



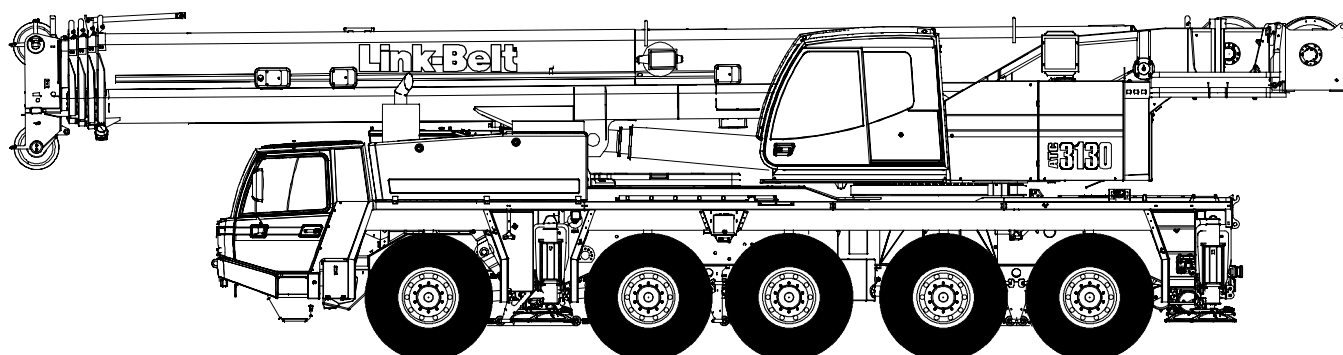
Technical Data

Specifications & Capacities

ATC 3130

Telescopic Boom All Terrain Crane

130 ton (117.9 metric ton)



CAUTION: This material is supplied for reference use only. Operator must refer to in-cab Crane Rating Manual and Operator's Manual to determine allowable crane lifting capacities and assembly and operating procedures.



5477 (supersedes 5468) – 0506 – P4



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Boom, Attachments, and Upper Structure

■ Boom

Design – Five section, formed construction of extra high tensile steel consisting of one base section and four telescoping sections. The two plate design of each section has multiple longitudinal bends for superior strength. Each telescoping section extends independently by means of one double-acting, single stage hydraulic cylinder with an integrated holding valve.

Boom

- 42.7–170.6 ft (13.0–52.0m) five section boom
- Four pinned positions of 0%, 46%, 92%, and 100% on each boom section provide twenty-six extend combinations for superior capacities when varying the extension of the telescoping sections, controlled from the operator's cab.
- Integral boom dolly connection
- Mechanical boom angle indicator
- Wind speed indicator
- Maximum tip heights for the following boom lengths are:

Boom Length (Pinned Positions)		Tip Height	
ft	m	ft	m
170.6	52.0	180.4	55.0
160.4	48.9	170.4	51.9
145.7	44.4	155.9	47.5
130.9	39.9	141.0	43.0
116.1	35.4	126.6	38.6
101.4	30.9	111.8	34.1
86.6	26.4	97.4	29.7
71.9	21.9	82.6	25.2
57.1	17.4	68.1	20.8
42.7	13.0	53.3	16.2

Boom Head

- Seven 18.2 in (46.2cm) root diameter nylon sheaves to handle up to fourteen parts of line
- Easily removable wire rope guards
- Rope dead end lugs on one side of the boom head
- Boom head is designed for quick-reeve of the hook block

Boom Elevation

- One double acting hydraulic cylinder with integral holding valve
- Boom elevation: -2° to 82°

Auxiliary Lifting Sheave – Optional

- Single 18.2 in (46.2m) root diameter nylon sheave
- Easily removable wire rope guards

- Does not affect erection of the fly or use of the main head sheaves

Hook Blocks and Balls – Optional

- 27.6 ton (25.0mt) 1 sheave quick-reeve hook block with safety latch
- 69.4 ton (63.0mt) 3 sheave quick-reeve hook block with safety latch
- 130 ton (117.9mt) 7 sheave quick-reeve hook block with safety latch
- 11 ton (10.0mt) swivel hook ball with safety latch

Fly – Optional

- 31.2 ft–53.1 ft (9.5–16.2m) two piece telescoping lattice fly, stowable, offsettable to 0° , 20° , and 35° . Maximum tip height is 233 ft (71.0m).

Fly Extensions – Optional

- One 24.6 ft (7.5m) lattice extension, equipped with one 18.2 in (46.2cm) root diameter nylon sheave, to be mounted on the tip of the fly option. Total extension length is 79.1 ft (24.1m). Maximum tip height is 259 ft (78.9m).
- One 19.7 ft (6.0m) lattice extensions, to be mounted between tip of the fly option and 24.6 ft (7.5m) lattice extension option. Total extension length is 98.8 ft (30.1m). Maximum tip height is 278 ft (84.7m).

■ Upper Operator's Cab and Controls

Environmental Cab – Fully enclosed, one person cab of galvaneal steel structure with acoustical insulation.

Equipped with:

- Tilting interior where the operator's seat, joystick controllers, floor controls and pedals, and main console tilt with-in the cab
- Tinted and tempered glass windows
- Extra-large power up/power down front window with windshield wiper and washer
- Fixed roof window with windshield wiper
- Sliding left side door with large fixed window
- Fold out rear window for ventilation
- Fixed right side window
- Six way adjustable, cushioned seat with headrests, adjustable lumbar support, and seat belt
- Engine dependent warm-water heater with air ducts for front windshield defroster and cab floor
- AM/FM stereo with single disc CD player
- 12 volt and 24 volt power connections
- Engine hourmeter
- Rated capacity limiter override
- Adjustable sun visor
- Dome light
- Cup holder
- Fire extinguisher
- Left side viewing mirror
- Integral recessed cabwalks
- One position travel swing lock



Air Conditioning – Integral with cab heating system utilizing the same ventilation outlets

Armrest Controls – Two dual axis electronic joystick controllers for:

- Swing
- Boom hoist
- Boom telescope
- Main front winch
- Auxiliary rear winch – optional
- Counterweight handling
- Drum rotation indicator(s)
- Winch high/low speed and disable switch(es)
- Free swing/automatic swing brake switch
- Auxiliary winch/telescope/counterweight handling switch
- High speed function button
- Boom pinning location stop button
- Warning horn
- Carrier steering
- Carrier throttle
- Carrier turn indicator switch

Foot Controls

- Swing brake
- Engine throttle
- Carrier service brakes

Front Main Console – Controls and indicators for:

- Emergency shut down switch
- Central warning indication
- Carrier low air pressure indication
- Carrier turn indication
- Carrier operation from operator's cab switch
- Carrier park brake release switch
- Carrier transmission control (forward/reverse)
- Outrigger controls

Right Side Console – Controls and indicators for:

- Auxiliary winch disable switch
- Swing override switch
- Drum rotation indicator activation switch
- Telescopic override switches
- Engine shutdown switch
- Anti–two block override switch

Right Side Overhead Console – Controls and indicators for:

- Central lubrication system switch
- Boom and cab floodlights switches
- Top windshield wiper switch
- Front windshield wiper and washer switch
- Power up/power down front windshield switch
- Tilting interior switch
- Battery main shutoff switch
- Supplementary heater controls

Cockpit Graphic Control (CGC) – Ergonomically positioned on the front main console, digital instrumentation and control for crane operations including:

- Engine coolant temperature
- Electronic bubble level and levelness readout
- CAN–BUS diagnostic and engine electronic fault indicator
- Swing lock indicator
- Hydraulic oil and air cleaner filter indicator
- Hydraulic oil temperature
- Low engine oil pressure indicator
- Low voltage indicator
- Fuel level
- Carrier park brake indicator
- Suspension lock indicator
- Axle lift indicator
- Carrier engine start and stop
- Crane engine throttle
- Carrier steering
- Outrigger operation
- Outrigger force readout – optional

Rated Capacity Limiter – PAT iFlex color graphic audio–visual warning system integrated into the front main console with anti–two block and function limiter. Operating data available includes:

- Crane configuration
- Boom length and angle
- Boom head height
- Allowed load and % of allowed load
- Boom angle
- Radius of load
- Actual load
- Counterweight handling
- Wind speed
- Operator settable alarms (include):
 - Maximum and minimum boom angles
 - Maximum and minimum tip height
 - Maximum boom length
 - Left/right swing positions
 - Operator defined area (imaginary plane)

■ Swing

Motor/Planetary – Bi–directional hydraulic swing motor mounted to a planetary reduction unit for 360° continuous smooth swing at 1.7 rpm. Free swing capable when controller within the operator's cab is in the neutral position.

Swing Park Brake – 360°, electric over hydraulic, (spring applied/hydraulic released) multi–disc brake mounted on the reduction unit. Operated by a switch from the operator's cab.

Swing Brake – 360°, foot operated, hydraulic applied disc brake mounted to the reduction unit.

Swing Lock – One–position swing lock (boom over rear) operated from the operator's cab.



Automatic Swing Brake Mode – Swing brake applies when controller within the operator's cab is in the neutral position. Operated by a switch from the operator's cab.

360° Positive Swing Lock – Optional – Meets New York City requirement.

■ Central Lubrication System

Automated lubrication unit that injects grease into the turntable bearing, boom hoist cylinder pins, boom foot pin, and the main (front) and auxiliary (rear) winch. Operated by a switch from the operator's cab.

■ Electrical

Two batteries provide 24-volt operation and starting. CAN bus wiring and components, and integral self-test CSS (Control & Service System).

Swing Alarm – Audio warning device signals when the upper is swinging.

Lights

- Two working lights on front of the cab
- One rotating amber beacon on the right side of the main winch
- One boom floodlight on the boom base section
- Two side marker lights on the boom head

■ Hydraulic System

Main Pumps

- Two variable displacement piston pumps for the main and auxiliary winches, boom hoist and telescope
- One fixed displacement piston pump for the counterweight removal, and swing
- One fixed displacement gear pump for pilot pressure
- One fixed displacement gear pump for telescope pinning
- The upper engine powers the pumps. Combined pump capacity of 151.6 gpm (574Lpm).
- Remote mounted, auxiliary hydraulic oil cooler

Pump Control “fine inching” Mode – Special fine metering pump settings, selectable from the operator's cab, allows very slow movements to the main and auxiliary winches, boom hoist, and swing for precision work.

Pump Control “high speed” Mode – Boosts hydraulic oil flow by combining the two variable displacement piston pumps for the main and auxiliary winches, boom hoist up, and telescope extend. Operated by a button on the right joystick controller from the operator's cab.

Hydraulic Reservoir – 198.1 gal (750L) capacity equipped with sight level gauge. Diffusers built in for deaeration.

Filtration – One 12 micron, full flow, line filter in the control circuit. All oil is filtered prior to return to sump tank. Accessible for easy filter replacement.

Counterbalance Valves – All hoist motors, boom extend cylinders, and boom hoist cylinders are equipped with counterbalance valves to provide load lowering and prevents accidental load drop when hydraulic power is suddenly reduced.

Boom Hoist Float Valves – For transporting the boom over the rear of the crane with a boom dolly. Allows hydraulic oil within the boom hoist cylinder to flow between piston side and case side.

Swing Brake Release Valve – For transporting the boom over the rear of the crane with a boom dolly. Holds the 360° swing park brake in the release position allowing free rotation of the upperstructure.

■ Pump Drive

All functions are hydraulically powered allowing positive, precise control with independent or simultaneous operation of all functions.

■ Fuel Tank

One 84.5 gal (320L) capacity tank.

