



Grove Manitowoc National Crane Potain



Grove YB5515-2

Provisional Product Guide

ASME B30.5
Imperial 85%



Features

- 13,6 t (15 USt) capacity
- 12,5 m (41 ft) three-section, full-power synchronized boom
- 9,1 t (10 USt) deck carrying capacity
- Load sensing piston pump with hydraulic proportional controls



Features



The reach and capacity to get the job done

The standard three-section boom offers 4,6 m – 12,5m (15 ft – 41 ft) of reach with a max tip height of 14,2 m (46.5 ft). The optional four-section boom offers 5,4 m – 15,4m (17.8 ft – 50.0 ft) of reach that can be enhanced with the optional 4,6 m (15 ft) swingaway extension to provide a total max tip height of 20,4 m (67 ft).



Outriggers

The YB5515-2 outriggers are two-position (0° and 100°) beam/jack style outriggers with inverted jack cylinders and pivoting pad.



Steering

The YB5515-2 comes standard with three steering modes: front (two-wheel), four-wheel coordinated, and four-wheel crab steer with electronic self alignment. Operators can choose between modes via three-position rocker switch located on dash panel.

Operator cab

New operator control layout with hydraulic proportional joystick controls, tilt steering wheel, and automotive dash panel gauges and indicator lights.





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Specifications

Superstructure

Boom

4,6 m – 12,5 m (15 ft – 41 ft) three-section, full-power, synchronized, telescopic boom.

Maximum tip height: 14,2 m (46.5 ft)

*Optional Boom

5,4 m – 15,4 m (17.8 ft – 50 ft) four-section, full-power, synchronized, telescopic boom.

Maximum tip height: 16,5 m (54 ft)

*Optional boom extensions

4,6 m (15 ft) fixed swingaway extension

Maximum tip height with standard boom: 18,1m (59.5 ft)

Maximum tip height with optional boom: 20,4 m (67 ft)

Boom extension can be offset 0°, -15°, and -30° via pivoting boom nose on the optional boom.

Boom nose

Fixed two-sheave quick reeve boom nose with standard 12,5 m (41 ft) boom.

Two-sheave, quick reeve type with-3- pinned pivoting (0°, +40°, and +80°) boom nose design to minimize head space requirements. With optional boom only. Lowers head height 0,4 m (1.3 ft) when nose is pivoted fully forward.

Boom elevation

Single double acting hydraulic cylinder with integral holding valve. Elevation: 0° to 69°

Anti-two block device

Standard anti-two block device (hardwired), which, when activated, provides an audible and visual warning to the operator and “locks out” all functions whose movement can cause two-blocking.



Load Moment Indicator

A simple, effective, and easy to use load moment indicating system used in conjunction with the anti-two block system to assist the operator in efficient operation of the unit within the limits of the load chart. The display panel displays the max. load allowed, the actual hook load, length and angle of the boom, and load radius in Dot Matrix numerical values and provides a load utilization colored bar graph. Inputs by operator are maximum allowed load and parts of line. If non-permitted conditions are approached the L.M.I. will warn the operator with an audible alarm and a warning light and will lock out those functions that may aggravate the condition.



* Optional Load Moment Indicator

“Graphics Display” of boom angle, boom length, load radius, and capacity. Operator input to set the limit parameters based on the load chart. Displays color coded light bar and audible alarm with function cut-out if load exceeds the load chart parameters.



Swing

Ball bearing swing circle with 360° continuous rotation. Worm gear and pinion driven by hydraulic motor. Spring applied, hydraulic released brake. Equipped with swing enable control. Maximum speed: 2.5 rpm



Hydraulic system

One pressure compensated variable displacement axial piston pump, with load sensing.

Maximum output of: 155 LPM (41.0 GPM)

Maximum operating pressure: 276 bars (4000 p.s.i.)

Four section valve bank, chassis mounted, operated via dash mounted pilot pressure hydraulic joystick controllers.

140L (37 gal) steel hydraulic reservoir with sight level gauge and steel side plating to guard against side impact.

Return line replaceable filter with by-pass protection and service indicator. Cartridge filter rating of 3 micron.



Specifications



Hoist specifications

Two speed gear motor driven hoist with automatic spring applied / hydraulically released wet brake. Smooth drum with cable follower.

Maximum hoist pull (first layer): 63,6 kN (14,300 lb)

Maximum permissible single line pull:
44,5 kN (10,000 lb.) (3.5:1 design factor)

Maximum single line speed: 64 m/min (210 fpm)

Rope construction: 6 x 19 XXIPS / IWRC

Rope diameter: 14 mm (9/16 in)

Rope length: 97,5 m (320 ft)

Carrier



Chassis

High strength alloy frame constructed with integral outrigger housings; front and rear lifting, tie-down, and towing lugs. 66.3 sq. ft. carry deck size with 9072 kg (20,000 lb) deck only carrying capacity. Deck coated with anti-skid treatment.



Outriggers

Single stage hydraulic telescoping beam with oblique style jack cylinder on all four corners. Provides extended and down and retracted and down lifting capabilities.

Integral holding valve on both beam and jack.

Outrigger positioning indicator located in dash display.

Outrigger pad size: 222 mm x 254 mm
(8.75 in x 10 in)

Maximum outrigger pad load: 15 876 kg (35,000 lb)



Outrigger controls

Independent outrigger control rocker switches for beam or jack selection with a separate extend /retract rocker selector switch. 360° level bubble located inside cab.



Engine (Tier IV)

Cummins QSB 3.3L four cylinder / turbo-charged diesel rated at 75kW (100 hp) at 2600 rpm. Includes std. 120V engine block heater and air intake "Grid" heater. Engine hourmeter located in dash display. Alternator: 120 amp.

