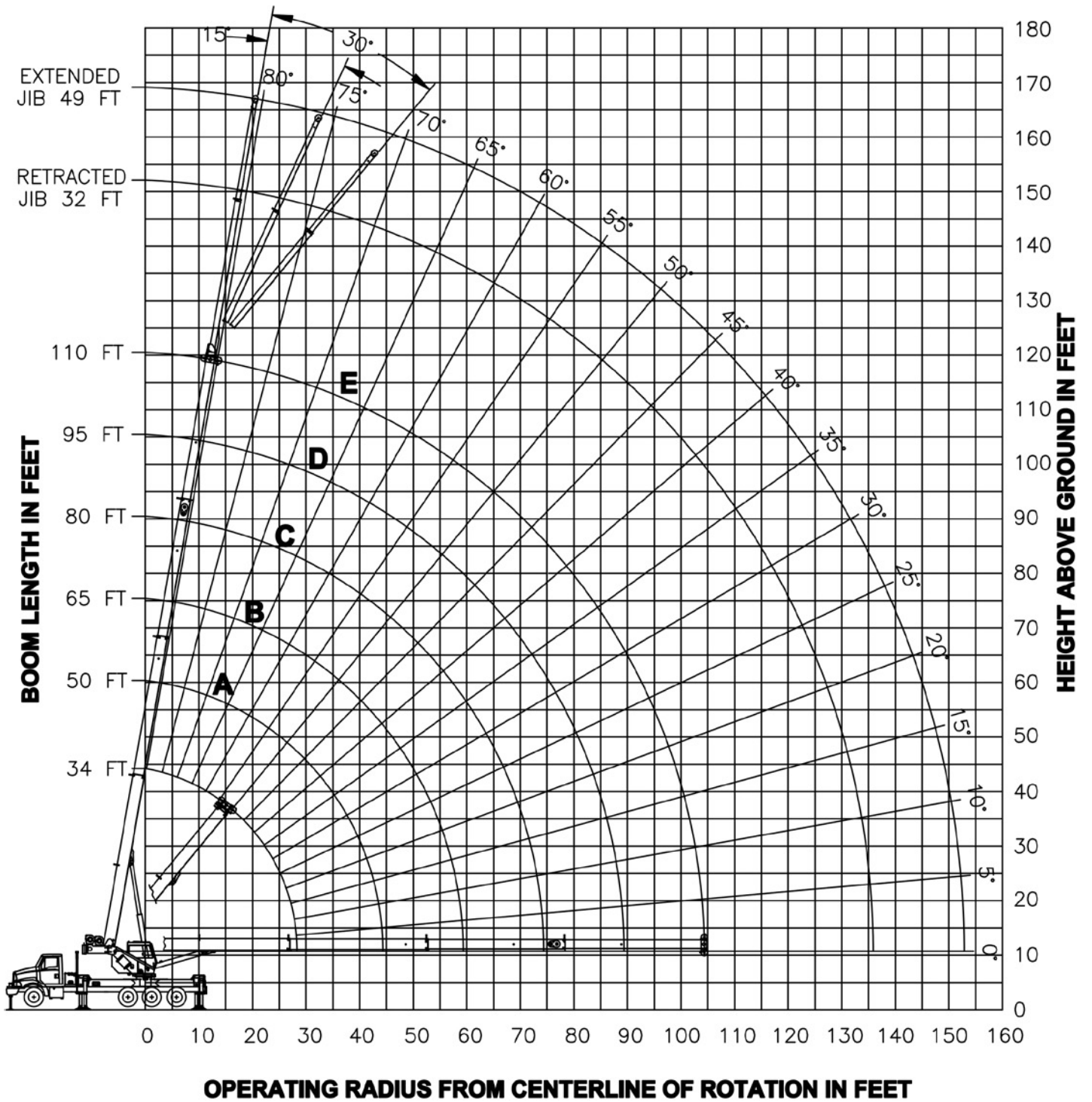
- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
35	76.5	7,300				
40	74.5	7,300				
45	72.5	7,300	76	6,500		
50	70.5	7,300	73.5	6,500	76	5,800
55	68.5	6,980	71.5	6,500	74	5,800
60	66.5	6,600	69.5	6,120	72	5,750
65	64	6,230	67	5,780	69.5	5,450
70	62	5,330	65	5,450	67	5,160
75	59.5	4,520	62.5	4,930	64.5	4,900
80	57	3,830	60	4,200	62	4,500

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
85	54.5	3,240	57.5	3,570	59.5	3,830
90	52	2,720	54.5	3,010	56.5	3,250
95	49	2,260	51.5	2,530	53.5	2,730
100	46	1,860	48.5	2,090	50.5	2,260
105	43	1,490	45.5	1,700	47	1,840
110	39.5	1,170	42	1,350	43.5	1,460
115	35.5	870	38	1,020	39	1,110
120					34.5	790
125						
130						

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


# 50110S BOOM DIAGRAM




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

# 50110SHL LOAD CHART: Main Boom and Jib

Lifting Capacities 4-section Boom 34 ft. - 110 ft.  
1 or 2-section Jib 32 ft. - 49 ft. - Full Outrigger Extension

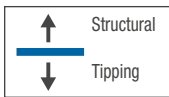
 23.2 ft. (7,1 m) (100%)