■ Engine

Specification	Mercedes Benz OM 904 LA
Numbers of cylinders	4
Cycle	4
Bore and Stroke: inch (mm)	4.02 x 5.12 (102x130)
Piston Displacement: in ³ (cm ³)	259.35 (4 250)
Max. Brake Horsepower: hp (kW)	173 (129) @ 2,200 rpm
Peak Torque: ft lb (Nm)	487 (660) @ 1,200 rpm
Alternator: volts – amps	24 – 90
Crankcase Capacity: qt (L)	16.91 (16)
• Webasto Engine/Cab Heater – Diesel fired heating unit that can be used for preheating of the engine, or for engine preheating combined with heating of the operator's cab.	

■ Load Hoist System

Main and Auxiliary (Optional) Winches

- Axial piston, constant displacement motors driven through planetary reduction unit for positive control under all load conditions
- Grooved lagging
- Power up/down mode of operation
- Third wrap indicator with function lockout
- Drum rotation indicator
- Wire rope with “Superstop” easy reeving system
- Drum diameter: 20.67 in (525mm)
- Rope diameter: 0.83 in (21mm)
- Rope length: 820 ft (250m)

Integrated Third Wrap Indicator – PAT iFlex color display visually and audibly warns the operator when the wire rope is on the first/bottom layer and when the wire rope is down to the last three wraps.



Main (Front) and Auxiliary (Rear) Winches – 0.83 in (21mm) Rope										
	Maximum Line Pull		Normal Line Speed		High Line Speed		Layer		Total	
Layer	lb	kg	ft/min	m/min	ft/min	m/min	ft	m	ft	m
1	21,010	9 530	202	61.6	360	109.6	169	51.5	169	51.5
2	19,517	8 853	218	66.3	387	118.0	182	55.4	351	106.9
3	18,203	8 257	233	71.0	415	126.5	195	59.4	546	166.3
4	17,066	7 741	249	75.8	443	134.9	208	63.3	753	229.6
5	16,078	7 293	264	80.5	470	143.3	221	67.3	974	296.9
6	15,168	6 880	280	85.2	498	151.7	234	71.3	1,208	368.2
7	14,385	6 525	295	90.0	526	160.2	247	75.2	1,455	443.4

Wire Rope Application	Diameter		Type	Maximum Permissible Load	
	in	mm		lb	kg
Main (Front) Winch	0.83	21	15x7 (35x7 class) rotation resistant – right lang lay	16,673	7 563
Auxiliary (Rear) Winch	0.83	21	15x7 (35x7 class) rotation resistant – right lang lay	16,673	7 563

■ Counterweight

Standard – Total of 24,250 lb (11 000kg) of total counterweight consisting of auxiliary winch or 2,205 lb (1 000kg) counterweight and four, hydraulically removable counterweights. Assembled and disassembled by hydraulic cylinders controlled from the operator's cab with capacities for:

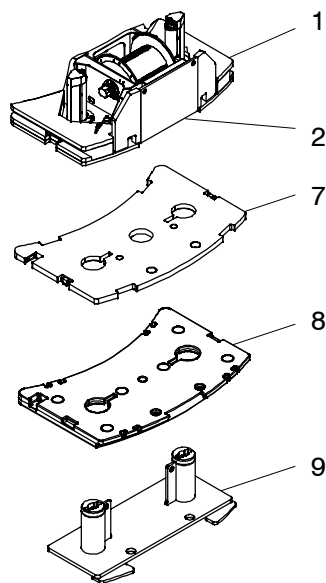
- 0 lb (0kg) counterweight
- 9,921 lb (4 500kg) counterweight
- 19,180 lb (8 700kg) counterweight
- 24,250 lb (11 000kg) counterweight

Optional – 52,910 lb (24 000kg) in addition to standard counterweight for a total of 77,160 lb (35 000kg) with additional capacities for:

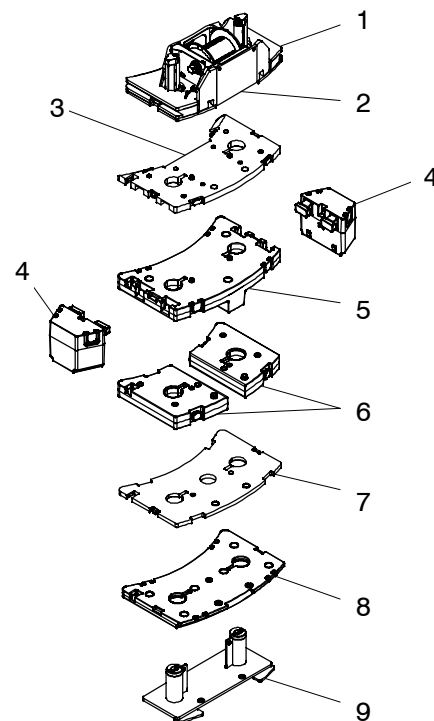
- 0 lb (0kg) counterweight
- 9,921 lb (4 500kg) counterweight
- 19,180 lb (8 700kg) counterweight
- 24,250 lb (11 000kg) counterweight
- 45,855 lb (20 800kg) counterweight
- 63,490 lb (28 800kg) counterweight
- 77,160 lb (35 000kg) counterweight*

Low speed jobsite travel is offered for these optional counterweight configurations and a boom dolly or boom trailer may be required for on-highway travel.

* Overall width of the crane increases to 12 ft 8 in (3.9m) for this counterweight configuration.



24,250 lb (11 000kg)



77,160 lb (35 000kg)

Counterweight Modules			9	8	7	6	5	4	3	2*	1
			2,425 lb (1 100kg) tray	6,834 lb (3 100kg) piece	5,071 lb (2 300kg) piece	14,110 lb (6 400kg) 2-piece	17,639 lb (8 000kg) piece	13,669 lb (6 200kg) 2-piece	7,496 lb (3 400kg) piece	2,204 lb (1 000kg) top*	7,716 lb (3 500kg) piece
Counterweight Usage Configurations	Standard	0 lb (0kg)									
		9,921 lb (4 500kg)								X	X
		19,180 lb (8 700kg)	X	X						X	X
		24,250 lb (11 000kg)	X	X	X					X	X
	Optional	45,855 lb (20 800kg)	X	X	X	X			X	X	X
		63,490 lb (28 800kg)	X	X	X	X	X		X	X	X
		77,160 lb (35 000kg)	X	X	X	X	X	X	X	X	X

* Auxiliary winch replaces this counterweight for a two-drum configuration.



Carrier

■ General

- 9 ft 9 in (3.0m) wide with 20.5R25 tires
- 25 ft 4 in (7.7m) wheelbase (centerline of first axle to centerline of fifth axle)
- **Frame** – Box-type, torsion resistant, welded construction made of high tensile steel. Equipped with front and rear towing and tie-down lugs, tow connections, and access ladders.

■ Outriggers

Boxes – Two double box, front and rear welded to the carrier frame

Beams and Jacks – Four dual stage beams with Confined Area Lifting Capacities (CALC) provide selectable outrigger extensions of full and intermediate positions. Jacks with integral check valves, hydraulically controlled from the operator's cab and on both sides of carrier. Automatic leveling.

Pontoons – Four lightweight, stow'n go, 21.3 in (54.2cm) square nylon pontoons with a contact area of 455 in² (2 937.6cm²) can be stored for road travel under the outrigger boxes.

Main Jack Reaction – 157,366 lb (700.0kN) force and 346 psi (2 384.6kPa) ground bearing pressure

■ Steering and Axles

- ZF–Servocom dual circuit system provides hydraulic assisted steering with a mechanical link between the steering wheel and two front axles. The two rear axles steer hydraulically and operation is based on primary and auxiliary steering modes.

Primary Steering Mode – Axles 4 and 5 will automatically steer in combination with axles 1 and 2 based on travel speed:

Primary			
Speed	Less than 15.5 mph (25km/h)	15.5–31.0 mph (25–50km/h)	Greater than 31.0 mph (50km/h)
Axle 1	Steered	Steered	Steered
Axle 2	Steered	Steered	Steered
Axle 3	Fixed (Lifted or Down)	Fixed (Lifted or Down)	Fixed (Lifted or Down)
Axle 4	Steered	Locked	Locked
Axle 5	Steered	Steered	Locked

Auxiliary Steering Modes – Five independent modes consisting of:

- **Independent Front:** Axles 1 and 2 (Axle 3 is lifted)
- **Combination:** Axles 1, 2, 4, and 5 (Axle 3 is lifted)
- **Crab:** Axles 1, 2, 4, and 5 (Axle 3 is lifted)
- **Independent Rear:** Axles 4 and 5 (Axle 3 is lifted)
- **Drive Away From Walls:** Temporary crab mode (Axle 3 is lifted)

The front, combination, and crab steering modes are controlled from the steering wheel and are selected by controls in the driver's cab. Momentary switches located in the driver's cab control the rear steering mode. Limited to 3rd gear travel.

- **Emergency Steering** – A pump is flange-mounted to the transfer box that provides hydraulic pressure to the steering circuit as long as the crane is in motion above 1.85 mph (3km/h).
- **Drive** – Two modes: 10 x 6 for highway travel: 2nd, 4th, and 5th axles are driven. 10 x 8 for job-site travel: 1st, 2nd, 4th, and 5th axle are driven.
- **Axle 1** – Steered, driven for job-site travel
- **Axle 2** – Steered, driven
- **Axle 3** – Non steered, non driven, lift system
- **Axle 4** – Steered, driven
- **Axle 5** – Steered, driven
- **Inter-Axle Differential Lock** – Traction adding device that locks axles 1 and 2 with axles 4 and 5. Operated by a switch from the carrier cab.
- **Transverse (Cross-Axle) Differential Locks** – Traction adding device that locks differentials within axles 1, 2, 4, and 5. Operated by a switch from the carrier cab with a 10 second timer.

■ Suspension

Hydro-pneumatic, lockable with level adjustment and automatic ride height leveling. All axles have longitudinal and transverse trailing arms with leveling adjustment and locked cylinders. The carrier can be tilted laterally and longitudinally by controls in the carrier cab that adjust each individual suspension cylinder.

- Cylinder stroke: –4.6 in (118mm) / +6.2 in (158mm)

Third Axle Lift System – Axle 3 lifts independently for highway travel and job-site travel applications. Operated by a switch from the carrier cab.

Third Axle Boost – Axle 3 is presettable to a specific loading when the boom is over the front. Boost range is between 17,700 lb (8 028.6kg) and 30,800 lb (13 970.6kg).



■ Ground Control Outrigger/Suspension Controls

Environmentally sealed and ergonomically positioned, control stations located on the left and right side of the carrier with controls and indicators for crane operations including:

- Starts and stops carrier engine
- Throttles carrier engine up and down
- Suspension operation including:
 - Raise and lower suspension on outriggers
 - Automatic ride height leveling on tires
- Outrigger operation including:
 - Extends and retracts two beams together
 - Extends and retracts all jacks together
 - Automatic leveling on outriggers
- Outrigger lighting
- Monitor's contrast and brightness
- Electronic bubble level
- Levelness or inclination
- One position swing lock engagement indicator
- Outrigger force readout – optional

■ Tires and Wheels

Standard – Ten (single) 20.5R25 tires on steel disc wheels.

Optional – Ten (single) 16.00R25 tires on steel disc wheels.

- Tire inflation kit
- Spare tires and wheels – optional

■ Brakes

Service – Full air brakes on all wheel ends. Dual circuit compressed air system with air dryer.