Maximum Torque: 414Nm (305 ft/lb).

Fuel requirements: Maximum of 15 ppm sulphur content. Requires "Ultra Low" sulphur diesel fuel.

NOTE: Tier IV required for sale in North America and European Union countries.



Engine (Tier III)

Cummins QSB 3.3L four cylinder / turbo-charged diesel rated at 74kW (99 hp) at 2600 rpm. Includes std. 120V engine block heater and air intake "Grid" heater. Engine hourmeter located in dash display. Alternator: 90 amp. Maximum Torque: 415Nm (306 ft/lb)

NOTE: Required for sale outside of North America and European Union countries.



Fuel tank capacity

Steel with side impact plate. Capacity: 151.4L (40 gal).



Transmission

Powershift with four speeds forward and four reverse. Steering column mounted shifter.



Operators control station

Frame mounted, open air style control station with cab shell includes all crane functions and driving controls and equipped with overhead safety glass. Other standard equipment includes a suspension seat with seat belt, sight level bubble and 1.1kg (2.5 lb) fire extinguisher, and tilt steering wheel. The dash panel will display the fuel level gauge, water temperature gauge, engine rpm, battery voltage, and hourmeter. Indicator lights will display parking brake, low transmission pressure, low brake pressure, outrigger position, headlights, work lights (if ordered), and hoist 3rd wrap (if ordered). Crane function indicator and turn signal indicators are also included. The load indicator display will be mounted on the top of the dash panel for direct line of sight for the operator.



Specifications



*Operators control station enclosed

Includes the standard cab shell and all controls and indicators noted above, with the addition of front, rear, and right side glass, a split (two-piece) hinged door with sliding glass, front windshield wiper and washer, hot water heater and defroster with fan and cab dome light.



Electrical system

One heavy duty maintenance free 12V battery, 820CCA at 0°F



Drive

Two-wheel (front-wheel) as standard with four-wheel-drive as an option. Drive axles supplied with planetary hubs and limited slip differential.



Steer

Standard three steering modes. Front (two wheel), four wheel coordinated, and four wheel crab steer with electronic self realignment. Three position rocker switch located on dash panel.

Outside Turning Radius:

Two wheel steer: 6,2m (20 ft. 4.8 in.)

Four wheel steer: 3,9m (13 ft. 1.0 in.)



Suspension/axles

Front: Drive / steer in both two wheel drive and four wheel drive

Rear: non-drive with steer in two wheel drive, drive/steer in four wheel drive

Front axle is rigid mounted to frame.

Rear axle offers 1.5° of oscillation



Brakes

Hydraulic actuated internal wet-disc service brake acting on each drive wheel. Dash mounted rocker switch with indicator light for activating or release of the dry disc parking brake mounted on the transmission output yoke.



Tires

Tubeless type, semi-aggressive tread, 12.00R20.



Lights

Full LED lighting includes turn indicators, head, tail, brake, and hazard warning lights recessed mounted.



Maximum speed

33.8 km/h (21.0 mph)



Gradeability (theoretical)

68%.....(to drive train stall) NO LOAD

40%.....(to drive train stall) with 9072 kg

(20,000 lb) DECK LOAD

Gross vehicle weight (G.V.W.)

13 488 kg (29,735 lb) basic unit with Tier IV engine.

Miscellaneous standard equipment

18t (20 USt) two sheave low profile “galvanize coated” hookblock with “quick reeve design”. Back-up motion alarm; outrigger motion alarm; non-skid decking; front and rear lifting, towing, and tie-down lugs.

*Optional equipment

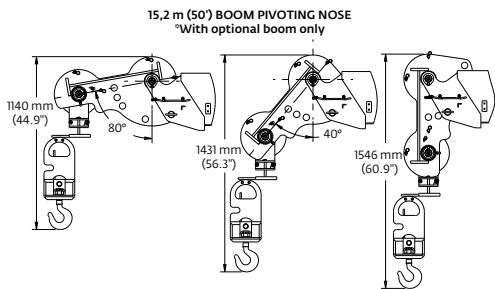
- ▶ AUXILIARY LIGHTING: Includes cab mounted amber flashing light and dual base boom mounted LED work lights.
- ▶ CONVENIENCE PACKAGE: Includes front and rear pintle hitch, dual rear view mirrors, head and tail lightmetal mesh grille covers.
- ▶ ENCLOSED CAB PACKAGE: Includes heater and defroster, cab dome light, all window glass, and two-piece split door.
- ▶ FOUR WHEEL DRIVE
- ▶ Below deck hydraulic tow winch with 4536 kg (10,000 lb) capacity.
- ▶ 4,6 m (15 ft) fixed boom extension
- ▶ Air conditioning (enclosed cab option required)
- ▶ Hoist third wrap indicator with hoist function cut-out
- ▶ Hoist drum rotation indicator
- ▶ 360° swing lock
- ▶ C.E. compliant package