 360°

MAIN BOOM LMI CODE #3												
 (ft.)	34 ft.		50 ft. (A)		65 ft. (B)		80 ft. (C)		95 ft. (D)		110 ft. (E)	
	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)	Loaded Boom Angle (deg)	Load Capacity (lbs.)
6	71	100,000										
8	67.5	88,500										
10	63.5	78,200	73	51,000								
12	60	70,200	70.5	51,000	76	40,000						
15	53.5	60,600	67	51,000	73	40,000	77	28,230				
20	42	48,400	60.5	46,600	68.5	38,810	73.5	28,230	76.5	20,000		
25	26.5	37,400	53.5	38,300	63.5	33,150	69.5	24,350	73.5	20,000	76.5	15,500
30			45.5	30,700	58.5	29,000	65.5	21,280	70.5	18,680	74	15,500
35			36.5	24,440	53	24,960	61.5	19,000	67.5	16,580	71.5	14,660
40			25	19,170	47	19,680	57.5	16,870	64	14,820	69	13,270
45					40.5	15,980	53	15,120	60.5	13,330	66	11,960
50					32.5	13,240	48	13,510	57	12,050	63	10,850
55					22.5	11,110	43	11,400	53	10,920	60	9,950
60							37	9,720	49	9,880	56.5	9,210
65							30	8,340	44.5	8,520	53.5	8,410
70							21	7,200	40	7,380	50	7,490
75									34.5	6,420	46	6,530
80									28	5,590	42	5,710
85									20	4,880	37.5	5,000
90											33	4,380
95											27	3,830
100											19	3,340


  


DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ = Stowed Jib, EJR = Erected Jib Retracted, EJE = Erected Jib Extended						
<b>SJ</b>	1,150 lbs.	780 lbs.	600 lbs.	490 lbs.	420 lbs.	360 lbs.
<b>EJR</b>	2,940 lbs.	2,650 lbs.	2,510 lbs.	2,420 lbs.	2,360 lbs.	2,320 lbs.
<b>EJE</b>	3,320 lbs.	2,910 lbs.	2,710 lbs.	2,580 lbs.	2,500 lbs.	2,430 lbs.



**NOTES:**

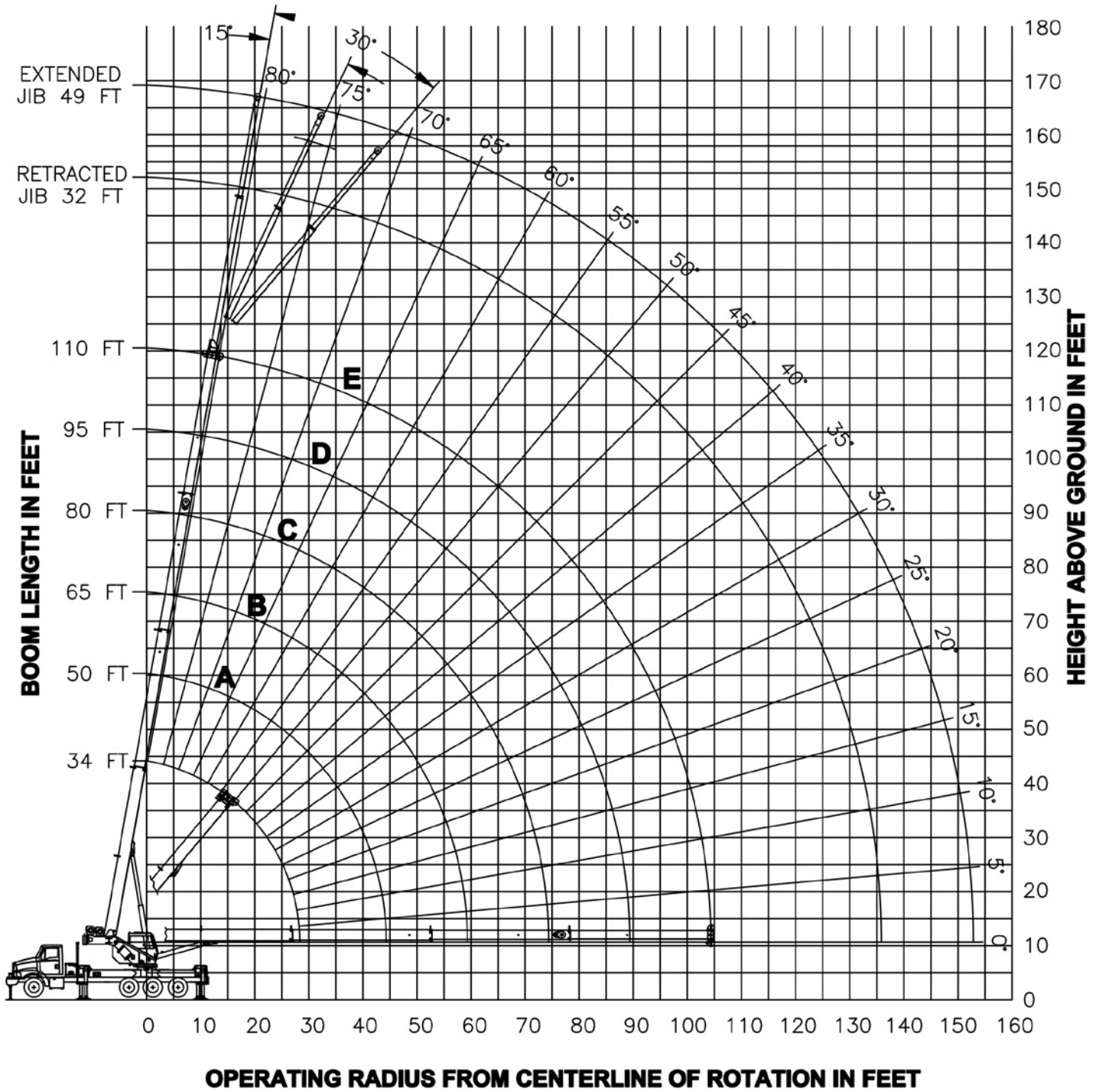
- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

32 ft. RETRACTED JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
35	76.5	7,300				
40	74.5	7,300				
45	72.5	7,300	76	6,500		
50	70.5	7,300	73.5	6,500	76	5,800
55	68.5	6,980	71.5	6,500	74	5,800
60	66.5	6,660	69.5	6,120	72	5,750
65	64	6,230	67	5,780	69.5	5,450
70	62	5,870	65	5,450	67	5,160
75	59.5	5,530	62.5	5,160	64.5	4,900
80	57	5,110	60	4,880	62	4,670
85	54.5	4,690	57.5	4,630	59.5	4,450

32 ft. RETRACTED JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
90	52	4,280	54.5	4,400	56.5	4,250
95	49	3,760	51.5	4,030	53.5	4,070
100	46	3,270	48.5	3,510	50.5	3,680
105	43	2,830	45.5	3,040	47	3,180
110	39.5	2,440	42	2,620	43.5	2,730
115	35.5	2,080	38	2,230	39	2,320
120	31.5	1,760	34	1,880	34.5	1,940
125	26.5	1,460	29	1,560	29	1,580
130	20.5	1,190	22	1,250	20	1,230
135	10	930				

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


# 50110SHL BOOM DIAGRAM



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


# 50128S LOAD CHART: Main Boom and Jib

Lifting Capacities 4-section Boom 38.5 ft. - 128 ft.

