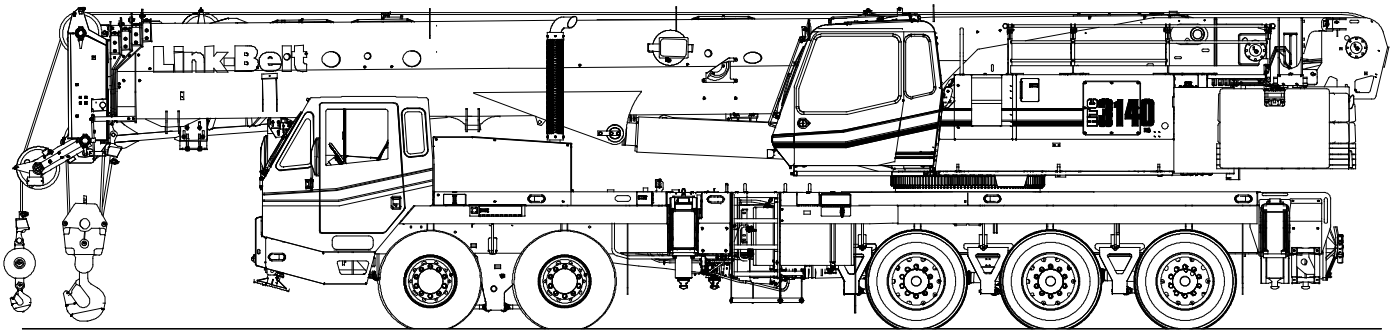


# Technical Data

## Specifications & Capacities

**HTC** **3140**

Telescopic Boom Truck Crane  
**140 US ton**  
**120 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.



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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 integrated holding valves.

### Boom

- 41.4–162 ft (12.6–49.3m) five section boom
- Integral boom dolly connection
- Five boom extend modes (EM1 through EM5), controlled from the operator's cab, provide superior capacities by varying the extension of the telescoping sections:
  - EM1 extends to 162 ft (49.3m)
  - EM2 extends to 150 ft (45.7m)
  - EM3 extends to 124.7 ft (38.0m)
  - EM4 extends to 112 ft (34.1m)
  - EM5 extends to 86.2 ft (26.3m)
- Mechanical boom angle indicator
- Wind speed indicator
- Maximum tip height for each extend mode is:
  - EM1 is 171 ft (52.1m)
  - EM2 is 159 ft (48.5m)
  - EM3 is 134 ft (40.8m)
  - EM4 is 122 ft (37.2m)
  - EM5 is 96 ft (29.3m)

### Boom Wear Pads

- Wear pads with Teflon inserts that self-lubricate the boom sections
- Bottom wear pads are universal for all telescoping boom sections
- Bottom wear pads are universal for the boom base section
- Top wear pads are universal for all boom sections

### Boom Head

- Six 16.38 in (41.6cm) root diameter nylon sheaves to handle up to twelve parts of line
- Easily removable wire rope guards
- Rope dead end lugs on each 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:  $-2.5^{\circ}$  to  $80^{\circ}$

### Auxiliary Lifting Sheave – Optional

- Single 16.38 in (41.6m) 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

- 140 ton (127.0mt) 7 sheave quick-reeve hook block with safety latch
- 100 ton (90.7mt) 6 sheave quick-reeve hook block with safety latch
- 80 ton (72.6mt) 5 sheave quick-reeve hook block with safety latch
- 50 ton (45.4mt) 4 sheave quick-reeve hook block with safety latch
- 35 ton (31.8mt) 1 sheave quick-reeve hook block with safety latch
- 12 ton (10.9mt) hook ball (swivel) with safety latch

### Fly – Optional

- 31 ft–55 ft (9.4–16.7m) two piece bi-fold lattice fly, stowable, offsettable to  $2^{\circ}$ ,  $15^{\circ}$ ,  $30^{\circ}$ , and  $45^{\circ}$ . Maximum tip height is 225 ft (68.6m).
- 10 ft–31 ft–55 ft (3.0–9.4–16.7m) three piece bi-fold lattice fly, stowable, offsettable to  $2^{\circ}$ ,  $15^{\circ}$ ,  $30^{\circ}$ , and  $45^{\circ}$ . Maximum tip height is 225 ft (68.6m).
- 10 ft–31 ft–55 ft (3.0–9.4–16.7m) three piece bi-fold lattice fly, stowable, hydraulically offsettable to  $2^{\circ}$  through  $45^{\circ}$ . Maximum tip height is 225 ft (68.6m).

### Fly Extensions – Optional

- One 18 ft (5.5m) lattice extension, equipped with two 16.38 in (41.6cm) root diameter nylon sheaves, to be mounted between the boom head and fly options. Maximum tip height is 243 ft (74.1m). Minimum of 32,000 lb (14 515kg) of counterweight required.
- Two 18 ft (5.5m) lattice extensions, one equipped with two 16.38 in (41.6cm) root diameter nylon sheaves, to be mounted between the boom head and fly options. Maximum tip height is 260 ft (79.2m). Minimum of 32,000 lb (14 515kg) of counterweight required.
- Three 18 ft (5.5m) lattice extensions, one equipped with two 16.38 in (41.6cm) root diameter nylon sheaves, to be mounted between the boom head and fly options. Maximum tip height is 278 ft (84.7m). Minimum of 32,000 lb (14 515kg) of counterweight required.

## ■ Upper Operator's Cab and Controls

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

Equipped with:

- Tilting cab up to 20°
- Seat belt
- Tinted and tempered glass windows
- Five way adjustable, cushioned seat with headrests, and seat belt
- Extra—large fixed front window with windshield wiper and washer
- Swing up roof window with windshield wiper
- Sliding left side door with large fixed window
- Sliding right side window for ventilation
- Engine dependent warm – water heater with air ducts for front windshield defroster and cab floor
- Defroster fan for the front window
- Bubble level
- Circulating fan
- Sun screen
- Dome light
- Cup holder
- Fire extinguisher
- Left side viewing mirror
- Two position travel swing lock

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

**Armrest Controls** – Two dual axis electronic joystick controllers or optional single axis electronic controllers for:

- Swing
- Boom hoist
- Main front winch
- Auxiliary rear winch – optional
- Drum rotation indication
- Drum rotation indicator activation switch
- Winch high/low speed disable switch(es)
- Cab heater and A/C controls
- Throttle lock switch
- Throttle set/resume switch
- Cab tilt switch
- Counterweight handling switch
- Warning horn button
- Swing park brake

### Foot Controls

- Boom Telescope
- Swing brake
- Engine throttle

**Right Front Console** – Controls and indicators for:

- Warning horn button
- Function disable switch
- Cab floodlights switch
- Console dimmer switch
- 2–12 volt accessory outlet (Switched & Unswitched)
- Emergency engine shutdown
- Windshield wiper/washer switch
- Outrigger keypad
- Upper ignition switch
- Lower ignition switch
- DPF regeneration inhibit switch
- DPF regeneration initiate switch
- Boom floodlights switch – optional
- Rotating beacon/strobe light switch – optional
- Hydraulic offset fly switch – optional