**Denotes optional equipment*

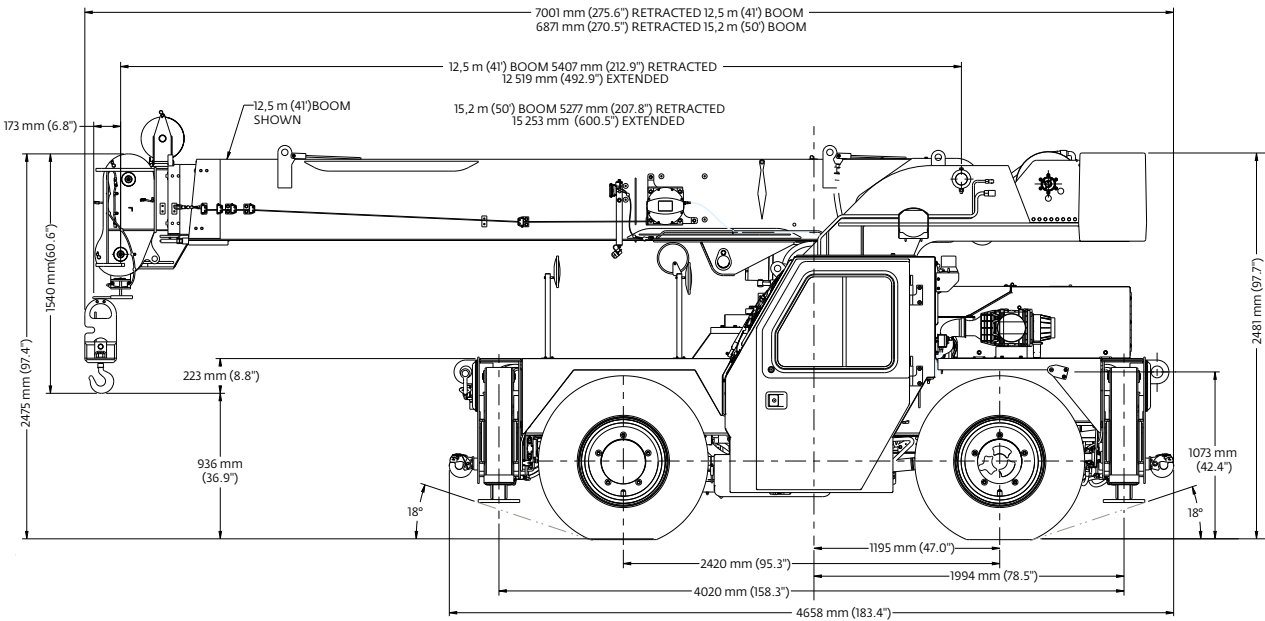
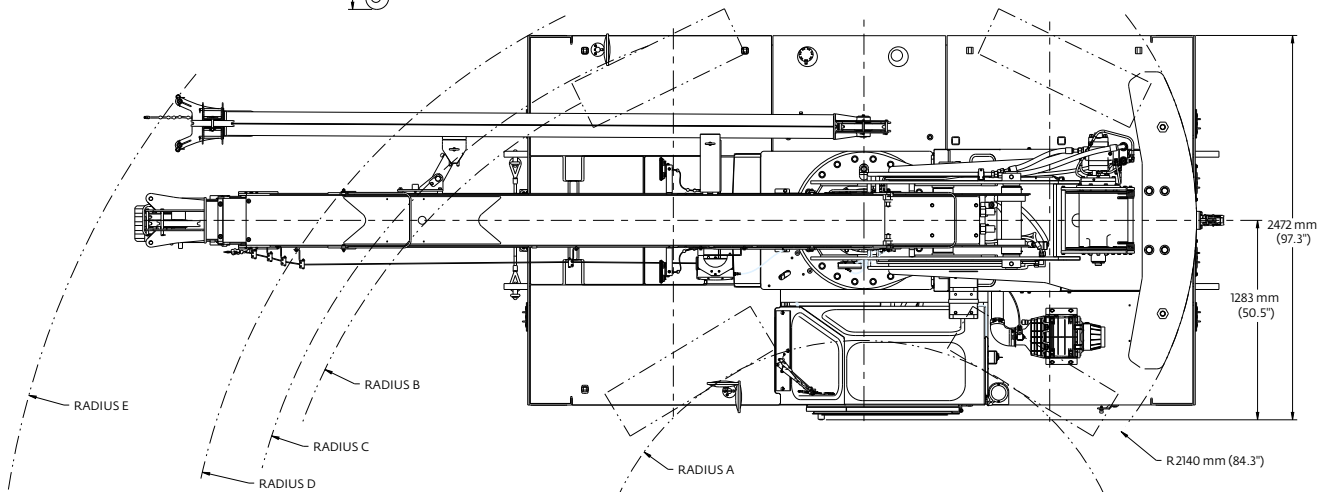


Dimensions

Dimensions						
	A	B	C	D	E 12.5 m (41 ft) boom	E 15,2 m (50 ft) boom
Two-wheel steer	3375 mm (11 ft 1 in)	6058 mm (19 ft 10.5 in)	6218 mm (20 ft 4.8 in)	6675 mm (21 ft 10.8 in)	7750 mm (25 ft 5 in)	7662 mm (25 ft 2 in)
Four-wheel steer	1722 mm (5 ft 8 in)	3841 mm (12 ft 7 in)	3993 mm (13 ft 1 in)	4481 mm (14 ft 8 in)	5572 mm (18 ft 3 in)	5478 mm (18 ft 0 in)