Parking/Emergency – Spring loaded type, acting on 2nd, 4th, and 5th axles

Intarder – Hydrodynamic driveline brake that is integral to the transmission. Operated by a switch from the carrier cab.

■ Central Lubrication System

Automated lubrication unit that injects grease into the steering gear arms, steering knuckles, and suspension cylinders. Operated by a switch from the carrier's cab.

■ Electrical

Two batteries provide 24-volt operation and starting. CAN bus wiring and components, and integral self-test CSS (Control & Service System).

Lights

- Front lighting includes two main headlights, two high beams lights, two fog lights, two directional indicators, and two parking lights
- Rear lighting includes two rear combination panels each with directional indicator, parking light, brake light, fog light, reversing light, and license plate light

- Other equipment includes hazard/warning system, cab light, instrument panel light, signal horn, and two amber rotating beacons on cab roof
- Four lights to illuminate the outriggers

■ Engine

Specification	Mercedes Benz OM 502 LA
Numbers of cylinders	8
Cycle	4
Bore and Stroke: inch (mm)	5.12 x 5.91 (130x150)
Piston Displacement: in ³ (cm ³)	972.04 (15 929)
Max. Brake Horsepower: hp (kW)	523 (390) @ 1,800 rpm
Peak Torque: ft lb (Nm)	1,770 (2 400) @ 1,300 rpm
Alternator: volts – amps	24 – 300
Crankcase Capacity: qt (L)	42.27 (40)
• Cruise control • Engine exhaust brake • Engine compression brake • Two thermostatically controlled, hydraulically driven radiator fans	

■ Transmission

Automated – ZF AS-TRONIC (no clutch pedal) automated manual transmission with 16 forward gears and 2 reverse gears

Auxiliary – Kessler transfer case with high/low range

■ Fuel Tank

One 132 gal (500L) capacity tank

■ Hydraulic System

Main Pumps

- One variable displacement piston pump for the front steering circuit 1, cooling fans, suspension, and outriggers
- One fixed displacement piston pump for front steering circuit 2
- Two fixed displacement gear pumps for rear steering
- One fixed displacement piston pump for emergency steering
- The carrier engine powers the pumps. Combined pump capacity of 73.2 gpm (277Lpm).

Hydraulic Reservoir – 76.6 gal (290L) capacity equipped with sight level gauge. Diffusers built in for deaeration.

Filtration – Two 12 micron, full flow, line filter in the control circuit. All oil is filtered prior to return to sump tank. Accessible for easy filter replacement.



■ Cab and Controls

Cab – Fully enclosed, two person full width cab of composite structure with acoustical insulation. Equipped with:

- Tinted and tempered glass windows
- Windshield wiper and washer
- Slide side windows of hardened glass
- Six way adjustable and air suspended driver and passenger seats with integrated three point safety belts and headrests
- Two heated and electrically adjustable rear-view mirrors
- One heated wide angle mirror and additional turn mirror
- Engine dependent warm-water heater with defroster nozzles for windshield and cab floor
- AM/FM radio with single disc CD player
- Adjustable sun visor
- Dome light
- 12 volt and 24 volt connection
- Air conditioning
- Fire extinguisher

Cab Instrumentation – Ergonomically positioned analog instrumentation for driving including:

- Speedometer with odometer
- Transmission mode, gear indication, and travel direction
- Engine coolant temperature
- Fuel level
- Tachometer with hourmeter

Dash Mounted – Controls and indicators for:

- Battery main shutoff
- Carrier throttle (0 to 1,200 rpm)
- Carrier lighting
- Auxiliary transmission high/low range
- 10x8 drive, inter-axle lock, and transverse differential lock
- Carrier control to operator's cab
- Suspension operation, automatic leveling, and lock
- Cruise and intarder activation
- Mirror heating
- Warning lamps
- Engine/gearbox malfunction with audible alarm
- Service and park brake indication
- Steering system malfunction with audible alarm

Cockpit Multi-Vision (CMV) Display – Ergonomically positioned on the driver's dash panel, digital instrumentation and indicators for crane operations including:

- Front and rear air pressure
- Air cleaner and hydraulic oil filter replacement
- Low engine oil and coolant
- Steering system malfunction
- Emergency steering activation
- CAN-BUS diagnostics
- Sensor fault
- Low voltage
- Tachometer fault
- Low fuel
- Suspension lifted and locked

- Auxiliary transmission high/low range
- Suspension leveled
- High beam headlights
- Third axle lifted
- Rear fog light activation
- 10x8 drive, inter-axle lock, and transverse differential lock
- One position swing lock engagement
- Intarder activation
- Axle oscillation activation
- Central lubrication activation
- Carrier control to operator's cab
- Boom raised out of the boom rest
- Display contrast and brightness readout
- Crane service diagnostics readouts
- Electronic bubble level
- Axle loadings readouts
- Steering modes

Center Console – Controls and indicators for:

- Heating and air conditioning controls
- Transmission gear shifting
- Auxiliary steering controls
- Rear axle locking switch
- Mirror adjustments
- Park brake

Steering Column – Controls for:

- Carrier ignition
- Warning horn
- Turn indicators
- High beam headlights
- Steer wheel adjustments
- Cruise and intarder controls
- Windshield wipers and washers

Foot Controls – Controls for:

- Carrier service brakes
- Engine throttle

■ Additional Equipment

Standard:

- Pneumatic and electrical quick disconnect connectors mounted on the rear bumper for boom dolly brakes and lights.
- Emergency function overrides
- Aluminum full deck fenders and ladders
- Hook block and ball bumper tie backs
- Left and right side carrier storage boxes
- Hook ball storage
- Folding ladder (stowed under the carrier cab)
- Handling slings
- Mud flaps
- Tool box with tools
- Grease gun
- First aid kit
- Tire inflation system
- Battery jumper cables



Carrier Speeds and Gradeability

ZF Astronic		Speed				Gradeability (@ Peak Torque Except Creep @ Idle)	
		High Range (0.800)		Low Range (1.836)		High Range (0.800)	Low Range (1.836)
Gear	Ratio	mph	km/h	mph	km/h	% Grade	
16th	0.83	52.8	85.0	26.1	42.0	1	2
15th	1.00	49.7	80.0	21.7	35.0	2	3
14th	1.18	42.3	68.0	18.6	30.0	3	3
13th	1.43	34.8	56.0	14.9	24.0	3	4
12th	1.73	28.6	46.0	12.4	20.0	4	5
11th	2.09	23.6	38.0	10.6	17.0	6	7
10th	2.56	19.3	31.0	8.7	14.0	7	8
9th	3.09	16.2	26.0	6.8	11.0	9	11
8th	3.78	13.0	21.0	5.6	9.0	11	13
7th	4.57	11.2	18.0	5.0	8.0	14	16
6th	5.39	9.3	15.0	4.3	7.0	16	19
5th	6.52	7.5	12.0	3.1	5.0	20	24
4th	7.89	6.2	10.0	2.5	4.0	25	30
3rd	9.54	5.0	8.0	2.5	4.0	31	37
2nd	11.68	4.3	7.0	1.9	3.0	39	47
1st	14.12	3.7	6.0	1.9	3.0	47	61
Reverse 1 (Low)	13.07	3.7	6.0	1.9	3.0	45	55
Reverse 2 (High)	10.81	4.3	7.0	1.9	3.0	36	43
1st @ 800 rpm	14.12	1.4	2.0	0.6	1.0	N/A	N/A
Reverse 1 (Low) @ 800 rpm	13.07	1.4	2.0	0.6	1.0	N/A	N/A
Reverse 2 (High) @ 800 rpm	10.81	1.4	2.0	0.6	1.0	N/A	N/A

Based on a 132,277.4 lb (60 000kg) gross vehicle weight with 16.00R25 and 20.5R25 tires



Axle Loads – English

Base crane with full tank of fuel and no counterweight	Gross Vehicle Weight ⁽¹⁾	Axle 1	Axle 2	Axle 3*	Axle 4	Axle 5
	lb	lb	lb	lb	lb	lb
	108,233	23,663	23,859	20,500	20,204	20,007
Third axle lifted	— — —	4,877	4,878	–20,500	5,372	5,373
Driver in carrier cab	250	181	181	0	–56	–56
16.00R25 tires (instead of standard)	–1,036	–259	–259	0	–260	–260
Auxiliary winch with 820 ft of 0.83 in diameter wire rope	3,109	–948	–948	0	2,503	2,503
[2] counterweight 2,205 lb on upper – replaces auxiliary winch	2,205	–608	–608	0	1,710	1,710
[1] counterweight 7,716 lb on upper	7,716	–1,625	–1,625	0	5,483	5,483
[3] counterweight 7,496 lb on upper – requires counterweight [1]	7,496	–1,579	–1,579	0	5,327	5,327
[6] counterweight 14,110 lb on upper – requires counterweight [9]	14,110	–2,972	–2,972	0	10,027	10,027
[7] counterweight 5,071 lb on upper – requires counterweight [9]	5,071	–1,068	–1,068	0	3,603	3,603
[8] counterweight 6,834 lb on upper – requires counterweight [9]	6,834	–1,440	–1,440	0	4,857	4,857
[9] counterweight 2,425 lb on upper	2,425	–511	–511	0	1,723	1,723
31.2–53.1 ft offsettable, two piece telescopic lattice fly (stowed)	3,669	2,277	2,277	0	–442	–442
Auxiliary lifting sheave (erected)	181	208	208	0	–117	–117
69.4 ton 3 sheave, quick–reeve hook block with safety latch (stowed at boom head)	1,323	1,356	1,356	0	–695	–695
69.4 ton 3 sheave, quick–reeve hook block with safety latch (stowed at front bumper)	1,323	1,195	1,195	0	–534	–534
11 ton swivel hook ball with safety latch (stowed at boom head)	441	464	464	0	–243	–243
11 ton swivel hook ball with safety latch (stowed in carrier storage)	441	72	72	0	148	148

Counterweight Load Transfer	Axle 1	Axle 2	Axle 3*	Axle 4	Axle 5
	lb	lb	lb	lb	lb
Transfer [6] counterweight 14,110 lb to carrier deck	8,241	8,241	0	–8,241	–8,241
Transfer [7] counterweight 5,071 lb to carrier deck	2,962	2,962	0	–2,962	–2,962
Transfer [8] counterweight 6,834 lb to carrier deck	3,992	3,992	0	–3,992	–3,992
Transfer [9] counterweight 2,425 lb to carrier deck	1,416	1,416	0	–1,416	–1,416

⁽¹⁾ Adjust gross vehicle weight and axle loading according to component weight. All weights are $\pm 3\%$.

*Axle 3 is presettable to a specific loading when boom is over the front. Boost range is between 17,700 lb to 30,800 lb.