**Cab Instrumentation** – Ergonomically positioned LCD display, CANBUS instrumentation for crane operation including:

- Tachometer
- Change filter indication
- Engine water temperature
- Fuel level
- Hydraulic oil temperature
- Stop engine
- Check engine
- Wait to start
- High exhaust temperature light
- DPF regeneration light
- Regeneration Disabled light
- Swing park brake light
- Fine metering function set & %
- Engine speed
- Engine oil pressure
- Battery voltage
- Engine hours
- Fuel rate (gal/hr)
- Engine load
- Third wrap indicator activation & setup
- Engine Diagnostics
- Electronic Control Diagnostics
- Outrigger level indicator
- Charge filter indicator

**Diagnostic Center** – Located on the left side of the front panel below the windshield

- Engine diagnostic
- RCL CANBUS diagnostic
- Boom CANBUS diagnostic
- Crane Controller USB diagnostic
- RCL controller USB diagnostic
- Manual boom control connection
- Manual crane control connection

**Link-Belt Pulse** – The Link-Belt in-house designed, total crane operating system that utilizes the display as a readout and operator interface for the following systems:

- **Rated capacity limiter** – LCD graphic audio – visual warning system integrated into the dash with anti – two block and function limiter. Operating data includes:
  - Crane configuration
  - Boom length and angle
  - Boom head height
  - Allowed load and % of allowed load
  - RCL light bar
  - Boom angle
  - Radius of load
  - Actual load
  - Wind speed
  - Unit Conversion
  - Multiple language capabilities
  - Highlighted unit of measurement on working screen
  - Active pin/latch status
  - Telescope operation displayed in real time
  - Counterweight installation/removal
  - Third wrap indicator
  - Diagnostics
  - Operator settable alarms (include):
    - Maximum and minimum boom angles
    - Maximum tip height
    - Maximum boom length
    - Swing left/right positions
    - Operator defined area (imaginary plane)
  - Outtrigger position sensing
- **Extend control module (ECM)**
  - Controls the extend modes
  - Diagnostics
- **Electronic controllers**
  - Controls all load lifting functions
  - Diagnostics
- **Fine metering**
  - Controls the initial reaction speeds of the main and auxiliary winches, boom hoist, and swing functions
  - Diagnostics

**External RCL Light Bar – Optional** – Visually informs the ground crew when crane is approaching maximum load capacity with a series of green, yellow, and red lights.

**Internal RCL Light Bar – Optional** – Visually informs the operator when crane is approaching maximum load capacity with a series of green, yellow, and red lights.

## ■ Swing

**Motor/Planetary** – Bi-directional hydraulic swing motor mounted to a planetary reducer for 360° continuous smooth swing at 1.5 rpm.

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

**Swing Brake** – 360°, foot operated, hydraulic applied disc brake mounted to the speed reducer.

**Swing Lock** – Two-position swing lock (boom over front or rear) operated from the operator's cab.

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

## ■ Electrical

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

### Lights

- Two working lights on front of the cab
- One rotating amber beacon on top of the cab – optional
- One amber strobe beacon on top of the cab – optional
- Boom floodlight – optional

## ■ Load Hoist System

### Load Hoist Performance

Main (Front) and Auxiliary (Rear) Winches – 7/8 in (22mm) Rope										
Layer	Maximum Line Pull		Normal Line Speed		High Line Speed		Layer		Total	
	lb	kg	ft/min	m/min	ft/min	m/min	ft	m	ft	m
1	21,022	9 535.4	137	41.7	272	82.9	125	38.1	125	38.1
2	18,985	8 611.9	152	46.3	301	91.7	138	42.0	263	80.2
3	17,280	7 838.0	167	50.9	331	100.8	152	46.3	415	126.5
4	15,868	7 197.6	182	55.4	360	109.7	165	50.3	588	179.2
5	14,669	6 653.7	197	60.0	390	118.8	179	54.6	759	231.3
6	13,639	6 186.5	212	64.6	419	127.7	192	58.5	951	289.9

Wire Rope Application		Diameter		Type	Maximum Permissible Load	
		in	mm		lb	kg
Main (Front) Winch	Standard	7/8	22	18x19 rotation resistant – right regular lay (Type RB)	17,520	7 946.9
	Optional	7/8	22	4 strand, low torque – right regular lay (Type GC)	30,285	13 737.0
	Optional	7/8	22	36x7 rotation resistant – right regular lay (Type ZB)	20,920	9 489.2
Auxiliary (Rear) Winch	Standard	7/8	22	18x19 rotation resistant – right regular lay (Type RB)	17,520	7 946.9
	Optional	7/8	22	4 strand, low torque – right regular lay (Type GC)	30,285	13 737.0
	Optional	7/8	22	36x7 rotation resistant – right regular lay (Type ZB)	20,920	9 489.2

### 2M Main (Front) and Optional Auxiliary (Rear) Winches

- Axial piston, full and half displacement (2–speed) motors driven through planetary reduction unit for positive control under all load conditions.
- Grooved lagging
- Power up/down mode of operation
- Hoist drum cable follower – optional
- Drum rotation indicator
- Drum diameter: 15 in (38.1cm)
- Rope length:
  - Main (Front): 850 ft (259.0m)
  - Auxiliary (Rear): 600 ft (182.8m) or 850 ft (259.0m)
- Maximum rope storage: 951 ft (289.9m)
- Terminator style socket and wedge

**Third wrap indicator – optional** – 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.

## ■ Hydraulic System

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

### Main Pumps

- One, three section gear pump for the boom hoist, telescope, swing, and charge circuits.
- Two, closed-loop piston pumps are mounted to the rear of the pump drive. The front pump drives the front winch and the rear pump drives the optional rear winch.
- One, pressure compensated piston pump mounted to the rear of the rear winch pump supplies hydraulic power to the controls, counterweight handling, and hydraulically offsettable fly (optional) circuits.

**Hydraulic Reservoir** – 155 gal (586.7L) capacity equipped with sight level gauge. Diffusers built in for deaeration. Magnetic drain plug and large internal magnet.

### Filtration

- One, 7-micron filter located inside hydraulic reservoir, accessible for easy replacement
- One, 7-micron charge filter located next to the reservoir with an in-cab indicator light
- One, magnetic suction strainer located inside the hydraulic reservoir

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

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

**Hydraulic Oil Cooler** – Remote mounted, removes heat from the hydraulic oil.

**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 released position allowing free rotation of the upperstructure.

## ■ Pump Drive

All pumps are mechanically driven by the diesel engine. Boom hoist and telescope pumps have an activation delay during engine start to aid in cold weather starting.