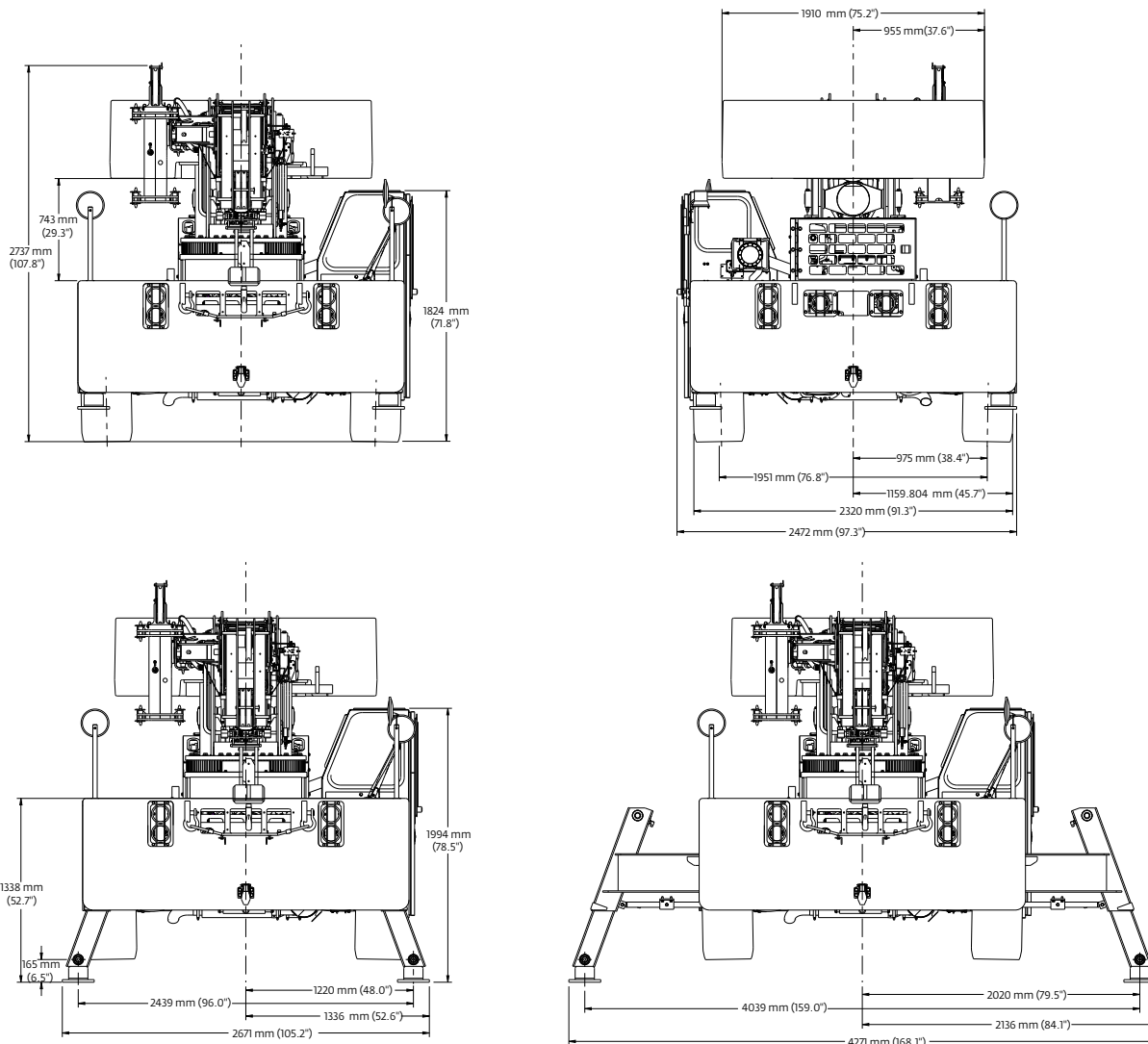


Dimensions are shown in mm (in).