Tire	Maximum Axle Load @ 50 mph Average Speed
20.5R25	26,015 lb
16.00R25	24,471 lb



Axle Loads – Metric

Base crane with full tank of fuel and no counterweight	Gross Vehicle Weight ⁽¹⁾	Axle 1	Axle 2	Axle 3*	Axle 4	Axle 5
	kg	kg	kg	kg	kg	kg
	49 094	10 733	10 822	9 299	9 164	9 075
Third axle lifted	— — —	2 212	2 213	–9 299	2 437	2 437
Driver in carrier cab	113	82	82	0	–25	–25
16.00R25 tires (instead of standard)	–470	–117	–117	0	–118	–118
Auxiliary winch with 250m of 21mm diameter wire rope	1 410	–430	–430	0	1 135	1 135
[2] counterweight 1 000kg on upper – replaces auxiliary winch	1 000	–276	–276	0	776	776
[1] counterweight 3 500kg on upper	3 500	–737	–737	0	2 487	2 487
[3] counterweight 3 400kg on upper – requires counterweight [1]	3 400	–716	–716	0	2 416	2 416
[6] counterweight 6 400kg on upper – requires counterweight [9]	6 400	–1 348	–1 348	0	4 548	4 548
[7] counterweight 2 300kg on upper – requires counterweight [9]	2 300	–484	–484	0	1 634	1 634
[8] counterweight 3 100kg on upper – requires counterweight [9]	3 100	–653	–653	0	2 203	2 203
[9] counterweight 1 100kg on upper	1 100	411	411	0	139	139
9.5–16.2m offsettable, two piece telescopic lattice fly (stowed)	1 664	1 033	1 033	0	–200	–200
Auxiliary lifting sheave (erected)	82	94	94	0	–53	–53
63 mt 3 sheave, quick–reeve hook block with safety latch (stowed at boom head)	600	615	615	0	–315	–315
63 mt 3 sheave, quick–reeve hook block with safety latch (stowed at front bumper)	600	642	642	0	–242	–242
10 mt swivel hook ball with safety latch (stowed at boom head)	200	210	210	0	–110	–110
10 mt swivel hook ball with safety latch (stowed in carrier storage)	200	32	32	0	67	67

Counterweight Load Transfer	Axle 1	Axle 2	Axle 3*	Axle 4	Axle 5
	kg	kg	kg	kg	kg
Transfer [6] counterweight 6 400kg to carrier deck	3 738	3 738	0	–3 738	–3 738
Transfer [7] counterweight 2 300kg to carrier deck	1 344	1 344	0	–1 344	–1 344
Transfer [8] counterweight 3 100kg to carrier deck	1 811	1 811	0	–1 811	–1 811
Transfer [9] counterweight 1 100kg to carrier deck	642	642	0	–642	–642

⁽¹⁾ Adjust gross vehicle weight and axle loading according to component weight. All weights are $\pm 3\%$.

*Axle 3 is presettable to a specific loading when boom is over the front. Boost range is between 8 028.6kg to 13 970.6kg.

Tire	Maximum Axle Load @ 80km/h Average Speed
20.5R25	11 800kg
16.00R25	11 100kg



Axle Loads with 2–Axle or 3–Axle Boom Dolly (3rd Axle Down) – English

Base crane with full tank of fuel and no counterweight	Gross Vehicle Weight	Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Dolly
	lb	lb	lb	lb	lb	lb	lb
	108,233	18,986	19,182	16,042	17,162	16,966	19,895
Driver in carrier cab	250	192	192	–44	–44	–44	0
16.00R25 tires (instead of standard)	–1,036	–210	–210	–206	–206	–206	0
Auxiliary winch with 820 ft of 0.83 in diameter wire rope	3,109	1,436	1,436	79	79	79	0
[2] counterweight 2,205 lb on upper – replaces auxiliary winch	2,205	942	942	107	107	107	0
[1] counterweight 7,716 lb on upper	7,716	2,697	2,697	774	774	774	0
[3] counterweight 7,496 lb on upper – requires counterweight [1]	7,496	2,620	2,620	752	752	752	0
[6] counterweight 14,110 lb on carrier – requires counterweight [9]	14,110	4,932	4,932	1,415	1,415	1,415	0
[7] counterweight 5,071 lb on carrier – requires counterweight [9]	5,071	1,773	1,773	509	509	509	0
[8] counterweight 6,834 lb on carrier – requires counterweight [9]	6,834	2,389	2,389	685	685	685	0
[9] counterweight 2,425 lb on carrier	2,425	848	848	243	243	243	0
31.2–53.1 ft offsettable, two piece telescopic lattice fly (stowed)	3,669	144	144	91	91	91	3,108
Auxiliary lifting sheave (erected)	181	–21	–21	–13	–13	–13	261
69.4 ton 3 sheave, quick–reeve hook block with safety latch (stowed at boom head)	1,323	–103	–103	–65	–65	–65	1,722
69.4 ton 3 sheave, quick–reeve hook block with safety latch (stowed on boom dolly)	1,323	0	0	0	0	0	1,323
11 ton swivel hook ball with safety latch (stowed in carrier storage)	441	44	44	117	117	117	0
11 ton swivel hook ball with safety latch (stowed at boom head)	441	–38	–38	–24	–24	–24	587
11 ton swivel hook ball with safety latch (stowed on boom dolly)	441	0	0	0	0	0	441
2–axle boom dolly	5,500	0	0	0	0	0	5,500
3–axle boom dolly	8,800	0	0	0	0	0	8,800

(¹) Adjust gross vehicle weight and axle loading according to component weight. All weights are $\pm 3\%$.

Tire	Maximum Axle Load @ 50 mph Average Speed
20.5R25	26,015 lb
16.00R25	24,471 lb



Axle Loads with 2–Axle or 3–Axle Boom Dolly (3rd Axle Down) – Metric

Base crane with full tank of fuel and no counterweight	Gross Vehicle Weight	Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Dolly
	kg	kg	kg	kg	kg	kg	kg
	49 094	8 612	8 701	7 277	7 785	7 696	9 024
Driver in carrier cab	113	87	87	–20	–20	–20	0
16.00R25 tires (instead of standard)	–470	–95	–95	–93	–93	–93	0
Auxiliary winch with 250m of 21mm diameter wire rope	1 410	651	651	–36	–36	–36	0
[2] counterweight 1 000kg on upper – replaces auxiliary winch	1 000	427	427	49	49	49	0
[1] counterweight 3 500kg on upper	3 500	1 223	1 223	351	351	351	0
[3] counterweight 3 400kg on upper – requires counterweight [1]	3 400	1 188	1 188	341	341	341	0
[6] counterweight 6 400kg on carrier – requires counterweight [9]	6 400	2 237	2 237	642	642	642	0
[7] counterweight 2 300kg on carrier – requires counterweight [9]	2 300	804	804	231	231	231	0
[8] counterweight 3 100kg on carrier – requires counterweight [9]	3 100	1 084	1 084	311	311	311	0
[9] counterweight 1 100kg on carrier	1 100	385	385	110	110	110	0
9.5–16.2m offsettable, two piece telescopic lattice fly (stowed)	1 664	65	65	41	41	41	1 410
Auxiliary lifting sheave (erected)	82	–15	–15	–10	–10	–10	141
63 mt 3 sheave, quick–reeve hook block with safety latch (stowed at boom head)	600	–47	–47	–29	–29	–29	781
63 mt 3 sheave, quick–reeve hook block with safety latch (stowed on boom dolly)	600	0	0	0	0	0	600
10 mt swivel hook ball with safety latch (stowed in carrier storage)	200	20	20	53	53	53	0
10 mt swivel hook ball with safety latch (stowed at boom head)	200	–17	–17	–11	–11	–11	266
10 mt swivel hook ball with safety latch (stowed on boom dolly)	200	0	0	0	0	0	200
2–axle boom dolly	2 495	0	0	0	0	0	2 495
3–axle boom dolly	3 992	0	0	0	0	0	3 992

(¹) Adjust gross vehicle weight and axle loading according to component weight. All weights are $\pm 3\%$.

Tire	Maximum Axle Load @ 80km/h Average Speed
20.5R25	11 800kg
16.00R25	11 100kg



Axle Loads with 2–Axle or 3–Axle Boom Dolly (3rd Axle Lifted) – English

Base crane with full tank of fuel and no counterweight	Gross Vehicle Weight	Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Dolly
	lb	lb	lb	lb	lb	lb	lb
	108,233	22,803	22,999	0	21,366	21,170	19,895
Driver in carrier cab	250	181	181	0	–56	–56	0
16.00R25 tires (instead of standard)	–1,036	–259	–259	0	–260	–260	0
Auxiliary winch with 820 ft of 0.83 in diameter wire rope	3,109	1,454	1,454	0	100	100	0
[2] counterweight 2,205 lb on upper – replaces auxiliary winch	2,205	967	967	0	135	135	0
[1] counterweight 7,716 lb on upper	7,716	2,881	2,881	0	977	977	0
[3] counterweight 7,496 lb on upper – requires counterweight [1]	7,496	2,799	2,799	0	949	949	0
[6] counterweight 14,110 lb on carrier – requires counterweight [9]	14,110	5,269	5,269	0	1,786	1,786	0
[7] counterweight 5,071 lb on carrier – requires counterweight [9]	5,071	1,894	1,894	0	642	642	0
[8] counterweight 6,834 lb on carrier – requires counterweight [9]	6,834	2,552	2,552	0	865	865	0
[9] counterweight 2,425 lb on carrier	2,425	906	906	0	307	307	0
31.2–53.1 ft offsettable, two piece telescopic lattice fly (stowed)	3,669	166	166	0	114	114	3,108
Auxiliary lifting sheave (erected)	181	–24	–24	0	–16	–16	261
69.4 ton 3 sheave, quick–reeve hook block with safety latch (stowed at boom head)	1,323	–118	–118	0	–81	–81	1,722
69.4 ton 3 sheave, quick–reeve hook block with safety latch (stowed on boom dolly)	1,323	0	0	0	0	0	1,323
11 ton swivel hook ball with safety latch (stowed in carrier storage)	441	72	72	0	148	148	0
11 ton swivel hook ball with safety latch (stowed at boom head)	441	–43	–43	0	–30	–30	587
11 ton swivel hook ball with safety latch (stowed on boom dolly)	441	0	0	0	0	0	441
2–axle boom dolly	5,500	0	0	0	0	0	5,500
3–axle boom dolly	8,800	0	0	0	0	0	8,800

(1) Adjust gross vehicle weight and axle loading according to component weight. All weights are $\pm 3\%$.