 23.2 ft. (7.07 m) (100%)

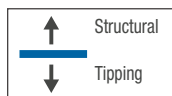
 360°

1 or 2-section Jib 32 ft. - 49 ft. - Full Outrigger Extension

MAIN BOOM LMI CODE #3																
 (ft.)	38.5 ft.		53 ft. (A)		66 ft. (B)		78 ft. (C)		91 ft. (D)		103 ft. (E)		116 ft. (F)		128 ft. (G)	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
6	73.5	100,000														
8	70.5	86,600														
10	67	76,400	74.5	51,000	78	51,000										
12	64	68,400	72.5	51,000	76.5	51,000	79	41,710								
15	59	59,000	68.5	51,000	73.5	46,650	77	37,880	79	30,000						
20	49.5	47,670	62.5	45,700	69	39,300	73	32,140	76	26,010	78.5	22,790				
25	38.5	36,900	56	37,680	64	33,450	69	27,890	72.5	22,620	75.5	20,160	78	17,660		
30	23.5	27,090	49.5	28,290	59	28,850	65	24,230	69.5	20,000	72.5	18,080	75.5	16,060	77.5	13,000
35			41.5	20,960	54	21,480	61	21,310	66	17,710	70.5	16,070	73	14,480	75.5	12,760
40			32	16,200	48	16,700	56.5	16,990	62.5	15,740	67.5	14,360	70.5	13,050	73	11,760
45			18.5	12,830	42	13,350	52	13,630	59	13,840	64	12,900	68	11,780	71	10,800
50					34.5	10,860	46.5	11,140	55	11,340	60.5	11,480	65	10,640	68.5	10,000
55					25	8,930	41	9,220	50.5	9,420	57	9,550	62	9,660	66	9,130
60					7	7,350	35	7,690	46.5	7,890	53.5	8,020	59	8,130	63.5	8,200
65							27	6,440	41.5	6,650	50	6,780	56	6,880	60.5	6,950
70							16	5,390	36.5	5,610	46	5,740	53	5,850	58	5,920
75									30	4,740	41.5	4,870	49.5	4,970	55	5,050
80									22	3,980	37	4,120	46	4,230	52	4,300
85									7	3,330	31.5	3,480	42.5	3,580	49	3,650
90											25	2,910	38	3,020	46	3,090
95											15.5	2,390	33.5	2,520	42	2,590
100													28.5	2,070	38.5	2,150
105													21.5	1,670	34	1,760
110													7.5	1,290	29.5	1,400
115															23.5	1,070
120															15	770


  


DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ = Stowed Jib, EJ R = Erected Jib Retracted, EJE = Erected Jib Extended								
<b>SJ</b>	1,230 lbs.	890 lbs.	720 lbs.	610 lbs.	520 lbs.	460 lbs.	410 lbs.	370 lbs.
<b>EJR</b>	2,840 lbs.	2,620 lbs.	2,500 lbs.	2,430 lbs.	2,370 lbs.	2,330 lbs.	2,300 lbs.	2,280 lbs.
<b>EJE</b>	3,170 lbs.	2,860 lbs.	2,700 lbs.	2,600 lbs.	2,520 lbs.	2,460 lbs.	2,410 lbs.	2,380 lbs.



**NOTES:**

- All loads rated at 360° pick
- 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