Dimensions and weights



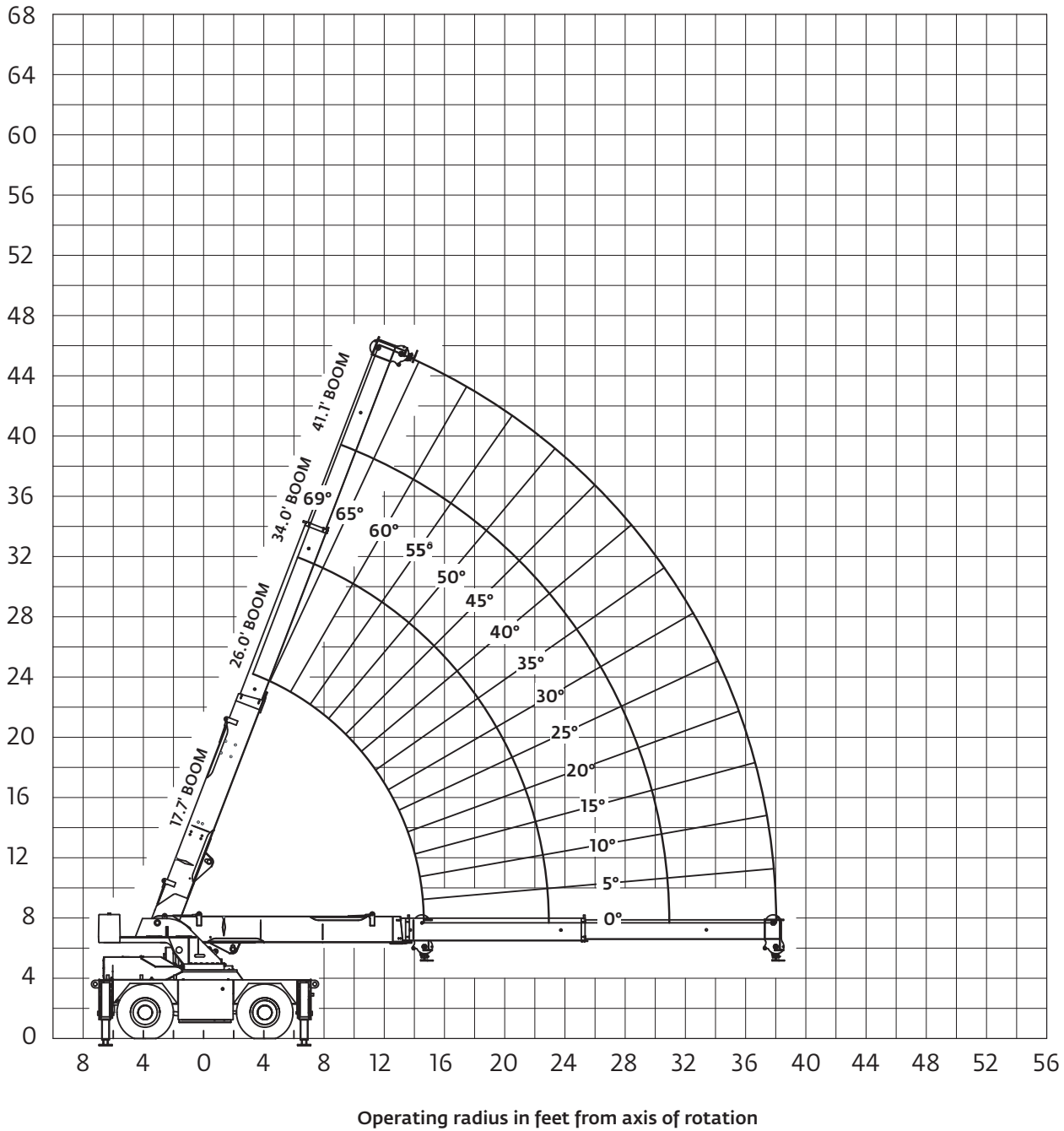
Weights

	GVW		Front		Rear	
	kg	lb	kg	lb	kg	lb
Basic machine: Including 12,5 m (41 ft) main boom, main hoist with 97,5 m (320 ft) of wire rope, 18 t (20 USt) hook block, full counterweight, Tier IV engine	13 488	29,735	5817	12,823	7671	16,912
Add: enclosed cab, heater and glass	84,8	187	37,1	82	47,6	105
Crane weight	13 573	29,922	5854	12,905	7719	17,017
Basic machine: Including 12,5 m (41 ft) main boom, main hoist with 97,5 m (320 ft) of wire rope, 18 t (20 USt) hook block, full counterweight, Tier IV engine	13 488	29,735	5817	12,823	7671	16,912
Add: 4,6 m (15 ft) fixed swingaway extension and extension carrier brackets and downhaul weight	178	394	271	598	-93	-204
Crane weight	13 666	30,129	6088	13,421	7578	16,708
Basic machine: Including 12,5 m (41 ft) main boom, main hoist with 97,5 m (320 ft) of wire rope, 18 t (20 USt) hook block, full counterweight, Tier IV engine	13 488	29,735	5817	12,823	7671	16,912
Add: 5,4 m - 15,4 m (17.8 ft - 50 ft) four-section full-power boom	435	961	363	802	72	159
Crane weight	13 923	30,696	6180	13,625	7743	17,071



Working range

Working range: 5,5 m -12,5 m (18 ft - 41 ft) boom (standard)



Height from the ground in feet

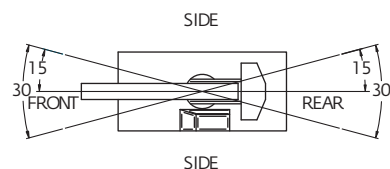
Operating radius in feet from axis of rotation



Load chart

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Extended and Down 360° or Retracted and Down Front/Rear								
Radius (ft)	17.7 ft BOOM		26 ft BOOM		34 ft BOOM		41.1 ft BOOM	
	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)
6	65	30,000	—	—	—	—	—	—
8	57	26,850	68.5	26,400	—	—	—	—
10	48	22,300	63.5	21,000	—	—	—	—
12	37.5	18,600	58.5	17,500	67	17,000	—	—
14	21.5	15,000	53	14,900	63	14,000	68.5	13,350
14.7	0	13,500	51	13,500	61.5	13,250	67.5	13,100
16	—	—	46.5	12,250	59	12,400	65.5	12,450
18	—	—	40	11,000	55	11,200	63	11,350
20	—	—	31.5	9200	50.5	9550	59	9680
22	—	—	19.5	7400	45.5	8300	55.5	8450
22.9	—	—	0	6900	43.5	7750	54	7750
24	—	—	—	—	40.5	7100	52	7340
26	—	—	—	—	34.5	6000	48	6450
28	—	—	—	—	27	5300	44	5730
30	—	—	—	—	16.5	4500	39.5	5120
30.9	—	—	—	—	0	4100	38	4850
32	—	—	—	—	—	—	34.5	4620
34	—	—	—	—	—	—	29	4180
36	—	—	—	—	—	—	21	3800
37.9	—	—	—	—	—	—	0	3480

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°								
Radius (ft)	17.7 ft BOOM		26 ft BOOM		34 ft BOOM		41.1 ft BOOM	
	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)
6	65	26,000	—	—	—	—	—	—
8	57	19,500	68.5	17,940	—	—	—	—
10	48	13,630	63.5	12,890	—	—	—	—
12	37.5	9730	58.5	9920	67	9500	—	—
14	21.5	7390	53	7720	63	7680	68.5	7440
14.7	0	6810	51	6800	61.5	6850	67.5	6850
16	—	—	46.5	6165	59	6310	65.5	6200
18	—	—	40	5030	55	5200	63	5250
20	—	—	31.5	4190	50.5	4350	59	4420
22	—	—	19.5	3530	45.5	3690	55.5	3770
22.9	—	—	0	3280	43.5	3450	54	3550
24	—	—	—	—	40.5	3160	52	3240
26	—	—	—	—	34.5	2730	48	2810
28	—	—	—	—	27	2370	44	2450
30	—	—	—	—	16.5	2080	39.5	2140
30.9	—	—	—	—	0	1950	38	1910
32	—	—	—	—	—	—	34.5	1880
34	—	—	—	—	—	—	29	1650
36	—	—	—	—	—	—	21	1460
37.9	—	—	—	—	—	—	0	1290



1) The rated loads are the maximum lift capacities as determined by operating radius, boom length and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. Retracted outrigger loads meet ASME B30.5-2011. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered part of the load. See above.

4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.