## ■ Fuel Tank

One 60 gal (227.1L) capacity tank

## ■ Engine

Specification	Cummins QSB–6.7
Numbers of cylinders	6
Cycle	4
Emissions Compliance Level:	Tier 4i/Stage IIIB
Bore and Stroke: inch (mm)	4.21 x 4.88 (107x124)
Piston Displacement: in <sup>3</sup> (L)	409 (6.7)
Max. Brake Horsepower: hp (kW)	215 (160) @ 1,800 rpm
Peak Torque: ft lb (Nm)	685 (929.0) @ 1,300 rpm
Alternator: volts – amps	12 – 160
Crankcase Capacity: qt (L)	18.4 (17.4)
<ul style="list-style-type: none"> <li>• 120 V engine block heater</li> <li>• Complies with EPA emissions standards effective January 2010.</li> </ul>	

## ■ Counterweight

**Standard** – Total of 20,000 lb (9 072kg) consisting of auxiliary winch or 2,000 lb (907kg) 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
- 4,000 lb (1 814kg) counterweight
- 8,000 lb (3 629kg) counterweight
- 14,000 lb (6 350kg) counterweight
- 20,000 lb (9 072kg) counterweight

**Optional** – 12,000 lb (5 443kg) in addition to standard counterweight for a total of 32,000 lb (14 515kg) counterweight with additional capacities for:

- 32,000 lb (14 515kg) counterweight

**Optional** – 25,000 lb (11 340kg) in addition to standard counterweight for a total of 45,000 lb (20 412kg) counterweight with additional capacities for:

- 32,000 lb (14 515kg) counterweight
- 45,000 lb (20 412kg) counterweight

**Optional** – 40,000 lb (18 144kg) in addition to standard counterweight for a total of 60,000 lb (27 215kg) with additional capacities for:

- 32,000 lb (14 515kg) counterweight
- 45,000 lb (20 412kg) counterweight
- 60,000 lb (27 215kg) 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 13 ft 8 in (4.2m) for this counterweight configuration.

**20,000 lb (9 072kg)**

**32,000 lb (14 515kg)**

**45,000 lb (20 412kg)**

**60,000 lb (27 215kg)**

<b>Counterweight Packages</b>	20,000 lb (9 072kg) – Standard								
	32,000 lb (14 515kg) – Optional								
	45,000 lb (20 412kg) – Optional								
	60,000 lb (27 215kg) – Optional								
<b>Counterweight Modules</b>	4,000 lb (1 814kg) Bottom Tray	6,000 lb (2 722kg) Piece	6,000 lb (2 722kg) Piece	2,000 lb (907kg) Top Tray	2,000 lb (907kg) Top*	12,000 lb (5 443kg) Piece	13,000 lb (5 897kg) Piece	15,000 lb (6 804kg) 2–Piece	
<b>Counterweight Usage Configurations</b>	0 lb (0kg)								
	4,000 lb (1 814kg)				X	X			
	8,000 lb (3 629kg)	X			X	X			
	14,000 lb (6 350kg)	X	X		X	X			
	20,000 lb (9 072kg)	X	X	X	X	X			
	32,000 lb (14 515kg)	X	X	X	X	X	X		
	45,000 lb (20 412kg)	X	X	X	X	X	X	X	
	60,000 lb (27 215kg)	X	X	X	X	X	X	X	X

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

# Carrier

## ■ General

- 9 ft 10 in (3.0m) wide
- 28 ft 1 in (8.56m) 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, intermediate, and retracted positions.

Jacks with integral check valves, hydraulically controlled from the operator's cab and on both sides of carrier. A fifth front bumper outrigger with integral check valves is hydraulically controlled from the operator's cab and at the front bumper of carrier.

**Pontoons** – Four lightweight, stow'n go, 26" (66cm) diameter steel pontoons with a contact area of 531 in<sup>2</sup> (3 425cm<sup>2</sup>) can be stored for road travel in either the storage racks on the carrier or under the outrigger boxes.

**Main Jack Reaction** – 160,000 lb (72 575kg) force and 301 psi (2 075kPa) ground bearing pressure

## ■ Steering and Axles

- Full integral master gear/slave gear steering system provides hydraulic assisted steering with mechanical link between steering wheel and wheels
- **Drive** – 10 x 6 for on/off–highway travel
- **Axle 1 & 2** – Tandem steered, non–driven
- **Axle 3, 4, & 5** – Tridem non–steered, driven
- **Inter–Axle Differential Lock** – Traction adding device that locks axle 3 with axle 4 and axle 4 with axle 5. Operated by a switch from the carrier cab.
- **Transaxle (Cross–axle) Differential Lock** – Traction adding device that locks differentials within axles 3, 4, and 5. Operated by a switch from the carrier cab.

## ■ Suspension

Hydro–pneumatic, lockable with level adjustment and automatic ride height leveling. All axles have longitudinal and transverse trailing arms with leveling adjustment and lockable cylinders. The carrier can be raised and lowered by controls in the carrier cab that adjust the suspension cylinders.

- Cylinder stroke: –3.5 in (–88.9mm) / +3.5 in (88.9mm)

## ■ Ground Control Outrigger/Suspension Controls

Environmentally sealed and ergonomically positioned, control stations located on both sides of the carrier with controls for crane operations including:

- Starts and stops carrier engine
- Throttles carrier engine up and down
- Suspension operation including:
  - Raise suspension on outriggers
  - Lower suspension on tires
- Outrigger operation including:
  - Extends and retracts two beams together
  - Extends and retracts all jacks together
  - Extend and retract fifth (bumper) outrigger
  - Automatic leveling on outriggers
- Outrigger lighting
- Bubble level

## ■ Tires and Wheels

**Front** – Four (single) 445/65R22.5 tires on aluminum disc wheels

**Rear** – Twelve (dual) 12R24.5 tires on aluminum disc wheels

- Spare tires and wheels – optional
- Tire inflation kit – optional

## ■ Brakes

**Service** – Full air anti–lock (ABS) brakes on all wheel ends. Dual circuit compressed air system with air dryer.

**Parking/Emergency** – Spring loaded type, acting on 3rd, 4th, and 5th axles automatically apply when air pressure drops below 40 psi (275.8kPa) in both circuits.