Tire	Maximum Axle Load @ 50 mph Average Speed
20.5R25	26,015 lb
16.00R25	24,471 lb



Axle Loads with 2–Axle or 3–Axle Boom Dolly (3rd Axle Lifted) – Metric

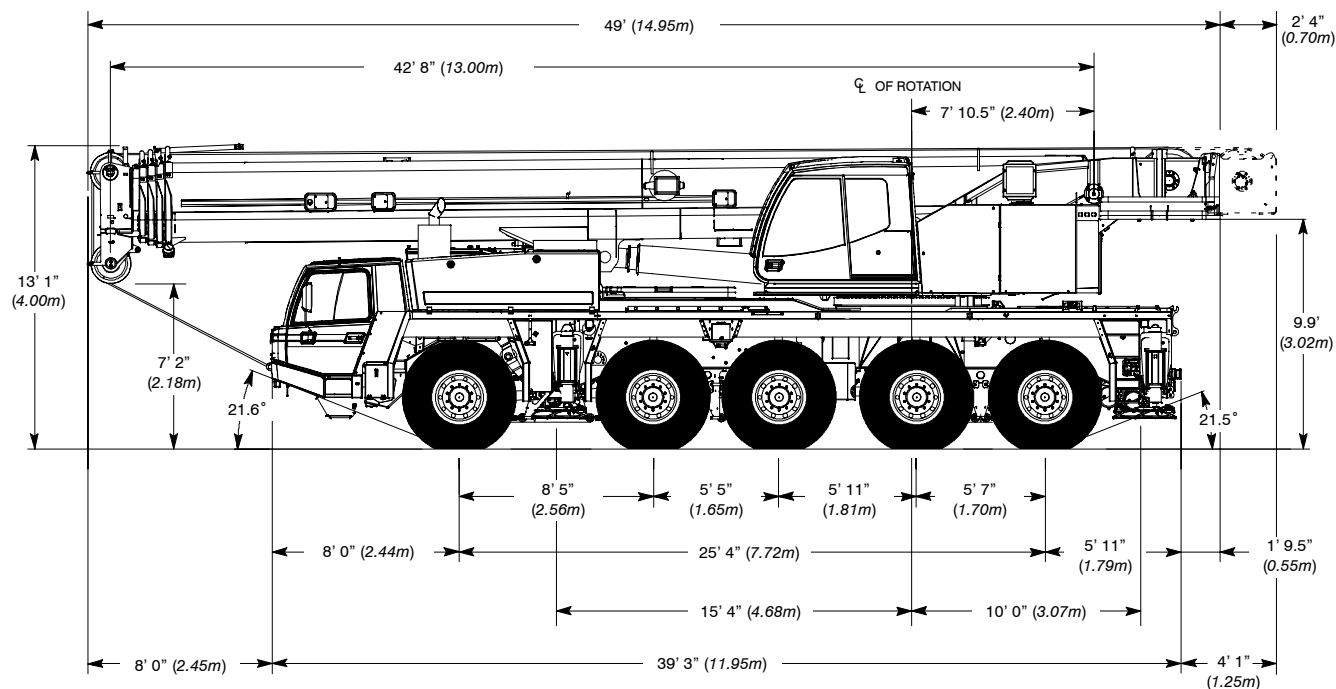
Base crane with full tank of fuel and no counterweight	Gross Vehicle Weight	Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Dolly
	kg	kg	kg	kg	kg	kg	kg
	49 094	10 343	10 432	0	9 691	9 603	9 024
Driver in carrier cab	113	82	82	0	–25	–25	0
16.00R25 tires (instead of standard)	–470	–117	–117	0	–118	–118	0
Auxiliary winch with 250m of 21mm diameter wire rope	1 410	660	660	0	45	45	0
[2] counterweight 1 000kg on upper – replaces auxiliary winch	1 000	439	439	0	61	61	0
[1] counterweight 3 500kg on upper	3 500	1 307	1 307	0	443	443	0
[3] counterweight 3 400kg on upper – requires counterweight [1]	3 400	1 270	1 270	0	430	430	0
[6] counterweight 6 400kg on carrier – requires counterweight [9]	6 400	2 390	2 390	0	810	810	0
[7] counterweight 2 300kg on carrier – requires counterweight [9]	2 300	859	859	0	291	291	0
[8] counterweight 3 100kg on carrier – requires counterweight [9]	3 100	1 158	1 158	0	392	392	0
[9] counterweight 1 100kg on carrier	1 100	411	411	0	139	139	0
9.5–16.2m offsettable, two piece telescopic lattice fly (stowed)	1 664	75	75	0	52	52	1 410
Auxiliary lifting sheave (erected)	82	–11	–11	0	–7	–7	118
63 mt 3 sheave, quick–reeve hook block with safety latch (stowed at boom head)	600	–54	–54	0	–37	–37	781
63 mt 3 sheave, quick–reeve hook block with safety latch (stowed on boom dolly)	600	0	0	0	0	0	600
10 mt swivel hook ball with safety latch (stowed in carrier storage)	200	33	33	0	67	67	0
10 mt swivel hook ball with safety latch (stowed at boom head)	200	–20	–20	0	–14	–14	266
10 mt swivel hook ball with safety latch (stowed on boom dolly)	200	0	0	0	0	0	200
2–axle boom dolly	2 495	0	0	0	0	0	2 495
3–axle boom dolly	3 992	0	0	0	0	0	3 992

(¹) Adjust gross vehicle weight and axle loading according to component weight. All weights are $\pm 3\%$.

Tire	Maximum Axle Load @ 80km/h Average Speed
20.5R25	11 800kg
16.00R25	11 100kg



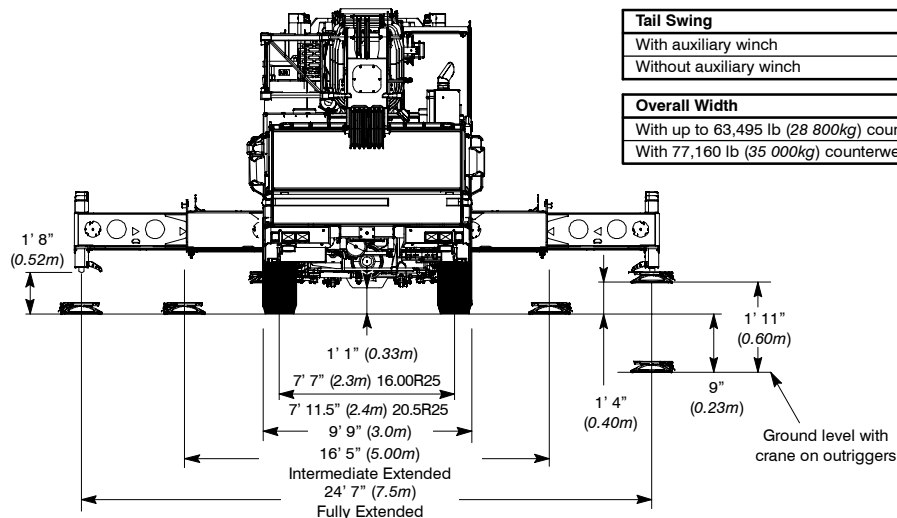
General Dimensions



Turning Radius	20.5R25		16.00R25	
	English	Metric	English	Metric
Wall to wall over carrier	34' 5"	10.49m	34' 2"	10.40m
Wall to wall over boom	38' 0"	11.58m	37' 9"	11.50m
Wall to wall over boom attachment	39' 11"	12.17m	39' 8"	12.10m
Curb to curb	29' 11"	9.12m	29' 7"	9.02m
Centerline of tire	29' 1"	8.86m	28' 10"	8.80m

Tail Swing	English	Metric
With auxiliary winch	15' 9"	4.8m
Without auxiliary winch	13' 1"	4.0m

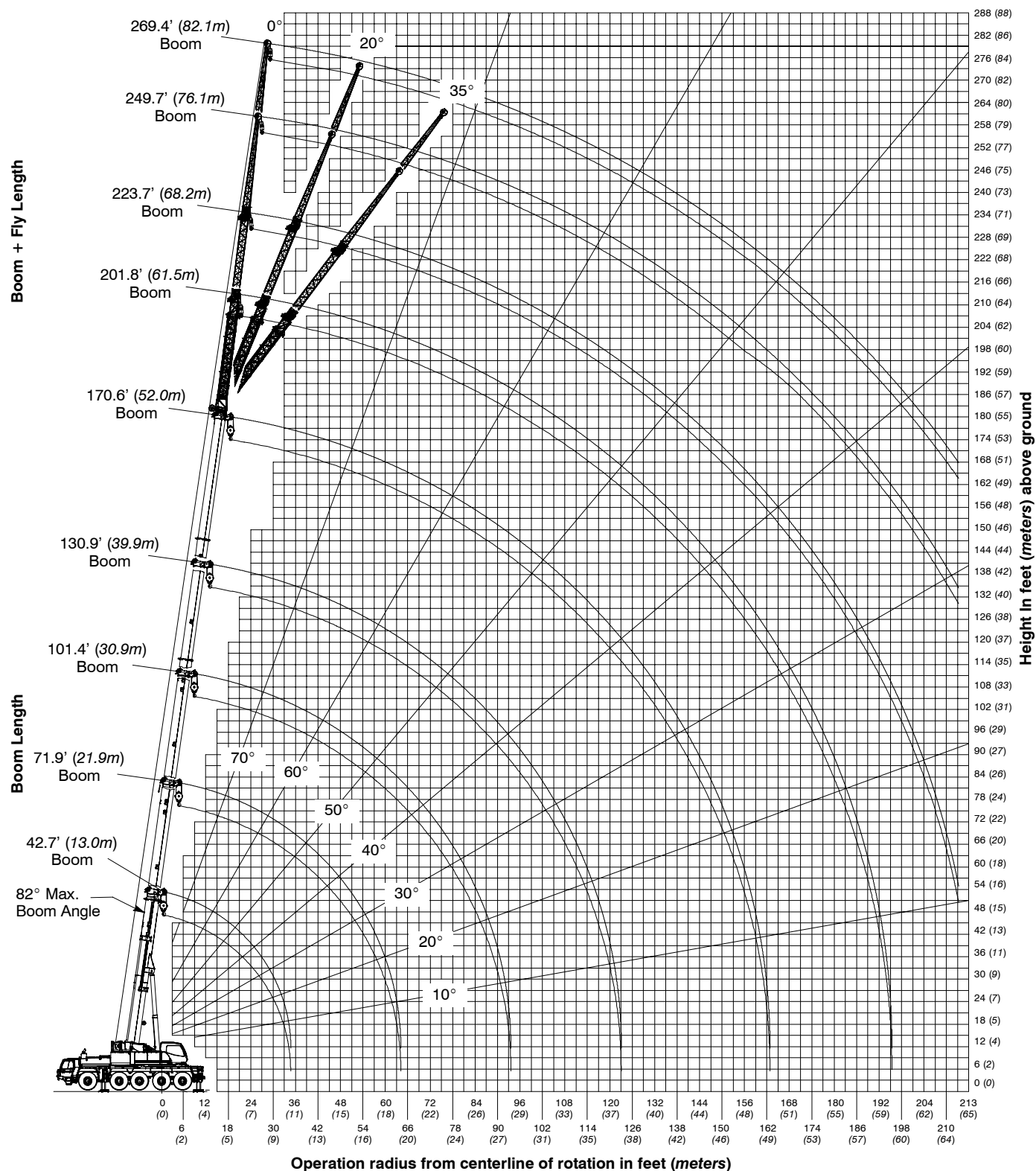
Overall Width	English	Metric
With up to 63,495 lb (28 800kg) counterweight	9' 9"	3.0m
With 77,160 lb (35 000kg) counterweight	12' 8"	3.9m



Not To Scale



Working Range Diagram





Boom Extend Modes

Boom Length		Sections Length			
ft	m	Tele I	Tele II	Tele III	Tele IV
170.6	52.0	100%	100%	100%	100%
160.4	48.9	92%	92%	92%	92%
145.7	44.4	46%	92%	92%	92%
		92%	92%	92%	46%
130.9	39.9	0%	92%	92%	92%
		46%	46%	92%	92%
		92%	92%	92%	0%
116.1	35.4	0%	46%	92%	92%
		46%	46%	46%	92%
		92%	92%	46%	0%
101.4	30.9	0%	0%	92%	92%
		0%	46%	46%	92%
		46%	46%	46%	46%
		92%	46%	46%	0%
86.6	26.4	0%	0%	46%	92%
		0%	46%	46%	46%
		46%	46%	46%	0%
		92%	46%	0%	0%
71.9	21.9	0%	0%	0%	92%
		0%	0%	46%	46%
		0%	46%	46%	0%
		92%	0%	0%	0%
57.1	17.4	0%	0%	0%	46%
		0%	0%	46%	0%
		46%	0%	0%	0%
42.7	13.0	0%	0%	0%	0%