5) Ratings on rubber depend on 12.00R20 tire capacity, condition of tires and proper inflation pressure (130 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front. Do not use jib with crane on rubber.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum deck load only is 20,000 lb. Combined boom and deck loads are not permitted on rubber.

8) Do not induce any external side loads to boom or jib.

NOTES:
SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

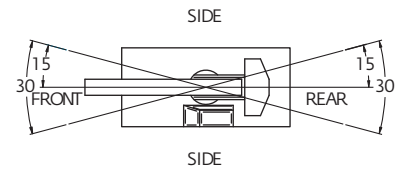
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



Load chart

MAIN BOOM ON RUBBER		
Any Boom Length		
Radius (ft)	Front Rating (lb)	360° Rating (lb)
6	17,800	15,650
8	14,600	11,400
10	11,800	9,720
12	9,550	8,590
14	8,010	6,710
14.7	7,500	5,750
16	6,930	5,390
18	5,610	4,400
20	4,730	3,630
22	3,960	3,080
22.9	3,650	2,850
24	3,300	2,585
26	2,860	2,255
28	2,530	1,980
30	2,310	1,760
30.9	2,100	1,650
32	2,035	1,540
34	1,875	1,375
36	1,650	1,260
37.9	1,450	1,100

**NOTES:**

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

1) The rated loads are the maximum lift capacities as determined by operating radius, boom length and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. Retracted outrigger loads meet ASME B30.5-2011. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered part of the load. See above.

4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.

5) Ratings on rubber depend on 12.00R20 tire capacity, condition of tires and proper inflation pressure (130 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front. Do not use jib with crane on rubber.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum deck load only is 20,000 lb. Combined boom and deck loads are not permitted on rubber.

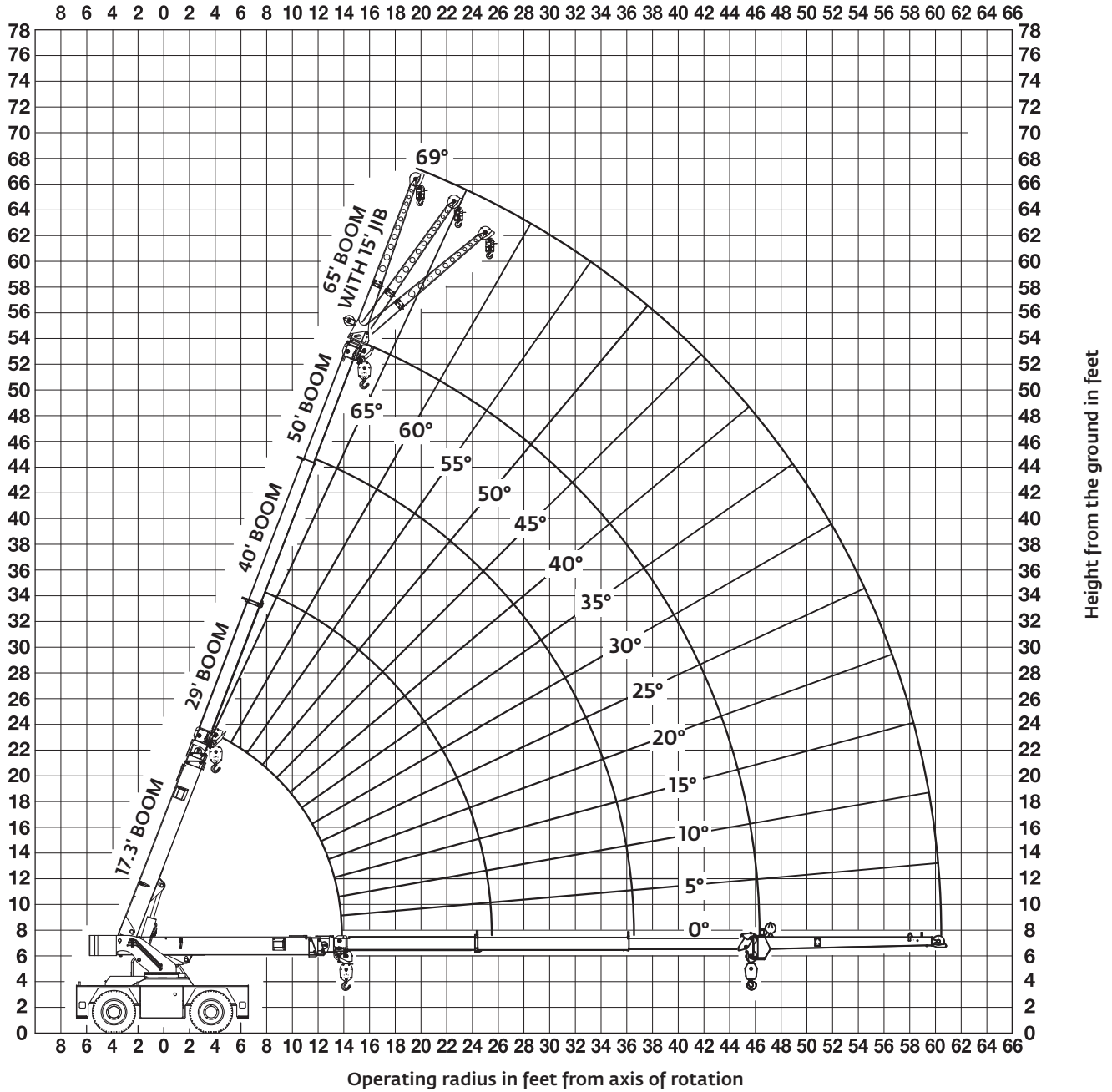
8) Do not induce any external side loads to boom or jib.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.