**Hill Start Aid (HSA)** – Prevents roll–back or roll–forward while launching on grades.

## ■ Electrical

**Battery** – Three batteries provide 12 volt starting and operation

### Lights

- Front lighting includes two main headlights, two high beam lights, two parking/directional indicators, and three cab marker lights.
- Side lighting includes three parking/directional indicators per side.
- Rear lighting includes two parking/directional indicators, two parking/brake lights, two reverse lights, three marker lights, and a license plate light.
- Other equipment includes hazard/warning system, cab lights, instrument panel lights, and signal horn.
- One amber strobe beacon on top of the cab – optional
- Daytime running lights – optional
- Outrigger working lights

## ■ Engine

Specification	Cummins ISX 15
Numbers of cylinders	6
Cycle	4
Bore and Stroke: inch (mm)	5.39 x 6.65 (137x169)
Piston Displacement: in <sup>3</sup> (L)	912 (14.9)
Max. Brake Horsepower: hp (kW)	581 (434) @ 2,000 rpm 550 (410) @ 1,800 rpm
Peak Torque: ft lb (Nm)	1,850 (2 508) @ 1,200 rpm
Alternator: volts – amps	12 – 160
Crankcase Capacity: qt (L)	52 (49.2)
<ul style="list-style-type: none"> <li>• Cruise control</li> <li>• Three-stage engine compression brake</li> <li>• Engine driven variable speed fan</li> <li>• Thermostatically controlled radiator</li> <li>• 120 V engine block heater</li> <li>• Ether injection system – optional</li> <li>• Complies with EPA Emissions standards effective January 2010</li> </ul>	

## ■ Transmission

**Main Transmission** – Automated – Eaton Ultra Shift® Plus (no clutch pedal) transmission with 11 forward gears and 3 reverse gears.

**Auxiliary Transmission** – Air actuated manual transmission with two gears.

## ■ Carrier Speeds and Gradeability

Eaton Ultra Shift® Plus		Speed				Gradeability (@ peak torque Except Creep @ Idle)	
Gear	Ratio	High Range (1.00)		Low Range (2.04)		% Grade	
		mph	km/h	mph	km/h	Min.	Max.
11th	0.73	65.62	105.61	32.16	51.76	1.71	3.49
10th	1.00	47.90	77.09	23.48	37.79	2.93	5.73
9th	1.38	34.71	55.86	17.01	27.37	4.50	8.79
8th	1.95	24.56	39.53	12.04	19.38	6.76	13.32
7th	2.77	17.29	27.83	8.48	13.65	9.96	19.79
6th	3.79	12.64	20.34	6.20	9.98	13.90	27.82
5th	5.23	9.16	14.74	4.49	7.23	19.45	39.13
4th	7.41	6.46	10.40	3.17	5.10	23.34	47.04
3rd	11.85	4.04	6.50	1.98	3.19	29.17	58.92
2nd	16.30	2.94	4.73	1.44	2.32	31.15	62.96
1st	26.08	1.84	2.96	0.90	1.45	38.94	78.85
Reverse (1)	20.84	2.30	3.70	1.13	1.82	33.54	67.85
Reverse (2)	13.03	3.68	5.92	1.80	2.90	20.74	41.72
Reverse (3)	3.43	13.96	22.47	6.29	10.12	6.55	14.13
1st @ Idle	26.08	0.60	0.97	0.32	0.51		
2nd @ Idle	16.30	0.96	1.54	0.50	0.80		
3rd @ Idle	11.85	1.31	2.11	0.69	1.11		
Reverse (1) @ Idle	20.84	0.75	1.21	0.39	0.63		
Reverse (2) @ Idle	13.03	1.19	1.92	0.63	1.01		

Based on a gross vehicle weight of 117,600 lbs (53 342kg)

## ■ Fuel Tank

One 95 gal (359.6L) capacity tank

## ■ Hydraulic System

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

### Main Pumps

- One fixed displacement gear pump for the steering circuit
- One fixed displacement gear pump for suspension and outriggers
- Combined pump capacity of 41 gpm (155.2Lpm)

**Hydraulic Reservoir** – 35 gal (132.5L) capacity equipped with sight level gauge. Diffusers built in for deaeration.

**Filtration** – Two 10 micron, full flow, return line filters. All oil is filtered prior to return to reservoir. Accessible for easy filter replacement.

## ■ Pump Drive

All pumps are mechanically driven by the diesel engine. Suspension and outriggers pump is direct mounted to the PTO at the bottom of the transmission. Steering pump is direct mounted to the engine.

## ■ Lower Cab and Controls

**Environmental Cab** – Fully enclosed, one person cab of composite structure with acoustical insulation. Equipped with:

- Tinted and tempered glass windows
- Roll down left side window for ventilation
- Right side window
- Intermittent windshield wiper and washer
- Six way adjustable and air suspended driver's seat with seat belt
- Two remote control, heated, rear view mirrors
- Engine dependent warm–water heater with air ducts for windshield defroster and cab floor
- Adjustable sun visor
- 2 Dome lights
- 12 volt accessory jack (switched)
- 12 volt accessory jack (unswitched)
- Fire extinguisher

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

**Cab Instrumentation** – Ergonomically positioned instrumentation for driving including:

- Speedometer with odometer, hour meter, trip meter, and clock
- Tachometer
- Front and rear system air pressure with warning indicator
- Diesel emissions fluid level with warning indicator

### **Dash Mounted Controls For:**

- Carrier lights
- Console dimmer switch
- Diesel particulate filter switch
- Fan override switch
- Remote mirror control switches
- Mirror heating switch
- Cab heater/air conditioning switch
- Travel mode switch
- Park brake air valve
- Trailer brake air valve

### **Dash Mounted Indicators For:**

- Turn signal indication
- High beam headlights

**Dash Mounted LCD Display** – Ergonomically positioned on the right of driver's front dash panel, digital instrumentation and indicators for crane operations including:

### **Gauges**

- Engine water temperature
- Engine oil pressure
- Fuel level
- Voltmeter

### **Indicator Lights**

- Check engine
- Stop engine
- Service engine
- Exhaust regeneration
- High exhaust temperature
- Wait to start
- Cruise
- Park brake
- ABS

- Trailer ABS
- Transaxle (cross–axle) differential lock
- Inter–axle differential lock
- Transfer case
- Travel mode
- Ride height
- Seat belt

### **Diagnostic Screens**

- Engine
- Transmission
- ABS brakes
- Suspension
- Outriggers

**Right Side Console** – Controls and indicators for:

- Transmission gear shifting
- Transmission digital readout
- Cruise controls
- Auxiliary transmission range selector switch
- Transaxle (cross–axle) differential lock switch with indicator light
- Inter–axle differential lock switch with indicator light
- Front axles (axles 1 & 2) suspension height switch
- Rear axles (axles 3–5) suspension height switch
- Ride height switch
- 2/12 volt accessory outlet (switched & unswitched)

### **Steering Column Controls For:**

- Carrier ignition
- Turn signal switch
- High beam switch
- Steering wheel adjustments
- Warning horn
- Hazard light switch
- Intermittent windshield wiper and washer

### **Foot Controls For:**

- Carrier service brakes
- Engine throttle

**Fuse & Diagnostic Center** – Located inside cab behind seat contains:

- Fuses, Relays
- Control Modules
- Diagnostic ports
  - Suspension diagnostic
  - Engine diagnostic
  - ABS Diagnostic
  - Cab display diagnostic
  - Transmission Diagnostic

## ■ Additional Equipment

### **Standard:**

- Aluminum full deck fenders with mud flaps
- Tow right side aluminum storage boxes
- Air hose connection ports
- Clearance flags