Main Boom Lift Capacity Charts

77,160 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)											Radius (ft)
	42.7 ⁽¹⁾	42.7	57.1	71.9	86.6	101.4	116.1	130.9	145.7	160.4	170.6	
10	260,000*	228,000*	194,000	162,000								10
12	234,000*	206,000	192,000	158,000								12
14	215,000	187,500	183,500	151,500	119,500							14
16	193,500	171,500	170,000	141,000	116,500							16
18	173,000	158,500	157,000	131,500	113,500	87,300						18
20	154,500	146,000	144,500	122,500	110,000	87,300	67,900					20
25	122,500	121,500	120,000	114,000	102,000	84,900	67,900	53,400				25
30	100,500	100,500	102,000	102,000	95,400	82,100	64,900	53,400	43,700	34,000		30
35			85,500	86,200	86,400	78,200	60,800	52,000	43,700	34,000	28,000	35
40			73,700	73,700	75,500	73,400	56,800	49,400	43,400	34,000	28,000	40
45			60,300	62,100	62,600	61,100	53,100	46,400	41,400	34,000	28,000	45
50				53,500	53,400	52,300	51,000	43,500	39,500	34,000	28,000	50
55				46,400	46,100	45,200	46,800	40,700	37,700	33,700	27,500	55
60				40,300	40,400	40,500	40,600	37,500	35,600	33,100	26,500	60
65					35,800	36,800	35,900	35,100	34,100	32,100	25,300	65
70					32,000	33,100	32,000	32,300	31,900	30,200	24,400	70
75					28,300	29,800	28,800	29,300	29,300	28,000	23,500	75
80						27,000	26,000	26,300	26,500	25,600	22,500	80
85						24,600	23,700	24,000	24,000	23,100	21,400	85
90						22,400	22,300	22,200	21,900	21,000	20,400	90
95							20,900	20,600	20,000	19,100	19,000	95
100							19,400	18,900	18,300	17,400	17,400	100
110								16,100	15,400	14,500	14,600	110
120								13,700	13,100	12,000	12,200	120
130									10,900	10,000	10,200	130
140										8,400	8,400	140
150										7,000	7,000	150
160											5,900	160

* Special Conditions Or Wire Rope Required

⁽¹⁾ Over Rear Only With Swing Lock Engaged

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



63,490 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)										Radius (ft)	
	42.7 ⁽¹⁾	42.7	57.1	71.9	86.6	101.4	116.1	130.9	145.7	160.4		170.6
10	260,000*	228,000*	194,000	162,000								10
12	234,000*	205,500	192,000	158,000								12
14	211,500	187,000	183,000	151,500	119,500							14
16	187,000	171,000	169,500	141,000	116,500							16
18	167,000	158,000	156,500	131,500	113,500	87,300						18
20	149,000	145,500	144,000	122,500	110,000	87,300	67,900					20
25	118,000	118,000	116,000	113,500	102,000	84,900	67,900	53,400				25
30	96,700	96,700	98,300	98,300	94,900	82,100	64,900	53,400	43,700	34,000		30
35			80,200	81,300	81,800	78,200	60,800	52,000	43,700	34,000	28,000	35
40			65,200	67,800	67,600	66,300	56,800	49,400	43,400	34,000	28,000	40
45			55,200	56,900	56,700	55,400	53,100	46,400	41,400	34,000	28,000	45
50				48,700	48,500	47,700	47,900	42,800	39,500	34,000	28,000	50
55				42,100	41,900	42,900	42,100	38,600	37,200	33,700	27,500	55
60				36,400	36,400	37,800	36,700	36,000	35,600	33,100	26,500	60
65					32,100	33,400	32,300	32,600	32,300	31,500	25,300	65
70					29,200	30,100	28,900	29,400	29,200	28,400	24,400	70
75					26,500	27,000	26,600	26,700	26,200	25,300	23,500	75
80						24,300	24,800	24,100	23,500	22,600	22,100	80
85						22,000	22,400	21,700	21,300	20,400	20,600	85
90						20,100	20,500	19,900	19,400	18,500	18,600	90
95							18,800	18,200	17,700	16,700	16,900	95
100							17,200	16,700	16,100	15,000	15,400	100
110								14,000	13,400	12,500	12,500	110
120								11,700	11,100	10,200	10,200	120
130									9,200	8,200	8,400	130
140										6,800	6,800	140
150										5,400	5,400	150
160											4,400	160
* Special Conditions Or Wire Rope Required (¹) Over Rear Only With Swing Lock Engaged												

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



45,855 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)											Radius (ft)
	42.7 ⁽¹⁾	42.7	57.1	71.9	86.6	101.4	116.1	130.9	145.7	160.4	170.6	
10	260,000*	228,000*	194,000	162,000								10
12	231,500*	199,000	191,500	158,000								12
14	201,500*	181,000	179,500	151,500	119,500							14
16	176,500	165,500	164,000	141,000	116,500							16
18	157,500	152,500	151,000	131,500	113,500	87,300						18
20	140,500	140,500	138,500	122,500	110,000	87,300	67,900					20
25	111,000	111,000	109,500	109,600	102,000	84,900	67,900	53,400				25
30	85,200	85,200	87,400	89,400	90,500	81,600	64,900	53,400	43,700	34,000		30
35			68,300	70,700	70,600	69,100	60,800	52,000	43,700	34,000	28,000	35
40			56,400	57,900	57,700	56,400	54,700	49,400	43,400	34,000	28,000	40
45			46,900	48,300	48,100	48,900	47,800	44,500	41,400	34,000	28,000	45
50				41,000	40,800	42,400	41,000	39,400	38,100	34,000	28,000	50
55				35,300	36,400	36,500	35,600	35,800	34,900	32,700	27,500	55
60				30,400	32,100	31,700	32,100	31,700	31,000	30,000	26,500	60
65					28,300	28,000	28,300	27,800	27,400	26,400	24,900	65
70					25,300	25,100	25,300	24,800	24,200	23,400	22,900	70
75					22,400	22,600	22,700	22,200	21,500	20,700	20,800	75
80						20,400	20,400	19,800	19,200	18,500	18,600	80
85						18,400	18,400	18,000	17,300	16,400	16,400	85
90						16,700	16,700	16,100	15,500	14,700	14,700	90
95							15,100	14,600	13,800	12,900	13,100	95
100							13,700	13,200	12,400	11,500	11,500	100
110								10,700	10,100	9,100	9,100	110
120								8,700	8,200	7,200	7,200	120
130									6,600	5,500	5,500	130
140										4,200	4,200	140
150										3,000	3,000	150
160											2,000	160
* Special Conditions Or Wire Rope Required (1) Over Rear Only With Swing Lock Engaged												

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



24,250 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)											Radius (ft)
	42.7 ⁽¹⁾	42.7	57.1	71.9	86.6	101.4	116.1	130.9	145.7	160.4	170.6	
10	260,000*	228,000*	194,000	162,000								10
12	217,000*	198,000	191,000	158,000								12
14	187,000	179,500	178,500	151,500	119,500							14
16	163,500	162,500	160,500	141,000	116,500							16
18	146,000	146,000	144,000	131,500	113,500	87,300						18
20	130,000	130,000	128,000	122,500	110,000	87,300	67,900					20
25	95,300	95,300	97,400	97,700	93,600	84,900	67,900	53,400				25
30	67,300	67,300	70,700	72,400	72,100	70,700	64,200	53,400	43,700	34,000		30
35			54,800	56,300	56,100	56,400	55,000	50,800	43,700	34,000	28,000	35
40			44,200	45,700	46,900	47,100	45,700	42,800	42,800	34,000	28,000	40
45			36,500	37,800	39,300	39,200	38,800	38,200	36,900	34,000	28,000	45
50				32,200	33,400	33,200	33,500	32,800	32,100	30,400	27,600	50
55				27,200	28,500	28,500	28,500	27,900	27,200	26,100	25,700	55
60				23,000	24,300	24,500	24,500	23,900	23,200	22,100	22,300	60
65					21,100	21,300	21,100	20,700	20,000	18,900	19,100	65
70					18,700	18,700	18,700	18,200	17,600	16,300	16,500	70
75					16,300	16,500	16,500	16,000	15,400	14,100	14,300	75
80						14,500	14,500	13,900	13,400	12,100	12,300	80
85						12,700	12,700	12,200	11,600	10,500	10,500	85
90						11,500	11,500	10,700	10,200	9,100	9,300	90
95							10,200	9,500	8,900	7,900	8,000	95
100							8,900	8,400	7,600	6,700	6,700	100
110								6,400	5,800	4,800	4,900	110
120								4,800	4,200	3,300	3,400	120
130									2,900			130
* Special Conditions Or Wire Rope Required (¹) Over Rear Only With Swing Lock Engaged												

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



19,180 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)											Radius (ft)
	42.7 ⁽¹⁾	42.7	57.1	71.9	86.6	101.4	116.1	130.9	145.7	160.4	170.6	
10	260,000*	228,000*	194,000	162,000								10
12	213,500*	203,000	192,000	158,000								12
14	183,500	182,500	179,000	151,500	119,500							14
16	160,500	160,500	158,500	141,000	116,500							16
18	143,500	143,500	141,000	131,500	113,500	87,300						18
20	127,000	127,000	125,000	121,000	110,000	87,300	67,900					20
25	88,400	88,400	90,200	91,200	90,300	84,900	67,900	53,400				25
30	62,800	62,800	66,500	68,200	68,000	66,500	63,600	53,400	43,700	34,000		30
35			51,500	52,800	53,600	54,100	52,800	48,900	43,700	34,000	28,000	35
40			41,400	42,500	44,300	44,000	42,500	42,500	40,900	33,800	28,000	40
45			33,800	35,300	36,900	36,600	36,600	35,900	34,800	33,000	28,000	45
50				29,800	30,800	31,000	31,000	30,300	29,800	28,600	26,800	50
55				25,100	26,000	26,300	26,300	25,600	25,100	24,000	24,100	55
60				21,100	22,200	22,600	22,600	21,900	21,300	20,200	20,400	60
65					19,300	19,600	19,600	18,900	18,200	17,300	17,300	65
70					16,900	17,000	17,000	16,500	15,800	14,800	14,900	70
75					14,500	14,900	14,900	14,300	13,600	12,600	12,800	75
80						13,200	13,200	12,400	11,700	10,800	10,900	80
85						11,600	11,600	10,700	10,200	9,100	9,400	85
90						10,200	10,000	9,500	8,700	7,800	7,800	90
95							8,700	8,300	7,500	6,500	6,500	95
100							7,700	7,200	6,500	5,500	5,500	100
110								5,400	4,700	3,600	4,000	110
120								3,900	3,100		2,300	120

* Special Conditions Or Wire Rope Required
⁽¹⁾ Over Rear Only With Swing Lock Engaged

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



0 lb Counterweight – Fully Extended Outriggers – 360° Rotation
(All Capacities Are Listed In Pounds)