Working range

Working range: 5,4 m - 15,4 m (17.8 ft - 50 ft) (optional)



THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



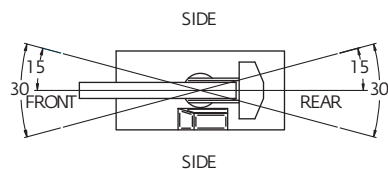
Load chart

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Extended and Down 360° or Retracted and Down Front/Rear

Radius (ft)	17.3 ft BOOM		29 ft BOOM		40 ft BOOM		50 ft BOOM	
	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)
6	64.5	30,000	-	-	-	-	-	-
8	56.5	25,760	-	-	-	-	-	-
10	47	21,270	67	16,950	-	-	-	-
12	36	18,050	62.5	16,950	-	-	-	-
14.2	0	13,100	57.5	15,520	67.5	15,520	-	-
16	-	-	53	12,420	65	12,420	-	-
18	-	-	47.5	10,990	61.5	10,990	68.5	10,990
20	-	-	41	9830	58	9800	66	9830
22	-	-	34	8600	54.5	8670	63	8700
24	-	-	25	7400	51	7490	60.5	7500
25.9	-	-	0	6480	47	6580	58	6620
28	-	-	-	-	42.5	5770	55	5800
30	-	-	-	-	38	5130	52	5160
32	-	-	-	-	32.5	4510	49	4620
34	-	-	-	-	25.5	4120	45.5	4160
36	-	-	-	-	16	3710	42	3710
36.9	-	-	-	-	0	3620	40.5	3590
38	-	-	-	-	-	-	38	3410
40	-	-	-	-	-	-	34	3040
42	-	-	-	-	-	-	29	2760
44	-	-	-	-	-	-	23	2410
46.9	-	-	-	-	-	-	0	2110

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°

Radius (ft)	17.3 ft BOOM		29 ft BOOM		40 ft BOOM		50 ft BOOM	
	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)
6	64.5	30,000	-	-	-	-	-	-
8	56.5	25,760	-	-	-	-	-	-
10	47	18,600	67	16,950	-	-	-	-
12	36	13,400	62.5	13,300	-	-	-	-
14.2	0	10,000	57.5	10,400	67.5	9970	-	-
16	-	-	53	8550	65	8500	-	-
18	-	-	47.5	7050	61.5	7150	68.5	6950
20	-	-	41	5920	58	6030	66	5910
22	-	-	34	5040	54.5	5160	63	5060
24	-	-	25	4330	51	4450	60.5	4390
25.9	-	-	0	3780	47	3900	58	3860
28	-	-	-	-	42.5	3390	55	3370
30	-	-	-	-	38	2980	52	2970
32	-	-	-	-	32.5	2630	49	2630
34	-	-	-	-	25.5	2330	45.5	2340
36	-	-	-	-	16	2060	42	2080
36.9	-	-	-	-	0	1960	40.5	1970
38	-	-	-	-	-	-	38	1850
40	-	-	-	-	-	-	34	1650
42	-	-	-	-	-	-	29	1470
44	-	-	-	-	-	-	23	1310
46.9	-	-	-	-	-	-	0	1100



1) The rated loads are the maximum lift capacities as determined by operating radius, boom length and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. Retracted outrigger loads meet ASME B30.5-2011. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered part of the load. See above.

4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.

5) Ratings on rubber depend on 12.00R20 tire capacity, condition of tires and proper inflation pressure (130 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front. Do not use jib with crane on rubber.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum deck load only is 20,000 lb. Combined boom and deck loads are not permitted on rubber.

8) Do not induce any external side loads to boom or jib.

NOTES:
SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



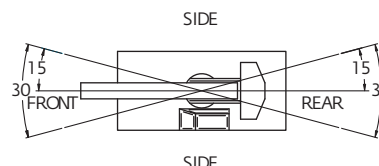
Load chart

MAIN BOOM ON RUBBER		
Any Boom Length		
Radius (ft)	Front Rating (lb)	360° Rating (lb)
6	17,800	15,550
8	14,350	11,500
10	11,450	8950
12	9790	7420
14.2	8170	6030
16	7020	5350
18	6210	4450
20	5540	3670
22	4830	3050
24	4160	2640
25.9	3630	2220
28	3280	1960
30	2910	1650
32	2600	1400
34	2320	1170
36	2080	990
36.9	1980	900
38	1900	820
40	1700	670
42	1520	510
44	1370	420
46.9	1160	-

NOTES:
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



15 FT FIXED JIB CAPACITIES ON EXTENDED OUTRIGGERS						
Main Boom Angle (deg)	Jib Offset Angle					
	0 deg		15 deg		30 deg	
	To 40 ft Main Boom	To 50 ft Main Boom	To 40 ft Main Boom	To 50 ft Main Boom	To 40 ft Main Boom	To 50 ft Main Boom
69	7500	7020	5480	5280	3950	3950
65	7180	5670	4890	4510	3690	3690
60	6000	4770	4440	3940	3510	3510
55	5180	4130	4100	3520	3400	3210
50	4580	3440	3830	3170	3220	2970
45	4040	2860	3620	2680	3130	2580
40	3490	2440	3270	2320	3070	2250
35	3080	2120	2930	2040	2860	2000
30	2770	1890	2660	1830	2630	1810
25	2540	1710	2470	1670	-	-
20	2370	1570	2320	1550	-	-
15	2240	1480	2220	1460	-	-
10	2160	1410	-	-	-	-
5	2120	1380	-	-	-	-
0	2110	1370	-	-	-	-

1) The rated loads are the maximum lift capacities as determined by operating radius, boom length and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. Retracted outrigger loads meet ASME B30.5-2011. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper training must all be taken into account by the operator.