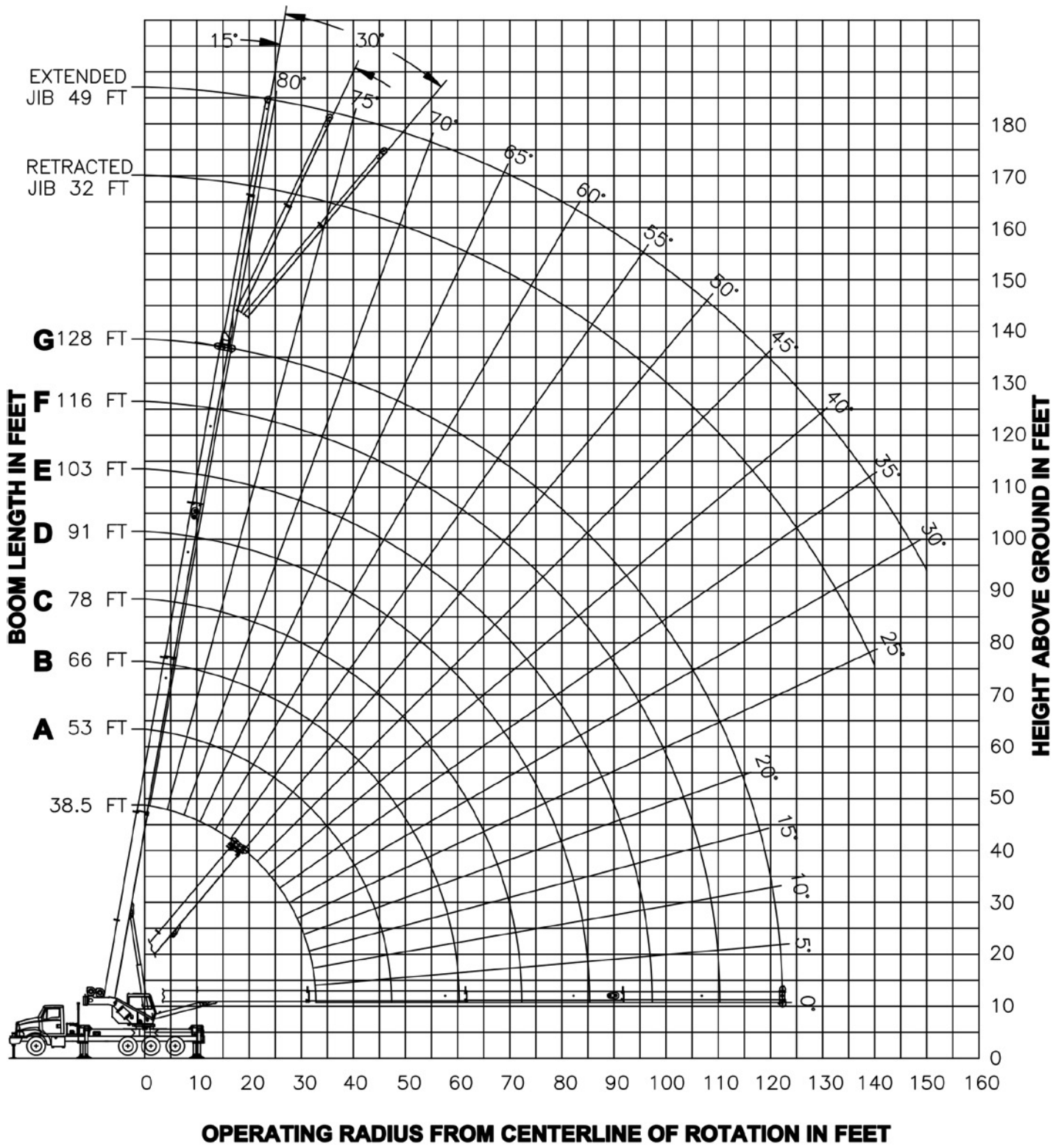
JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
35	78	5,400				
40	76.5	5,400	79.5	5,400		
45	75	5,400	78	5,400		
50	73.5	5,400	76.5	5,400	79	5,400
55	72	5,400	74.5	5,400	77	5,400
60	70	5,400	73	5,400	75	5,400
65	68.5	5,400	71	5,400	73	5,240
70	66.5	5,210	69	5,230	71.5	4,990
75	64.5	4,740	67	4,970	69.5	4,750

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
80	62.5	4,140	65	4,570	67.5	4,520
85	60.5	3,490	63	3,890	65	4,220
90	58	2,920	61	3,280	63	3,580
95	55.5	2,410	58.5	2,740	60.5	3,010
100	53	1,970	56	2,270	58	2,500
105	50.5	1,570	53.5	1,840	55.5	2,040
110	48	1,210	50.5	1,450	52.5	1,630
115	45.5	880	48	1,100	49.5	1,260
120					46.5	910

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# 50128S BOOM DIAGRAM




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

# 50128SHL LOAD CHART: Main Boom and Jib

Lifting Capacities 4-section Boom 38.5 ft. - 128 ft.  
1 or 2-section Jib 31 ft. - 55 ft. - Full Outrigger Extension

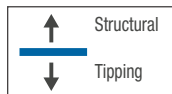
 23.2 ft. (7.07 m) (100%)

 360°

MAIN BOOM LMI CODE #3																
 (ft.)	38.5 ft.		53 ft. (A)		66 ft. (B)		78 ft. (C)		91 ft. (D)		103 ft. (E)		116 ft. (F)		128 ft. (G)	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
6	73.5	100,000														
8	70.5	86,600														
10	67	76,400	74.5	51,000	78	51,000										
12	64	68,400	72.5	51,000	76.5	51,000	79	41,710								
15	59	59,000	68.5	51,000	73.5	46,650	77	37,880	79	30,000						
20	49.5	47,700	62.5	45,700	69	39,300	73	32,140	76	26,010	78.5	22,790				
25	38.5	38,300	56	38,400	64	33,450	69	27,890	72.5	22,620	75.5	20,160	78	17,660		
30	23.5	30,200	49.5	31,590	59	29,140	65	24,230	69.5	20,000	72.5	18,080	75.5	16,060	77.5	13,000
35			41.5	23,590	54	24,100	61	21,310	66	17,710	70.5	16,070	73	14,480	75.5	12,760
40			32	18,360	48	18,860	56.5	19,150	62.5	15,740	67.5	14,360	70.5	13,050	73	11,760
45			18.5	14,670	42	15,190	52	15,470	59	14,050	64	12,900	68	11,780	71	10,800
50					34.5	12,460	46.5	12,740	55	12,620	60.5	11,610	65	10,640	68.5	10,000
55					25	10,350	41	10,630	50.5	10,830	57	10,500	62	9,890	66	9,130
60					7	8,620	35	8,960	46.5	9,160	53.5	9,290	59	8,970	63.5	8,320
65							27	7,590	41.5	7,800	50	7,930	56	8,030	60.5	7,570
70							16	6,440	36.5	6,660	46	6,790	53	6,900	58	6,910
75									30	5,700	41.5	5,840	49.5	5,940	55	6,010
80									22	4,880	37	5,020	46	5,130	52	5,200
85									7	4,140	31.5	4,310	42.5	4,420	49	4,490
90											25	3,690	38	3,800	46	3,870
95											15.5	3,130	33.5	3,260	42	3,330
100													28.5	2,770	38.5	2,850
105													21.5	2,330	34	2,410
110													7.5	1,920	29.5	2,020
115															23.5	1,660
120															15	1,330


DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SJ = Stowed Jib, EJR = Erected Jib Retracted, EJE = Erected Jib Extended


SJ	1,230 lbs.	890 lbs.	720 lbs.	610 lbs.	520 lbs.	460 lbs.	410 lbs.	370 lbs.
EJR	2,840 lbs.	2,620 lbs.	2,500 lbs.	2,430 lbs.	2,370 lbs.	2,330 lbs.	2,300 lbs.	2,280 lbs.
EJE	3,170 lbs.	2,860 lbs.	2,700 lbs.	2,600 lbs.	2,520 lbs.	2,460 lbs.	2,410 lbs.	2,380 lbs.