Radius (ft)	Boom Length (ft)											Radius (ft)
	42.7 ⁽¹⁾	42.7	57.1	71.9	86.6	101.4	116.1	130.9	145.7	160.4	170.6	
10	235,000*	217,500*	194,000	162,000								10
12	198,500	195,000	189,000	158,000								12
14	170,500	170,500	168,500	151,500	119,500							14
16	149,000	149,000	147,000	141,000	116,500							16
18	126,500	126,500	124,000	121,000	111,500	87,300						18
20	104,500	104,500	110,900	110,900	106,500	86,400	67,900					20
25	66,800	66,600	71,000	73,000	72,700	70,500	63,100	53,400				25
30	46,900	45,800	49,900	51,700	53,700	53,200	51,700	47,600	43,300	34,000		30
35			36,700	38,900	40,500	40,600	40,000	39,400	37,300	33,400	28,000	35
40			28,600	30,500	31,900	32,100	32,100	31,400	30,500	29,200	27,500	40
45			22,700	24,500	25,800	26,000	26,000	25,400	24,500	23,400	23,300	45
50				20,000	21,300	21,500	21,500	20,800	20,000	19,000	19,100	50
55				16,300	17,600	17,800	17,800	17,100	16,300	15,300	15,300	55
60				13,300	14,500	14,700	14,700	14,100	13,200	12,100	12,100	60
65					12,200	12,200	12,200	11,600	10,700	9,600	9,800	65
70					10,100	10,100	10,100	9,600	8,700	7,600	7,900	70
75					8,100	8,400	8,400	8,000	7,200	6,000	6,100	75
80						6,900	6,900	6,500	5,800	4,600	4,600	80
85						5,600	5,600	5,200	4,500	3,400	3,400	85
90						4,700	4,700	4,100	3,300	2,200	2,200	90
95							3,800	3,200	2,100			95
100							2,900	2,400				100

* Special Conditions Or Wire Rope Required

⁽¹⁾ Over Rear Only With Swing Lock Engaged

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



Fly Attachment Lift Capacity Charts – Optional

77,160 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
170.6 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	14,600												35
40	14,600												40
45	14,600												45
50	14,600	14,600		10,900									50
55	14,600	14,600	12,900	10,900			7,300			5,100			55
60	14,600	14,600	12,500	10,900	9,700		7,300			5,100			60
65	14,600	14,600	12,200	10,900	9,700		7,300			5,100			65
70	14,600	14,400	12,000	10,900	9,400		7,300	6,500		5,100			70
75	14,600	14,000	11,700	10,900	9,000	6,100	7,300	6,100		5,100	4,800		75
80	14,300	13,500	11,300	10,900	8,600	5,900	7,200	5,900		5,100	4,600		80
85	13,500	12,800	11,100	10,900	8,300	5,700	7,100	5,700		5,100	4,300		85
90	12,700	12,100	10,800	10,800	8,100	5,700	7,000	5,400		5,000	4,100		90
95	11,900	11,400	10,600	10,400	7,800	5,500	6,800	5,200	3,900	5,000	3,900		95
100	11,100	10,700	10,300	10,000	7,400	5,300	6,600	5,000	3,800	4,900	3,700	2,600	100
110	9,800	9,500	9,400	8,900	7,000	5,100	5,900	4,700	3,600	4,600	3,500	2,500	110
120	8,700	8,400	8,400	8,000	6,400	4,900	5,400	4,400	3,500	4,000	3,200	2,400	120
130	7,700	7,500	7,500	7,100	6,100	4,800	4,900	4,000	3,300	3,700	2,900	2,200	130
140	6,900	6,800	6,800	6,400	5,800	4,600	4,500	3,800	3,300	3,300	2,700	2,200	140
150	6,100	6,100	6,100	5,700	5,500	4,500	4,100	3,500	3,100	3,100	2,500	2,100	150
160	5,000	5,300	5,400	5,100	5,100	4,400	3,800	3,400	3,000	2,700	2,400	2,000	160
170	3,900	4,100	4,100	4,500	4,500	4,300	3,500	3,200	2,900	2,400	2,200		170
180	2,900	3,000	2,900	4,000	4,200	4,000	3,300	3,000	2,800	2,300	2,000		180
190				3,200	3,400	3,400	3,100	2,900	2,800	2,100	2,000		190
200				2,400	2,600	2,300	2,600	2,700	2,500	1,900			200
210							2,300	2,500	2,200				210

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



77,160 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
160.4 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	17,000												35
40	17,000	17,000											40
45	17,000	17,000											45
50	17,000	16,700		12,300			7,700						50
55	17,000	16,300	12,700	12,300	10,900		7,700			5,600			55
60	17,000	15,900	12,300	12,300	10,900		7,700	7,000		5,600			60
65	17,000	15,600	11,900	12,300	10,700		7,700	6,800		5,600			65
70	17,000	15,200	11,800	12,300	10,300	7,100	7,700	6,400		5,600			70
75	16,500	14,700	11,400	12,300	10,000	7,000	7,600	6,000		5,600	4,700		75
80	15,800	14,200	11,100	12,300	9,600	6,800	7,400	5,800		5,600	4,500		80
85	15,200	13,600	10,900	12,100	9,300	6,500	7,200	5,500		5,300	4,300		85
90	14,600	13,100	10,800	11,800	8,900	6,300	7,000	5,300	3,900	5,200	4,000		90
95	14,000	12,600	10,600	11,500	8,500	6,200	6,700	5,100	3,800	5,100	3,800		95
100	13,400	12,200	10,400	11,200	8,200	6,100	6,300	4,900	3,700	4,900	3,700	2,600	100
110	12,500	11,500	10,000	10,100	7,600	5,900	5,700	4,600	3,600	4,400	3,400	2,500	110
120	11,500	10,800	9,600	9,300	7,200	5,700	5,100	4,200	3,400	3,900	3,100	2,300	120
130	9,700	10,000	9,300	8,600	6,800	5,500	4,700	3,900	3,300	3,500	2,900	2,200	130
140	7,900	8,300	8,500	7,900	6,300	5,300	4,300	3,700	3,200	3,200	2,600	2,100	140
150	6,400	6,600	7,000	7,300	6,100	5,200	3,900	3,400	3,100	2,800	2,400	2,000	150
160	5,000	5,300	5,300	6,200	5,800	5,100	3,600	3,300	2,900	2,600	2,300	2,000	160
170	3,900	3,900	3,900	5,100	5,500	5,000	3,300	3,100	2,900	2,300	2,100		170
180	3,000	2,900	2,600	4,300	4,500	4,500	3,100	2,800	2,800	2,200	2,000		180
190				3,400	3,400	3,400	2,800	2,800	2,700	2,000			190
200				2,300	2,300	1,900	2,500	2,600	2,500				200

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



63,490 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
170.6 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	14,600												35
40	14,600												40
45	14,600												45
50	14,600	14,600		10,900									50
55	14,600	14,600	12,900	10,900			7,300			5,100			55
60	14,600	14,600	12,500	10,900	9,700		7,300			5,100			60
65	14,600	14,600	12,200	10,900	9,700		7,300			5,100			65
70	14,600	14,400	12,000	10,900	9,400		7,300	6,500		5,100			70
75	14,600	14,000	11,700	10,900	9,000	6,100	7,300	6,100		5,100	4,800		75
80	14,300	13,500	11,300	10,900	8,600	5,900	7,200	5,900		5,100	4,600		80
85	13,500	12,800	11,100	10,900	8,300	5,700	7,100	5,700		5,100	4,300		85
90	12,700	12,100	10,800	10,800	8,100	5,700	7,000	5,400		5,000	4,100		90
95	11,900	11,400	10,600	10,400	7,800	5,500	6,800	5,200	3,900	5,000	3,900		95
100	11,100	10,700	10,300	10,000	7,400	5,300	6,600	5,000	3,800	4,900	3,700	2,600	100
110	9,800	9,500	9,400	8,900	7,000	5,100	5,900	4,700	3,600	4,600	3,500	2,500	110
120	8,700	8,400	8,400	8,000	6,400	4,900	5,400	4,400	3,500	4,000	3,200	2,400	120
130	7,500	7,500	7,500	7,100	6,100	4,800	4,900	4,000	3,300	3,700	2,900	2,200	130
140	5,900	6,500	6,600	6,400	5,800	4,600	4,500	3,800	3,300	3,300	2,700	2,200	140
150	4,500	4,900	5,000	5,700	5,500	4,500	4,100	3,500	3,100	3,100	2,500	2,100	150
160	3,300	3,600	3,700	4,600	5,000	4,400	3,800	3,400	3,000	2,700	2,400	2,000	160
170	2,400	2,500	2,500	3,500	3,900	4,100	3,500	3,200	2,900	2,400	2,200		170
180		1,800	1,800	2,600	3,000	3,100	3,100	3,000	2,800	2,300	2,000		180
190				1,800	2,200	2,200	2,400	2,900	2,800	2,100	2,000		190
200							1,800	2,200	2,400	1,900			200

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



63,490 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
160.4 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	17,000												35
40	17,000	17,000											40
45	17,000	17,000											45
50	17,000	16,700		12,300			7,700						50
55	17,000	16,300	12,700	12,300	10,900		7,700			5,600			55
60	17,000	15,900	12,300	12,300	10,900		7,700	7,000		5,600			60
65	17,000	15,600	11,900	12,300	10,700		7,700	6,800		5,600			65
70	17,000	15,200	11,800	12,300	10,300	7,100	7,700	6,400		5,600			70
75	16,500	14,700	11,400	12,300	10,000	7,000	7,600	6,000		5,600	4,700		75
80	15,800	14,200	11,100	12,300	9,600	6,800	7,400	5,800		5,600	4,500		80
85	15,200	13,600	10,900	12,100	9,300	6,500	7,200	5,500		5,300	4,300		85
90	14,600	13,100	10,800	11,800	8,900	6,300	7,000	5,300	3,900	5,200	4,000		90
95	14,000	12,600	10,600	11,500	8,500	6,200	6,700	5,100	3,800	5,100	3,800		95
100	13,400	12,200	10,400	11,200	8,200	6,100	6,300	4,900	3,700	4,900	3,700	2,600	100
110	11,700	11,500	10,000	10,100	7,600	5,900	5,700	4,600	3,600	4,400	3,400	2,500	110
120	9,500	10,200	9,600	9,300	7,200	5,700	5,100	4,200	3,400	3,900	3,100	2,300	120
130	7,700	8,300	8,500	8,600	6,800	5,500	4,700	3,900	3,300	3,500	2,900	2,200	130
140	5,900	6,500	6,600	7,400	6,300	5,300	4,300	3,700	3,200	3,200	2,600	2,100	140
150	4,700	5,000	5,000	6,000	6,100	5,200	3,900	3,400	3,100	2,800	2,400	2,000	150
160	3,300	3,600	3,600	4,800	5,300	5,000	3,600	3,300	2,900	2,600	2,300	2,000	160
170	2,500	2,500	2,400	3,700	4,100	4,200	3,300	3,100	2,900	2,300	2,100		170
180	1,800	1,800		2,700	3,100	3,100	3,100	2,800	2,800	2,200	2,000		180
190				2,000	2,000	2,000	2,400	2,700	2,700	2,000			190
200							1,800	2,300	2,500				200

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



45,855 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
170.6 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	14,600												35
40	14,600												40
45	14,600												45
50	14,600	14,600		10,900									50
55	14,600	14,600	12,900	10,900			7,300			5,100			55
60	14,600	14,600	12,500	10,900	9,700		7,300			5,100			60
65	14,600	14,600	12,200	10,900	9,700		7,300			5,100			65
70	14,600	14,400	12,000	10,900	9,400		7,300	6,500		5,100			70
75	14,600	14,000	11,700	10,900	9,000	6,100	7,300	6,100		5,100	4,800		75
80	14,300	13,500	11,300	10,900	8,600	5,900	7,200	5,900		5,100	4,600		80
85	13,500	12,800	11,100	10,900	8,300	5,700	7,100	5,700		5,100	4,300		85
90	12,700	12,100	10,800	10,800	8,100	5,700	7,000	5,400		5,000	4,100		90
95	11,800	11,400	10,600	10,400	7,800	5,500	6,800	5,200	3,900	5,000	3,900		95
100	10,700	10,700	10,300	10,000	7,400	5,300	6,600	5,000	3,800	4,900	3,700	2,600	100
110	8,400	9,000	9,300	8,900	7,000	5,100	5,900	4,700	3,600	4,600	3,500	2,500	110
120	6,200	6,900	7,400	7,700	6,400	4,900	5,400	4,400	3,500	4,000	3,200	2,400	120
130	4,600	5,100	5,500	5,800	6,100	4,800	4,900	4,000	3,300	3,700	2,900	2,200	130
140	3,200	3,600	3,900	4,500	5,300	4,600	4,500	3,800	3,300	3,300	2,700	2,200	140
150	2,100	2,300	2,600	3,200	4,000	4,400	3,900	3,500	3,100	3,100	2,500	2,100	150
160				2,300	2,900	3,100	2,900	3,400	3,000	2,700	2,400	2,000	160
170						2,000	2,000	2,700	2,900	2,200	2,200		170
180								2,000	2,400		2,000		180