### **Optional:**

- Pneumatic and electrical quick disconnect connectors mounted on the rear for trailer or boom dolly brakes and lights
- Rear mounted pintle hook

# Axle Loads

Base crane with full tank of fuel and 2,000 lb (907kg) counterweight	Gross Vehicle Weight <sup>(1)</sup>		Front Axles		Rear Axles	
	lb	kg	lb	kg	lb	kg
	103,414	46 908	38,414	17 311	65,250	29 597
Driver in carrier cab	250	113	311	141	-61	-28
Rear pintle hook	44	20	-23	-10	67	30
Pneumatic and electrical connectors for trailer or boom dolly	15	7	1	-1	13	6
Ether injection	6	3	9	4	-2	1
Remove 2,000 lb (907kg) of ctwt – for one winch configuration only	-2,039	-925	1,054	478	-3,093	-1 403
Hoist drum follower – main	101	46	-43	-20	144	65
Auxiliary winch with 600 ft (182.8m) of 7/8" (22mm) wire rope	1,059	480	-497	-225	1,556	706
Remove auxiliary winch with 600 ft (182.8m) of 7/8" (22mm) wire rope – for two winch configuration only	-2,893	-1 312	1,565	710	-4,458	-2 022
Hoist drum follower – auxiliary	101	46	-57	-26	158	72
Substitute 600 ft (182.8m) of rope with 850 ft (259.1m) of rope – auxiliary	420	191	-192	-87	612	278
Remove 850 ft (259.1m) of rope from front (main) winch	-1,451	-658	482	219	-1,932	-876
Remove 600 ft (182.8m) of rope from rear (auxiliary) winch	-1,031	-468	471	214	-1,502	-681
360° mechanical swing lock	140	64	23	10	117	53
4,000 lb (1 814kg) counterweight bottom tray on upper	4,000	1 814	-1,733	-786	5,733	2 600
6,000 lb (2 722kg) counterweight on upper	6,000	2 722	-2,599	-1 179	8,599	3 900
6,000 lb (2 722kg) counterweight on upper	6,000	2 722	-2,599	-1 179	8,599	3 900
12,000 lb (5 443kg) counterweight on upper	12,000	5 443	-5,198	-2 358	17,198	7 801
13,000 lb (5 897kg) counterweight on upper	13,000	5 897	-5,632	-2 555	18,632	8 451
2,000 lb (907kg) counterweight top tray on upper	2,000	907	-806	-366	2,806	1 273
Floodlight to the front of boom base section	7	3	11	5	-4	-2
Fly mounting brackets to boom base section for fly options	290	132	295	134	-5	-2
31 – 55 ft (9.45 – 16.76m) offsettable, two-piece (bi-fold) lattice fly – stowed	2,734	1 240	2,705	1 227	29	13
10 – 31 – 55 ft (3.05 – 9.45 – 16.76m) offsettable, three-piece (bi-fold) lattice fly – stowed	3,331	1 511	3,543	1 607	-212	-96
10 – 31 – 55 ft (3.05 – 9.45 – 16.76m) hydraulically offsettable, three-piece (bi-fold) lattice fly – stowed	3,804	1 725	4,299	1 950	-495	-225
Additional components for hydraulically offsettable fly	469	213	584	265	-115	-52
Auxiliary lifting sheave	120	54	218	99	-98	-44
35 ton (31.8mt) 1-sheave hook block at front bumper	1,100	499	1,795	814	-695	-315
50 ton (45.4mt) 4-sheave hook block at front bumper	1,200	544	1,958	888	-758	-344
80 ton (72.6mt) 5-sheave hook block at front bumper	1,411	640	2,302	1 044	-891	-404
100 ton (90.7mt) 6-sheave hook block at front bumper	1,750	794	2,855	1 295	-1,105	-501
140 ton (127.0mt) 7-sheave hook block at front bumper	2,394	1 086	3,906	1 772	-1,512	-686
12 ton (10.9mt) hook ball at front bumper	722	327	1,178	534	-456	-207

Counterweight Load Transfer	Front Axles		Rear Axles	
	lb	kg	lb	kg
Transfer 4,000 lb (1 814kg) counterweight tray to carrier deck	4,664	2 116	-4,664	-2 116
Transfer 6,000 lb (2 722kg) counterweight to carrier deck	6,996	3 173	-6,996	-3 173
Transfer 6,000 lb (2 722kg) counterweight to carrier deck	6,996	3 173	-6,996	-3 173
Transfer 12,000 lb (5 443kg) counterweight to carrier deck	13,992	6 347	-13,992	-6 347
Transfer 13,000 lb (5 897kg) counterweight to carrier deck	15,158	6 876	-15,158	-6 876

Axle	Maximum Load @ 65 mph (105km/h)
Front	49,200 lb (22 317kg) – aluminum disc wheels with 445/65R22.5 tires
Rear	74,184 lb (33 650kg) – aluminum disc wheels with 12R24.5 tires