**NOTES:**

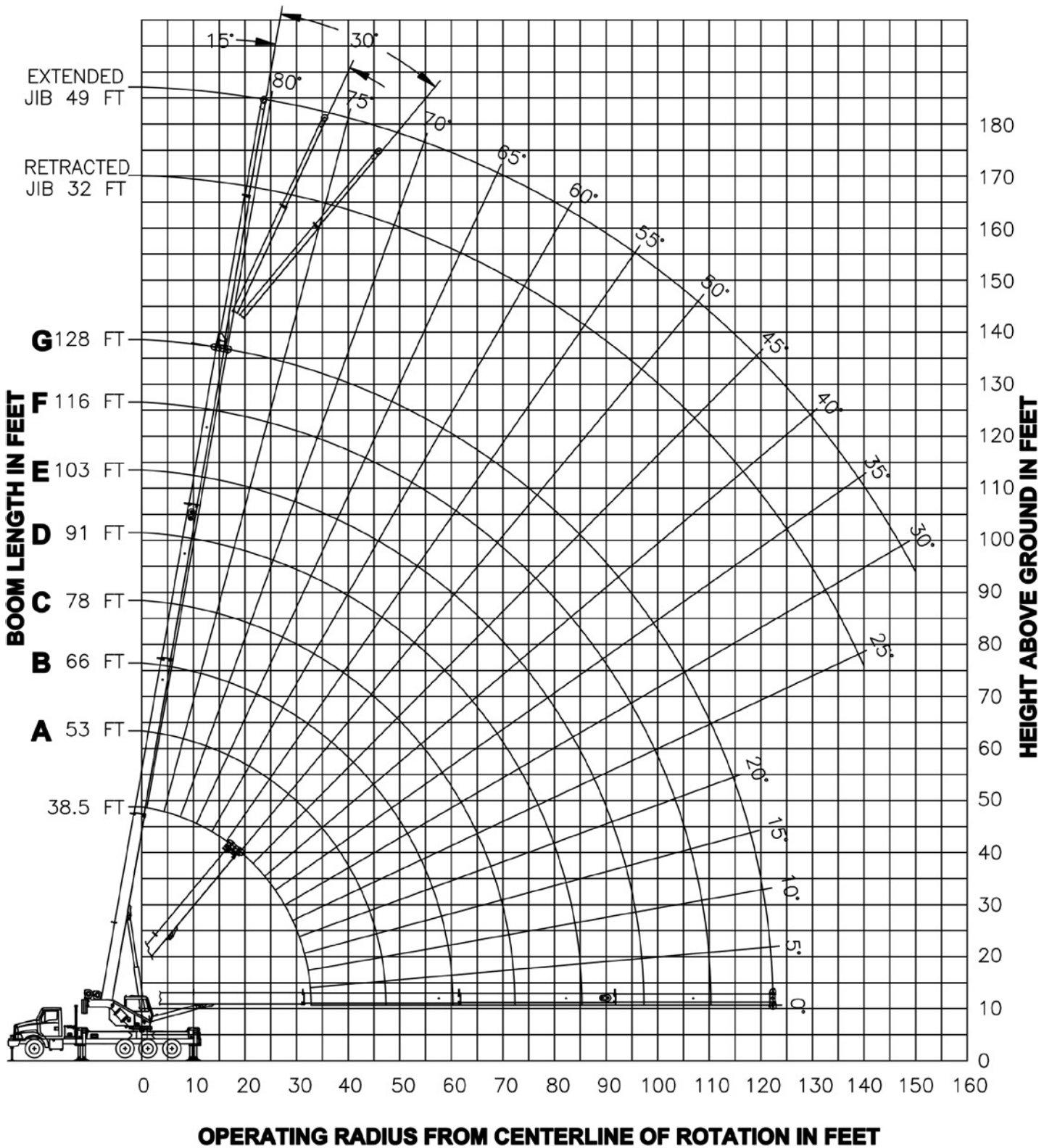
- All loads rated at 360° pick
- Loads based on crane on outriggers
- All "on outriggers" loads are based on 85% tipping
- Loads above heavy line are based on structural rating
- Loads below heavy line are based on tipping rating

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	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
55	72	5,400	74.5	5,400	77	5,400
60	70	5,400	73	5,400	75	5,400
65	68.5	5,400	71	5,400	73	5,240
70	66.5	5,210	69	5,230	71.5	4,990
75	64.5	4,740	67	4,970	69.5	4,750

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
80	62.5	4,300	65	4,570	67.5	4,520
85	60.5	3,890	63	4,140	65	4,310
90	58	3,510	61	3,740	63	3,930
95	55.5	3,150	58.5	3,360	60.5	3,540
100	53	2,660	56	2,960	58	3,170
105	50.5	2,220	53.5	2,490	55.5	2,700
110	48	1,830	50.5	2,080	52.5	2,250
115	45.5	1,480	48	1,700	49.5	1,850
120	42.5	1,160	45	1,350	46.5	1,480
125	39.5	860	42	1,030	43	1,130

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


# 50128SHL BOOM DIAGRAM




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


# 50155S LOAD CHART: Main Boom and Jib


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

 23.2 ft. (7,1 m) (100%)