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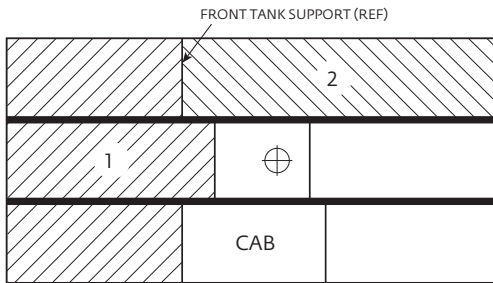
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



Rigging chart

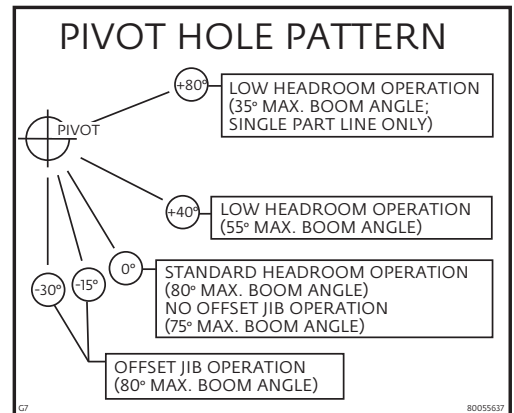
LOAD DISTRIBUTION CHART



Maximum Allowable Uniformly Distributed Load

AREA 1	4.01 m ² (43.2 sq ft)	5985 kg (13,195 lb)
AREA 2	2.15 m ² (23.1 sq ft)	3087 kg (6805 lb)
TOTAL	6.16 m ² (66.3 sq ft)	9072 kg (20,000 lb)

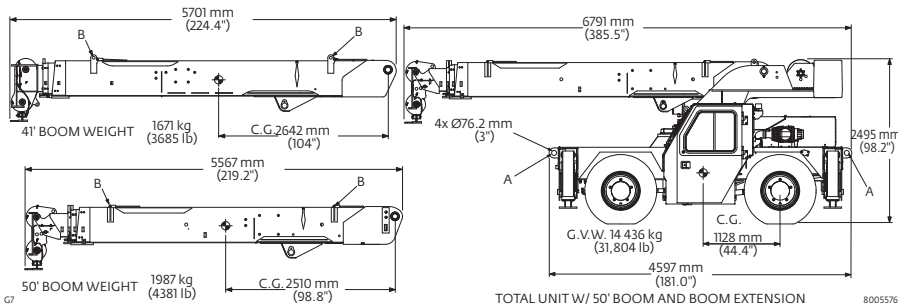
1. Maximum travel speed with any or all loads - 4.0 km/h (2.5 MPH)
2. Loads to be transported on smooth level firm surfaces only.
3. Boom must be retracted and in center forward position.
4. Any combination or total of areas 1 & 2 may be used.
5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
6. Rated pick and carry loads may be transported on deck area 1 provided the load is cribbed directly on the frame rails.



TRANSPORTATION AND LIFTING DATA - YB5515-2

1. LIFTING OF ENTIRE CRANE OR MAJOR CRANE ASSEMBLIES MUST BE ACCOMPLISHED BY UTILIZING SPECIFIC FITTINGS INDICATED ON ADJACENT CHART. USE OF FITTINGS FOR PURPOSES OTHER THAN THOSE DESIGNATED ON CHART IS PROHIBITED. FITTING CAPACITIES ARE MAXIMUM ALLOWABLE LOADS PER INDIVIDUAL FITTING.
2. RIGGING PERSONNEL SHALL BE RESPONSIBLE FOR PROPER SELECTION AND PLACEMENT OF ALL SLINGS AND LOAD HANDLING DEVICES.
3. DIMENSIONS AND WEIGHTS SHOWN ARE ESTIMATED FOR LARGEST CONFIGURATION AVAILABLE. WEIGHTS DO NOT INCLUDE BOOM EXTENSION AND/OR JIB, UNLESS OTHERWISE INDICATED.
4. RIGGING PERSONNEL SHALL VERIFY DIMENSIONS AS REQUIRED FOR CLEARANCE.
5. DO NOT USE COUNTERWEIGHT LIFT LOCATIONS OR BOOM SLING POINT FOR LIFTING OR TIE DOWN OF ENTIRE CRANE.

FITTING	NO. / UNIT	BOOM CWT		CAPACITY-TONNES [TONS]					
		LIFT	TOW	LIFT	LIFT	TIE DOWN			
						FORE & AFT	SIDE	DOWN	
A	4	X	X	X	9.1 [10]	27.2 [30]	27.2 [30]	0.9 [1]	27.2 [30]
B	4			X	1.8 [2]				



RIGGING CHART	
<p>1-PART 0-7500 lb</p>	<p>4-PART 0-30,000 lb</p>
<p>WIRE ROPE: 9/16" Diameter 6 X 19 Bright Minimum required breaking strength = 37,000 lb</p>	

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 10,000 LB

RATING REDUCTIONS FOR LOAD HANDLING DEVICES INSTALLED (lb)		
	FROM MAIN BOOM	FROM JIB
MAIN BLOCK	356*	NOT APPLICABLE
HOOK & BALL	105*	105
JIB STOWED	NO REDUCTION	NOT APPLICABLE
15' JIB DEPLOYED	700	NO REDUCTION

* Refer to rating plate for actual weight

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



Symbols glossary



Axles



Counterweight



Grade



Outriggers



Boom



Drive



Heavy duty jib



Radius



Boom elevation



Electrical system



Hoist



Rotation



Boom extension



Engine



Hookblock



Speed



Boom length



Extension



Hydraulic system



Steering



Boom nose



Frame



Lights



Suspension



Brakes



Fuel tank capacity



Oil



Swing



Cab



Gear



Outrigger controls



Tires



Transmission



Notes



Notes



Notes



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