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

## Axle Loads with 2–Axle or 3–Axle Boom Dolly

Base crane with full tank of fuel and 2,000 lb (907kg) counterweight	Gross Vehicle Weight <sup>(1)</sup>		Front Axles		Rear Axles		Dolly Axles	
	lb	kg	lb	kg	lb	kg	lb	kg
	103,414	46 908	36,411	16 516	50,041	22 698	16,962	7 694
Nelson 2–axle boom dolly <sup>(2)</sup>	6,000	2 722	0	0	0	0	6,000	2 722
Nelson 3–axle boom dolly <sup>(2)</sup>	9,000	4 082	0	0	0	0	9,000	4 082
Driver in carrier cab	250	113	311	141	–61	–28	0	0
Rear pintle hook	44	20	–23	–10	67	30	0	0
Pneumatic and electrical connectors for trailer or boom dolly	15	7	1	–1	13	6	0	0
Ether injection	6	3	9	4	–2	1	0	0
Remove 2,000 lb (907kg) of ctwt – for one winch configuration only	–2,039	–925	–1,664	–755	–375	–170	0	0
Hoist drum follower – main	101	46	73	33	28	13	0	0
Auxiliary winch with 600 ft (182.8m) of 7/8" (22mm) wire rope	1,059	480	814	369	245	111	0	0
Remove auxiliary winch with 600 ft (182.8m) of 7/8" (22mm) wire rope – for two winch configuration only	–2,893	–1 312	–2,431	–1 103	–462	–210	0	0
Hoist drum follower – auxiliary	101	46	87	40	14	6	0	0
Substitute 600 ft (182.8m) of rope with 850 ft (259.1m) of rope – auxiliary	420	191	318	144	102	46	0	0
Remove 850 ft (259.1m) of rope from front (main) winch	–1,451	–658	–916	–415	–534	–242	0	0
Remove 600 ft (182.8m) of rope from rear (auxiliary) winch	–1,031	–468	–780	–354	–250	–113	0	0
360° mechanical swing lock	140	64	19	9	121	55	0	0
4,000 lb (1 814kg) counterweight bottom tray on upper	4,000	1 814	2,931	1 330	1,069	485	0	0
6,000 lb (2 722kg) counterweight on upper	6,000	2 722	4,397	1 994	1,603	727	0	0
6,000 lb (2 722kg) counterweight on upper	6,000	2 722	4,397	1 994	1,603	727	0	0
12,000 lb (5 443kg) counterweight on upper	12,000	5 443	8,794	3 989	3,206	1 454	0	0
13,000 lb (5 897kg) counterweight on upper	13,000	5 897	9,526	4 321	3,474	1 576	0	0
2,000 lb (907kg) counterweight top tray on upper	2,000	907	1,405	637	595	270	0	0
Floodlight to the front of boom base section	7	3	–1	–1	0	0	8	4
Fly mounting brackets to boom base section for fly options	290	132	31	14	24	11	235	107
31–55 ft (9.45–16.76m) offsettable, two–piece (bi–fold) lattice fly – stowed	2,734	1 240	320	145	246	112	2,167	983
10–31–55 ft (3.05–9.45–16.76m) offsettable, three–piece (bi–fold) lattice fly – stowed	3,331	1 511	301	137	232	105	2,797	1 269
10–31–55 ft (3.05–9.45–16.76m) hydraulically offsettable, three–piece (bi–fold) lattice fly – stowed	3,804	1 725	254	115	196	89	3,354	1 521
Additional components for hydraulically offsettable fly	469	213	12	5	9	4	448	203
Auxiliary lifting sheave	120	54	–21	–10	–16	–7	158	72
35 ton (31.8mt) 1–sheave hook block at boom head	1,100	499	–167	–76	–128	–58	1,395	633
50 ton (45.4mt) 4–sheave hook block at boom head	1,200	544	–182	–83	–140	–64	1,522	690
80 ton (72.6mt) 5–sheave hook block at boom head	1,411	640	–214	–97	–165	–75	1,789	811
100 ton (90.7mt) 6–sheave hook block at boom head	1,750	794	–265	–120	–204	–93	2,219	1 007
140 ton (127.0mt) 7–sheave hook block at boom head	2,394	1 086	–363	–165	–279	–127	3,036	1 377
12 ton (10.9mt) hook ball at boom head	722	327	–109	–49	–84	–38	916	415

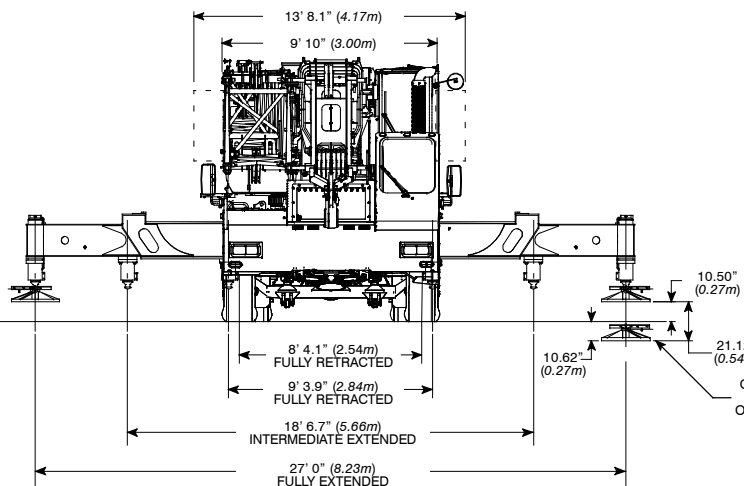
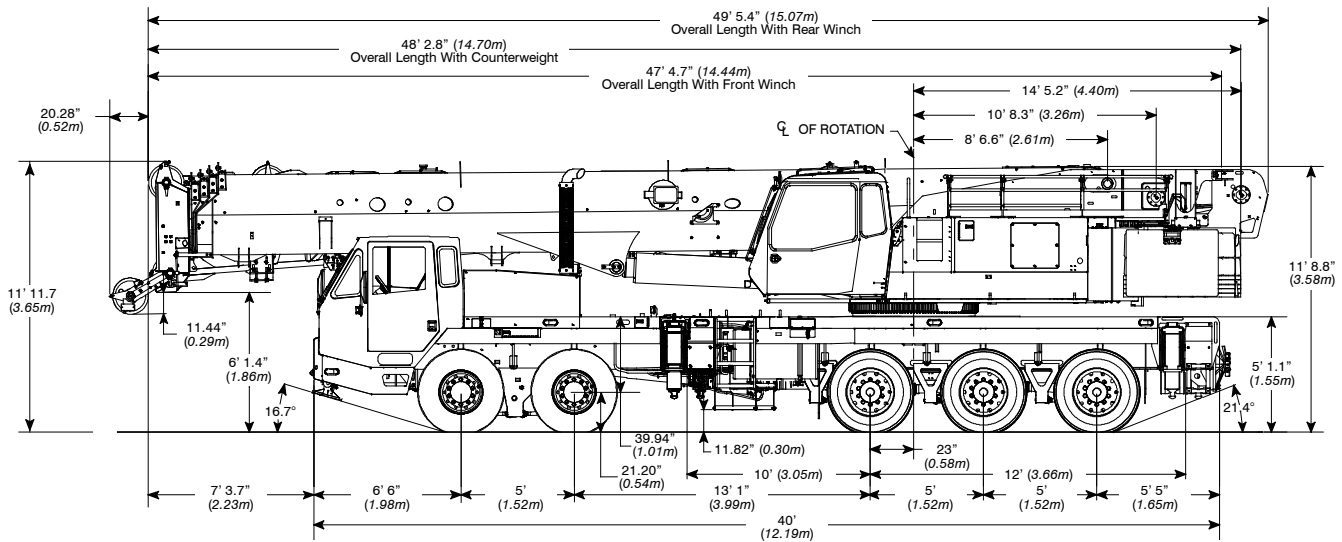
Counterweight Load Transfer	Front Axles		Rear Axles		Dolly Axles	
	lb	kg	lb	kg	lb	kg
Transfer 4,000 lb (1 814kg) counterweight tray to boom dolly	–2,931	–1 330	–1,069	–485	4,000	1 814
Transfer 6,000 lb (2 722kg) counterweight to boom dolly	–4,397	–1 994	–1,603	727	6,000	2 722
Transfer 6,000 lb (2 722kg) counterweight to boom dolly	–4,397	–1 994	–1,603	727	6,000	2 722
Transfer 12,000 lb (5 443kg) counterweight to boom dolly	–8,794	–3 989	–3,206	–1 454	12,000	5 443
Transfer 13,000 lb (5 897kg) counterweight to boom dolly	–9,526	–4 321	–3,474	–1 576	13,000	5 897
Transfer 2,000 lb (907kg) counterweight top tray to boom dolly	–1,405	–637	–595	–270	2,000	907

Axle	Maximum Load @ 65 mph (105km/h)
Front	49,200 lb (22 317kg) – aluminum disc wheels with 445/65R22.5 tires
Rear	74,184 lb (33 650kg) – aluminum disc wheels with 12R24.5 tires

<sup>(1)</sup> Adjust gross vehicle weight and axle loading according to component weight. All weights are ±3%.