 360°

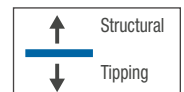
MAIN BOOM LMI CODE #3																				
 (ft.)	38.5 ft.		63 ft. (A)		74 ft. (B)		86 ft. (C)		97 ft. (D)		109 ft. (E)		120 ft. (F)		132 ft. (G)		143 ft. (H)		155 ft. (I)	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
6	73.5	100,000																		
8	70.5	85,400																		
10	67	75,100	77	40,000																
12	64	67,100	75	40,000	78	37,700														
15	58.8	57,700	72.5	40,000	75.5	36,340	78.5	31,000												
20	49	46,070	67.5	38,250	72	33,380	75	28,200	77.5	24,120										
25	38	35,280	62.5	35,040	67.5	30,620	71.5	25,970	74.5	22,200	77	18,000	79	16,260						
30	22.5	27,920	57	29,140	63	28,020	68	23,950	71	20,480	74	17,000	76.5	15,280	78	13,500	79.5	11,500		
35			51.5	21,500	58.5	21,830	64	22,080	68	18,670	71.5	15,920	74	14,270	76	12,900	77.5	11,300	79	9,000
40			45	16,460	54	16,770	60.5	17,010	65	17,170	68.5	14,700	71.5	13,310	74	12,000	75.5	11,000	77	9,000
45			38	12,910	48.5	13,220	56.5	13,220	61.5	13,610	65.5	13,570	69	12,410	71.5	11,300	73.5	10,460	75.5	9,000
50			29.5	10,280	43	10,590	52	10,820	58	10,970	62.5	11,100	66	11,180	69	10,550	71.5	9,460	73.5	8,800
55			17	8,210	37	8,560	47.5	8,790	54	8,940	59.5	9,060	63.5	9,150	67	9,220	69.5	8,880	71.5	8,320
60					29	6,940	42.5	7,180	50	7,320	56	7,440	60.5	7,530	64.5	7,600	67.5	7,650	69.5	7,700
65					19	5,600	37	5,860	46	6,010	53	6,130	57.5	6,210	62	6,280	65	6,330	67.5	6,380
70							30.5	4,760	41.5	4,920	49	5,040	54.5	5,120	59	5,190	62.5	5,240	65.5	5,290
75							22.5	3,830	36.5	3,990	45.5	4,120	51.5	4,200	56.5	4,270	60.5	4,320	63.5	4,360
80							7.5	2,990	30.5	3,200	41.5	3,330	48	3,410	53.5	3,480	58	3,530	61.5	3,570
85									23.5	2,510	37	2,640	44.5	2,730	50.5	2,800	55.5	2,850	59	2,890
90									12	1,880	32	2,040	41	2,130	47.5	2,200	52.5	2,250	57	2,300
95											25.5	1,510	36.5	1,610	44.5	1,680	50	1,730	54.5	1,770
100											17	1,030	32	1,140	41	1,210	47	1,260	52	1,310
105																	44	850	49.5	890
DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SFJ = Stowed Fixed Jib, STJ = Stowed Telescopic Jib																				
SFJ	960 lbs.		590 lbs.		500 lbs.		430 lbs.		390 lbs.		340 lbs.		310 lbs.		280 lbs.		260 lbs.		240 lbs.	
STJ	2,620 lbs.		2,270 lbs.		2,190 lbs.		2,130 lbs.		2,130 lbs.		2,050 lbs.		2,020 lbs.		1,990 lbs.		1,970 lbs.		1,950 lbs.	

JIB LOAD CAPACITIES						
 (ft.)	0° Offset Code - #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
40	80	4,000				
45	78	4,000				
50	77.5	4,000	80	4,000		
55	75.5	4,000	78	4,000		
60	74	4,000	76.5	4,000	80	4,000
65	72.5	4,000	75	4,000	78	4,000
70	71	4,000	73.5	4,000	76	4,000
75	69.5	4,000	72	4,000	74.5	3,880
80	68	4,000	71	3,940	73	3,730

JIB LOAD CAPACITIES						
 (ft.)	0° Offset		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
85	66.5	3,360	69.5	3,780	71.5	3,570
90	65	2,750	67.5	3,350	70	3,430
95	63.5	2,210	66	2,760	68	3,230
100	61.5	1,740	64.5	2,250	66.5	2,670
105	60	1,310	62.5	1,780	65	2,170
110	58	930	61	1,370	63	1,720
115			59	990	61	1,310
120					59	940
125						