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



45,855 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
160.4 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	17,000												35
40	17,000	17,000											40
45	17,000	17,000											45
50	17,000	16,700		12,300			7,700						50
55	17,000	16,300	12,700	12,300	10,900		7,700			5,600			55
60	17,000	15,900	12,300	12,300	10,900		7,700	7,000		5,600			60
65	17,000	15,600	11,900	12,300	10,700		7,700	6,800		5,600			65
70	17,000	15,200	11,800	12,300	10,300	7,100	7,700	6,400		5,600			70
75	16,500	14,700	11,400	12,300	10,000	7,000	7,600	6,000		5,600	4,700		75
80	15,800	14,200	11,100	12,300	9,600	6,800	7,400	5,800		5,600	4,500		80
85	15,200	13,600	10,900	12,100	9,300	6,500	7,200	5,500		5,300	4,300		85
90	13,900	13,100	10,800	11,800	8,900	6,300	7,000	5,300	3,900	5,200	4,000		90
95	12,300	12,500	10,600	11,500	8,500	6,200	6,700	5,100	3,800	5,100	3,800		95
100	10,700	11,600	10,400	11,200	8,200	6,100	6,300	4,900	3,700	4,900	3,700	2,600	100
110	8,400	9,000	9,500	9,800	7,600	5,900	5,700	4,600	3,600	4,400	3,400	2,500	110
120	6,500	6,900	7,400	7,700	7,200	5,700	5,100	4,200	3,400	3,900	3,100	2,300	120
130	4,800	5,300	5,500	6,000	6,800	5,500	4,700	3,900	3,300	3,500	2,900	2,200	130
140	3,300	3,600	3,900	4,600	5,400	5,300	4,300	3,700	3,200	3,200	2,600	2,100	140
150	2,100	2,300	2,600	3,500	4,000	4,400	3,900	3,400	3,100	2,800	2,400	2,000	150
160				2,400	2,900	3,100	3,100	3,300	2,900	2,600	2,300	2,000	160
170					2,000	2,000	2,200	2,900	2,900	2,300	2,100		170
180								1,900	2,400	1,800	2,000		180

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



24,250 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
170.6 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	14,600												35
40	14,600												40
45	14,600												45
50	14,600	14,600		10,900									50
55	14,600	14,600	12,900	10,900			7,300			5,100			55
60	14,600	14,600	12,500	10,900	9,700		7,300			5,100			60
65	14,600	14,600	12,200	10,900	9,700		7,300			5,100			65
70	14,600	14,400	12,000	10,900	9,400		7,300	6,500		5,100			70
75	13,400	14,000	11,700	10,900	9,000	6,100	7,300	6,100		5,100	4,800		75
80	11,500	12,900	11,300	10,900	8,600	5,900	7,200	5,900		5,100	4,600		80
85	9,800	11,000	11,100	10,900	8,300	5,700	7,100	5,700		5,100	4,300		85
90	8,300	9,500	10,100	9,700	8,100	5,700	7,000	5,400		5,000	4,100		90
95	7,000	8,000	8,800	8,400	7,800	5,500	6,800	5,200	3,900	5,000	3,900		95
100	5,900	6,700	7,400	7,200	7,400	5,300	6,600	5,000	3,800	4,900	3,700	2,600	100
110	3,900	4,700	5,200	5,100	6,500	5,100	5,800	4,700	3,600	4,600	3,500	2,500	110
120	2,400	2,900	3,400	3,600	4,800	4,900	4,300	4,400	3,500	4,000	3,200	2,400	120
130			1,800	2,300	3,400	4,000	3,000	4,000	3,300	3,300	2,900	2,200	130
140					1,900			3,200	3,300	2,200	2,700	2,200	140
150								2,100	2,700		2,500	2,100	150
160												2,000	160

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



24,250 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
160.4 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	17,000												35
40	17,000	17,000											40
45	17,000	17,000											45
50	17,000	16,700		12,300			7,700						50
55	17,000	16,300	12,700	12,300	10,900		7,700			5,600			55
60	17,000	15,900	12,300	12,300	10,900		7,700	7,000		5,600			60
65	17,000	15,600	11,900	12,300	10,700		7,700	6,800		5,600			65
70	15,500	15,200	11,800	12,300	10,300	7,100	7,700	6,400		5,600			70
75	13,600	14,300	11,400	12,300	10,000	7,000	7,600	6,000		5,600	4,700		75
80	11,700	12,900	11,100	12,100	9,600	6,800	7,400	5,800		5,600	4,500		80
85	9,800	11,000	10,900	11,200	9,300	6,500	7,200	5,500		5,300	4,300		85
90	8,500	9,500	10,000	9,800	8,900	6,300	7,000	5,300	3,900	5,200	4,000		90
95	7,200	8,100	8,800	8,500	8,500	6,200	6,700	5,100	3,800	5,100	3,800		95
100	5,900	6,900	7,400	7,400	8,100	6,100	6,300	4,900	3,700	4,900	3,700	2,600	100
110	3,900	4,700	5,200	5,400	6,600	5,900	5,700	4,600	3,600	4,400	3,400	2,500	110
120	2,400	3,100	3,400	3,800	4,800	5,500	4,600	4,200	3,400	3,900	3,100	2,300	120
130			2,000	2,400	3,400	4,000	3,100	3,900	3,300	3,500	2,900	2,200	130
140					2,200	2,600	2,000	3,200	3,200	2,400	2,600	2,100	140
150								2,100	2,900		2,400	2,000	150
160									2,000			2,000	160

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



19,180 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
170.6 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	14,600												35
40	14,600												40
45	14,600												45
50	14,600	14,600		10,900									50
55	14,600	14,600	12,900	10,900			7,300			5,100			55
60	14,600	14,600	12,500	10,900	9,700		7,300			5,100			60
65	14,600	14,600	12,200	10,900	9,700		7,300			5,100			65
70	13,600	14,400	12,000	10,900	9,400		7,300	6,500		5,100			70
75	12,000	13,200	11,700	10,900	9,000	6,100	7,300	6,100		5,100	4,800		75
80	10,000	11,300	11,200	10,700	8,600	5,900	7,200	5,900		5,100	4,600		80
85	8,400	9,500	10,500	9,800	8,300	5,700	7,100	5,700		5,100	4,300		85
90	7,000	8,000	9,100	8,500	8,100	5,700	7,000	5,400		5,000	4,100		90
95	5,800	6,800	7,500	7,200	7,800	5,500	6,800	5,200	3,900	5,000	3,900		95
100	4,800	5,700	6,200	6,000	7,300	5,300	6,500	5,000	3,800	4,900	3,700	2,600	100
110	2,900	3,700	4,100	4,100	5,400	5,100	4,900	4,700	3,600	4,600	3,500	2,500	110
120		2,200	2,400	2,600	3,800	4,600	3,400	4,400	3,500	3,600	3,200	2,400	120
130					2,400	3,100	2,100	3,500	3,300	2,400	2,900	2,200	130
140								2,400	3,200		2,600	2,200	140
150									2,100			2,100	150
160												1,900	160

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



19,180 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
160.4 ft Main Boom Length													
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			79.1 ft Offset Fly			98.8 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	0°	20°	35°	0°	20°	35°	
35	17,000												35
40	17,000	17,000											40
45	17,000	17,000											45
50	17,000	16,700		12,300			7,700						50
55	17,000	16,300	12,700	12,300	10,900		7,700			5,600			55
60	16,900	15,900	12,300	12,300	10,900		7,700	7,000		5,600			60
65	16,500	15,600	11,900	12,300	10,700		7,700	6,800		5,600			65
70	14,200	14,900	11,800	12,300	10,300	7,100	7,700	6,400		5,600			70
75	12,100	13,400	11,400	12,300	10,000	7,000	7,600	6,000		5,600	4,700		75
80	10,300	11,400	11,000	11,700	9,600	6,800	7,400	5,800		5,600	4,500		80
85	8,600	9,600	10,500	10,000	9,300	6,500	7,200	5,500		5,300	4,300		85
90	7,100	8,200	9,100	8,600	8,900	6,300	7,000	5,300	3,900	5,200	4,000		90
95	5,800	6,900	7,700	7,300	8,300	6,200	6,700	5,100	3,800	5,100	3,800		95
100	4,800	5,700	6,400	6,200	7,600	6,100	6,300	4,900	3,700	4,900	3,700	2,600	100
110	2,900	3,700	4,100	4,400	5,600	5,900	5,100	4,600	3,600	4,400	3,400	2,500	110
120		2,200	2,600	2,900	3,800	4,700	3,600	4,200	3,400	3,800	3,100	2,300	120
130					2,600	3,100	2,300	3,700	3,300	2,600	2,900	2,200	130
140						2,100		2,400	3,100		2,600	2,100	140
150									2,300		2,100	2,000	150
160												2,000	160

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



0 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)							
170.6 ft Main Boom Length							
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	
35	14,600						35
40	14,600						40
45	14,600						45
50	14,600	14,600		10,900			50
55	13,600	14,500	12,900	10,900			55
60	11,600	13,800	12,500	10,800	9,700		60
65	9,100	11,100	12,200	10,300	9,700		65
70	7,100	8,900	10,100	8,600	9,400		70
75	5,400	7,000	8,000	6,900	8,700	6,100	75
80	3,900	5,500	6,300	5,400	7,700	5,900	80
85	2,700	3,900	4,800	4,000	6,300	5,700	85
90		2,800	3,600	3,000	5,100	5,700	90
95		1,800	2,500	2,100	4,000	5,000	95
100					3,000	4,000	100
110						2,200	110

0 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)							
160.4 ft Main Boom Length							
Radius (ft)	31.2 ft Offset Fly			53.1 ft Offset Fly			Radius (ft)
	Fly Length (ft)			Fly Length (ft)			
	0°	20°	35°	0°	20°	35°	
35	17,000						35
40	17,000	17,000					40
45	17,000	17,000					45
50	16,700	16,700		12,300			50
55	14,900	15,800	12,700	12,300	10,900		55
60	11,800	14,000	12,300	12,100	10,900		60
65	9,200	11,300	11,900	10,600	10,700		65
70	7,200	9,000	10,000	8,800	10,300	7,100	70
75	5,500	7,100	8,000	7,100	9,400	7,000	75
80	4,000	5,500	6,400	5,600	8,000	6,800	80
85	2,700	4,100	4,900	4,300	6,500	6,500	85
90		2,900	3,600	3,200	5,200	6,100	90
95		1,900	2,500	2,200	4,100	5,300	95
100					3,100	4,200	100
110						2,300	110

This information is not for crane operation. Operator must refer to the in-cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads.



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