<sup>(2)</sup> Weights may vary.

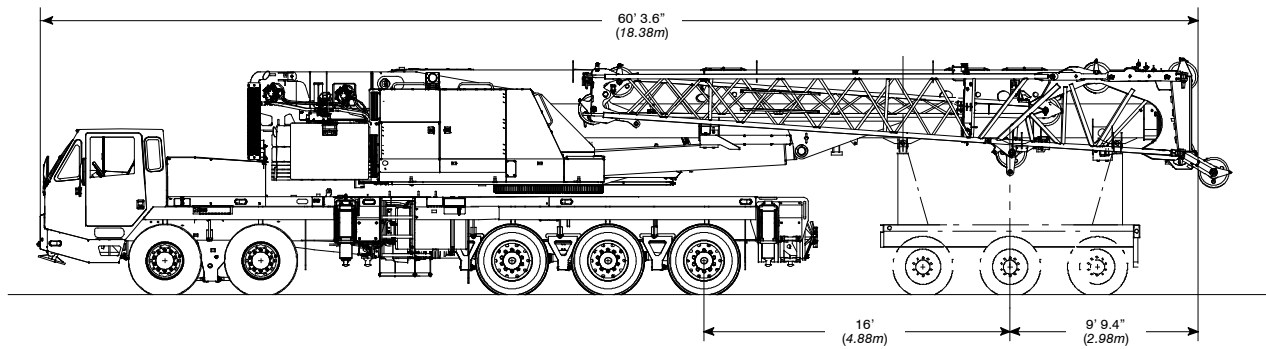
# General Dimensions



Turning Radius	English	Metric
Wall to wall over carrier	45' 4.2"	13.82m
Wall to wall over boom	49' 4"	15.04m
Wall to wall over boom attachment	50' 6.3"	15.40m
Curb to curb	41' 7.4"	12.68m
Centerline of tire	40' 9.9"	12.44m

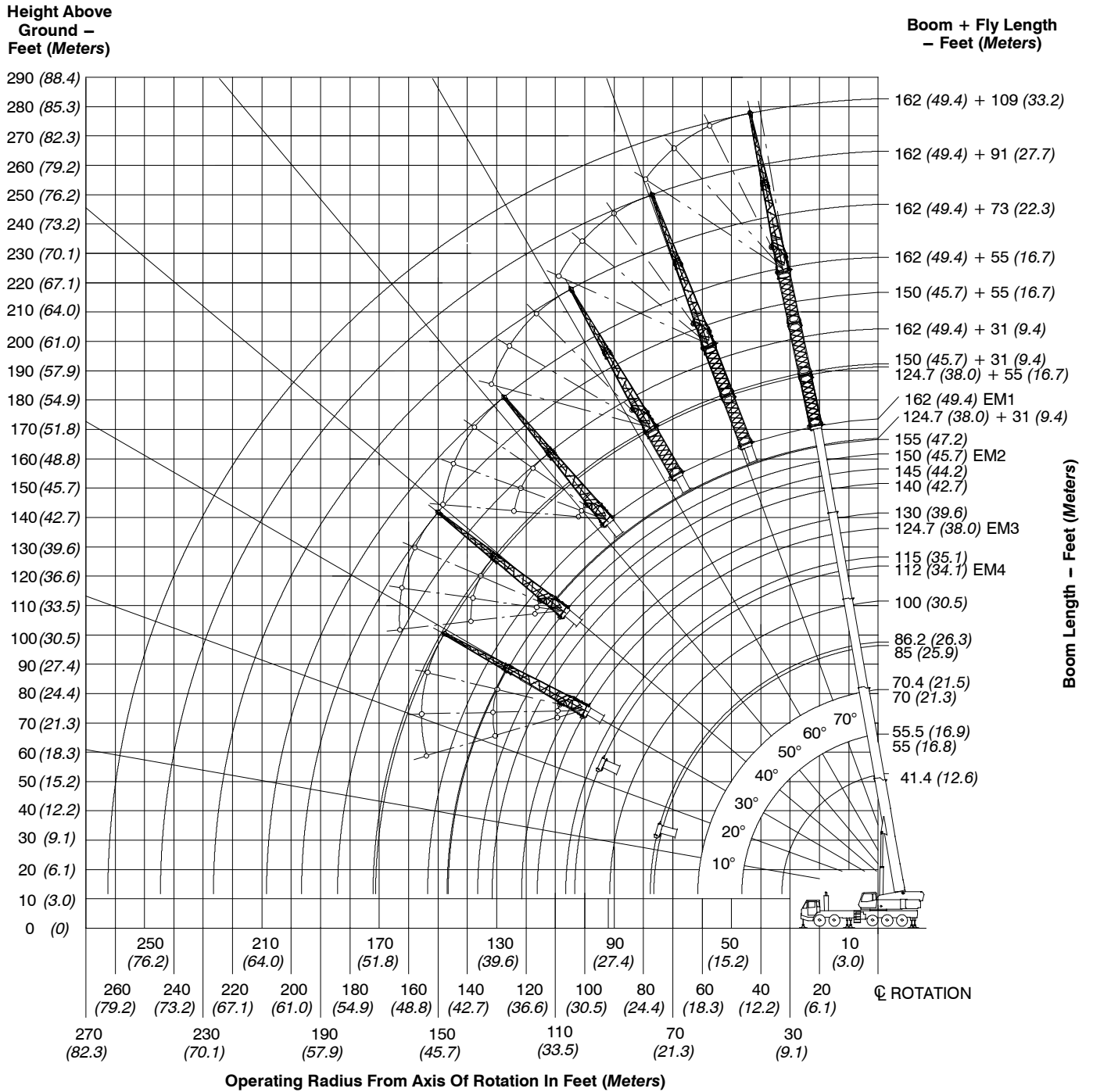
Tail Swing	English	Metric
With two winches	15' 8.6"	4.79m
With counterweight	14' 11.13"	4.55m
Without counterweight	13' 8.3"	4.17m

Overall Width	English	Metric
With up to 45,000 lb (20 412kg) counterweight	9' 10"	3.00m
With 60,000 lb (27 215kg) counterweight	13' 8.1"	4.17m



Not To Scale

# Working Range Diagram



# Boom Extend Modes

Boom Length		Telescope Length			
ft	m	T4	T3	T2	T1
41.4	12.6				
55	16.8	47%			
70	21.3	99%			
85	25.9	100%	49%		
100	30.5	100%	100%		
115	35.1	100%	100%	49%	
130	39.6	100%	100%	98%	
145	44.2	100%	100%	100%	46%
155	47.2	100%	100%	100%	78%
162	49.4	100%	100%	100%	100%