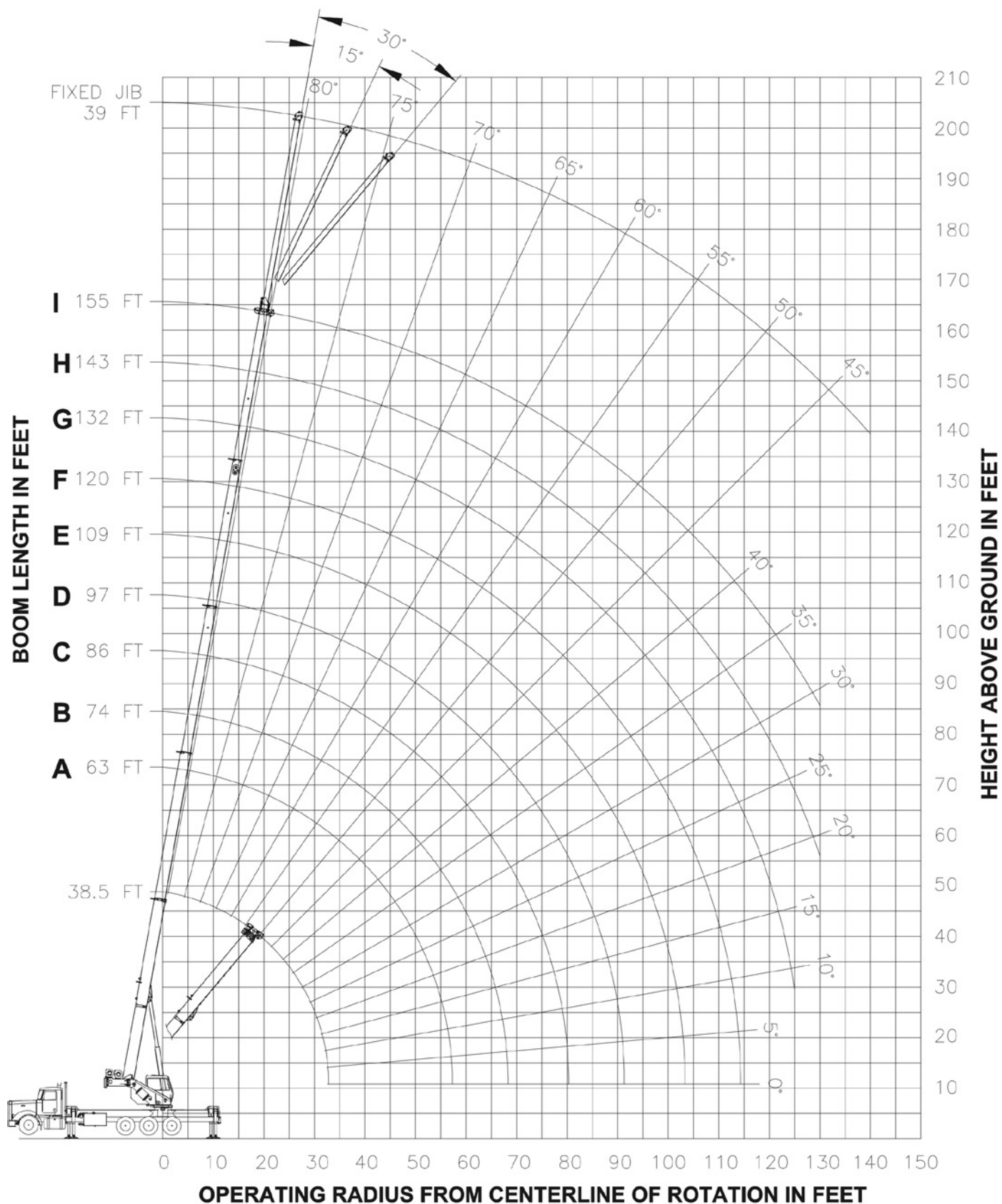
**NOTES:**

- All loads rated at 360° pick
- 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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# 50155S BOOM DIAGRAM




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

# 50155SHL LOAD CHART: Main Boom and Jib

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


 23.2 ft. (7.07 m) (100%)


 360°

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

**DEDUCTIONS FROM MAIN BOOM CAPACITIES FOR STOWED JIBS - SFJ = Stowed Fixed Jib, STJ = Stowed Telescopic Jib**

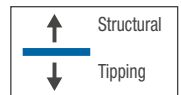
SFJ	960 lbs.	590 lbs.	500 lbs.	430 lbs.	390 lbs.	340 lbs.	310 lbs.	280 lbs.	260 lbs.	240 lbs.
STJ	2,620 lbs.	2,270 lbs.	2,190 lbs.	2,130 lbs.	2,130 lbs.	2,050 lbs.	2,020 lbs.	1,990 lbs.	1,970 lbs.	1,950 lbs.

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
40	80	4,000				
45	78	4,000				
50	77.5	4,000	80	4,000		
55	75.5	4,000	78	4,000		
60	74	4,000	76.5	4,000	80	4,000
65	72.5	4,000	75	4,000	78	4,000
70	71	4,000	73.5	4,000	76	4,000
75	69.5	4,000	72	4,000	74.5	3,880
80	68	4,000	71	3,940	73	3,730
85	66.5	3,860	69.5	3,780	71.5	3,570

JIB LOAD CAPACITIES						
 (ft.)	0° Offset - Code #8		15° Offset - Code #10		30° Offset - Code #12	
	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)	Loaded Boom Angle (deg)	Full 360° (lbs.)
90	65	3,720	67.5	3,630	70	3,430
95	63.5	3,240	66	3,480	68	3,290
100	61.5	2,700	64.5	3,210	66.5	3,160
105	60	2,230	62.5	2,700	65	3,030
110	58	1,800	61	2,230	63	2,590
115	56	1,410	59	1,810	61	2,140
120	54.5	1,060	57	1,430	59	1,730
125			55	1,080	57	1,350
130					55	1,000

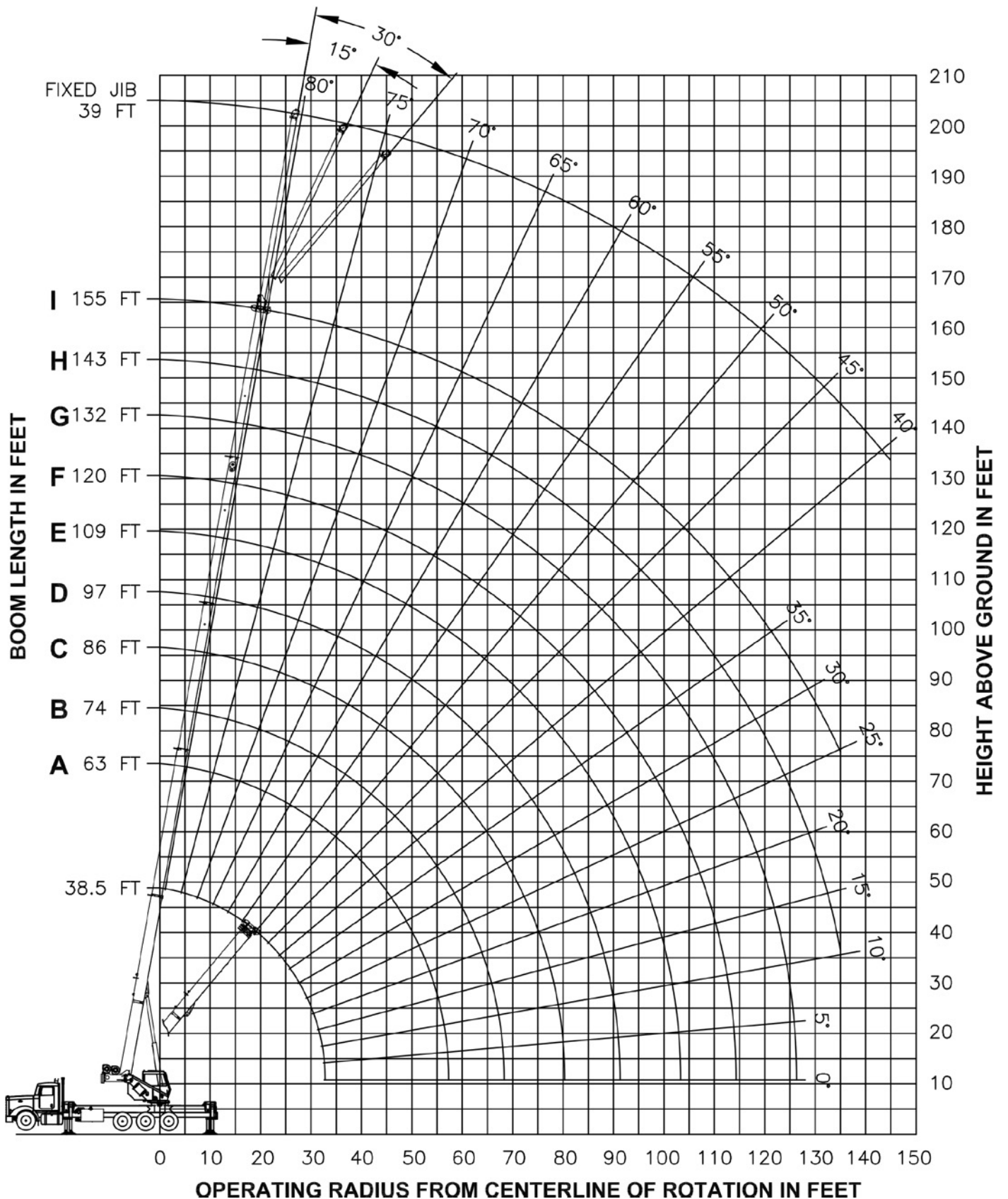
**NOTES:**

- All loads rated at 360° pick
- 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



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

# 50155SHL BOOM DIAGRAM

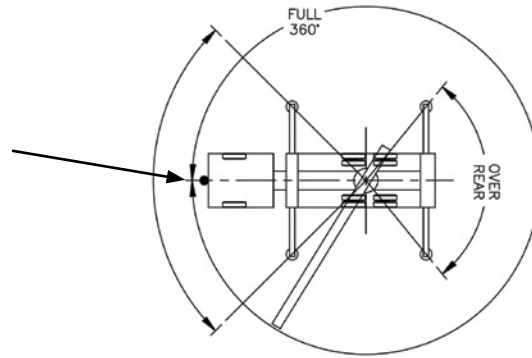


Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

# 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.

If a front bumper stabilizer was not supplied, then the front tires must be in contact with the ground 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.

# LMI OPERATING CODES

Code	Crane Configuration	Outrigger Configuration	Area of Operation
#3	Main Boom	Fully Extended	Full 360°
#5	Main Boom	Fully Retracted	Full 360°
#8	Retracted Jib 0° Offset	Fully Extended	Full 360°
#10	Retracted Jib 15° Offset	Fully Extended	Full 360°
#12	Retracted Jib 30° Offset	Fully Extended	Full 360°

# REEVING DIAGRAM

ALLOWABLE LINE PULL										<b>WARNING</b>
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	



# 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)

5-sheave quick reeve boom point

Self lubricating slider pads



Boom max. tip height 5096: 153.3 ft. (50,9 m)

Boom max. tip height 50110: 167.1 ft. (51,2 m)

Boom max. tip height 50128: 184.8 ft. (56,3 m)

Boom max. tip height 50155: 202.4 ft. (61,7 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



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 and FBS setup

## Operator aids



Wired LMI with crane function cut-offs for overload protection, wired anti-two block system, graphical display, event recorder, WADS - Work Area Definition System

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



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



Load block: 5T (4.5 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)

3-section vane pump, SAE C input

Hydraulic reservoir capacity: 115 gal. (435 L)

Pump sections @ 2000 rpm with 100 psi

- Shaft end pump: 41.67 gpm (158 lpm)
- Center pump: 28.3 gpm (107 lpm)
- Cover end pump: 11.7 gpm (44 lpm)

## Tiltable Cab/Cab Controls



Standard features:

Curved glass, 0° to 20° cab tilt, Automotive door, heated cloth seat, 8 seat adjustments, lumbar support and adjustable head rest, sliding windows, rear pop out window, top hinged hatch, standard diesel fired heater, retractable sun screen, 12 volt DC outlet, E-coated cab (10 year rust warranty)



Controls:

PLC crane controller, CANBUS communication, J1939 truck engine communication capability, electronic hand and foot throttle, Hirschmann/PAT iScout D3 LMI system

# OPTIONS

## Boom

### Max. Boom Length



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



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

## Bulkhead

24 in. (607 mm) bulkhead

## Hoist, Rope and Hook

- Rooster sheave
- Wireline options available
- 2nd overhaul ball available
- 3rd wrap limiter main and auxiliary winch



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

## Boom

### Max. Tip Height



- 5096S
  - Max. tip height: 105.2 ft. (32,1 m)
- 50110S & 50110SHL
  - Max. tip height: 119 ft. (36,3 m)
- 50128 S & 50128SHL
  - Max tip height: 131.9 ft. (40,2 m)
- 50155S & 50155SHL
  - Max. tip height: 163.4 ft. (49,8 m)

### Jibs

- 5096S, 50110S, 50128S
  - 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)

### Max. Tip Height with Extension



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

## Hydraulics



Hose reel – boom mounted.  
Front Bumper Stabilizer (FBS)





# TC500

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



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

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