Boom Length		Telescope Length			
ft	m	T4	T3	T2	T1
41.4	12.6				
55	16.8	47%			
70	21.3	90%	9%		
85	25.9	90%	60%		
100	30.5	90%	90%	20%	
115	35.1	90%	90%	69%	
130	39.6	90%	90%	90%	27%
140	42.7	90%	90%	90%	59%
150	45.7	90%	90%	90%	90%

Boom Length		Telescope Length			
ft	m	T4	T3	T2	T1
41.4	12.6				
55	16.8	46%	1%		
70	21.3	46%	47%	4%	
85	25.9	46%	47%	53%	
100	30.5	46%	47%	90%	12%
115	35.1	46%	47%	90%	60%
124.7	38.0	46%	47%	90%	90%

Boom Length		Telescope Length			
ft	m	T4	T3	T2	T1
41.4	12.6				
55	16.8	46%	1%		
70	21.3	46%	47%	4%	
85	25.9	46%	47%	49%	4%
100	30.5	46%	47%	49%	52%
112	34.1	46%	47%	49%	90%

Boom Length		Telescope Length			
ft	m	T4	T3	T2	T1
41.4	12.6				
55.5	16.9		47%		
70.4	21.5		47%	49%	
86.2	26.3		47%	49%	50%

# Main Boom Lift Capacity Charts – Standard

20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)										Radius (ft)	
	41.4	55	70	85	100	115	130	145	155	162		
8	280,000											8
10	240,600	157,000	151,100									10
12	218,000	157,000	150,200									12
15	179,200	157,000	135,800	105,500								15
20	132,900	135,500	116,900	89,800	65,200	56,400						20
25	104,100	106,800	102,400	77,900	65,200	55,500	51,000					25
30	78,100	82,100	82,700	69,100	63,900	49,400	45,400	37,200	31,900			30
35		63,000	64,400	64,300	57,100	44,400	40,600	37,200	31,900	26,100		35
40		49,600	51,200	51,100	50,000	40,200	36,500	34,900	31,900	26,100		40
45		40,000	42,600	41,500	40,500	36,700	32,900	32,000	30,000	26,100		45
50			35,600	35,700	34,300	33,500	30,100	29,400	27,500	26,100		50
55			30,100	30,900	30,600	28,200	27,800	27,100	25,300	24,100		55
60			25,800	26,700	26,600	26,200	25,800	25,000	23,400	22,200		60
65				23,100	23,600	23,200	22,300	22,300	21,500	20,700		65
70				20,300	20,700	20,400	20,100	19,400	19,000	18,800		70
75				17,900	18,300	18,000	17,800	17,100	16,900	16,700		75
80					16,400	16,200	15,900	15,300	14,900	14,700		80
85					14,600	14,400	14,200	13,600	13,200	13,000		85
90					13,100	12,900	12,700	12,100	11,700	11,500		90
95						11,500	11,400	10,800	10,400	10,200		95
100						10,400	10,200	9,600	9,300	9,000		100
105							9,300	9,100	8,600	8,200	8,000	105
110								8,200	7,600	7,300	7,100	110
115								7,300	6,800	6,500	6,300	115
120								6,600	6,000	5,700	5,500	120
125									5,300	5,000	4,800	125
130									4,700	4,400	4,200	130
135									4,200	3,800	3,600	135
140										3,300	3,100	140
145										2,800	2,600	145
150										2,700	2,100	150

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 and on tires do not exceed 75% of the tipping loads.

# Main Boom Lift Capacity Charts – Optional

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)											
Radius (ft)	Boom Length (ft)										Radius (ft)
	41.4	55	70	85	100	115	130	145	155	162	
8	280,000										8
10	240,600	157,000	151,100								10
12	218,000	157,000	150,200								12
15	190,700	157,000	135,800	105,500							15
20	153,300	149,300	116,900	89,800	65,200	56,400					20
25	120,700	123,300	102,400	77,900	65,200	55,500	51,000				25
30	98,500	101,200	90,900	69,100	63,900	49,400	45,400	37,200	31,900		30
35		85,200	81,800	65,300	57,100	44,400	40,600	37,200	31,900	26,100	35
40		73,800	73,700	64,900	51,300	40,200	36,500	34,900	31,900	26,100	40
45		64,500	64,600	59,500	46,500	36,700	32,900	32,000	30,000	26,100	45
50			56,300	54,700	42,400	33,600	30,100	29,400	27,500	26,100	50
55			48,500	48,600	39,000	30,900	27,800	27,100	25,300	24,100	55
60			42,400	42,500	35,800	28,600	25,800	25,000	23,400	22,200	60
65				37,500	33,100	26,500	24,000	23,200	21,700	20,700	65
70				33,400	30,600	24,600	22,500	21,600	20,200	19,200	70
75				29,900	28,400	23,000	21,000	20,300	18,700	17,900	75
80					26,300	21,500	19,800	19,000	17,400	16,700	80
85					23,700	20,200	18,600	17,800	16,200	15,600	85
90					21,500	19,000	17,600	16,700	15,100	14,600	90
95						17,900	16,600	15,700	14,100	13,500	95
100						16,800	15,700	14,800	13,100	12,600	100
105						15,600	14,900	13,900	12,300	11,800	105
110							14,100	13,200	11,500	11,000	110
115							13,400	12,400	10,800	10,300	115
120							12,800	11,800	10,100	9,600	120
125								11,200	9,400	9,000	125
130								10,600	8,800	8,400	130
135								10,000	8,300	7,800	135
140									7,800	7,300	140
145									7,300	6,800	145
150									7,200	6,400	150

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 and on tires do not exceed 75% of the tipping loads.

# Manual Offset Fly Attachment Lift Capacity Charts – Optional

20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)														
Main Boom + 10 ft Manual Offset Fly (2°, 15°, 30°, 45° Offsets)														
Radius (ft)	Main Boom Length (ft)													Radius (ft)
	41.4	55	70	85	100	115	124.7	130	140	145	150	155	162	
10	51,800	51,800												10
12	47,300	51,800	51,800											12
15	46,400	46,800	51,800	51,800										15
20	45,200	45,700	46,000	45,800	51,800									20
25	44,600	44,900	45,100	45,000	44,300	50,700	43,400	36,300						25
30	44,600	44,400	44,500	44,400	43,800	42,800	41,600	36,300	29,900	25,600	25,400	22,400		30
35	44,600	44,300	44,100	44,000	41,300	40,100	37,300	34,100	29,900	25,600	25,400	22,400		35
40	44,600	44,300	44,000	43,700	37,500	36,400	34,000	32,200	29,900	25,600	25,400	22,400	20,000	40
45		42,000	42,400	42,000	34,500	33,400	31,000	29,500	29,500	25,600	25,400	22,400	20,000	45
50		34,900	35,300	34,900	31,800	30,600	28,300	27,100	27,100	25,600	25,400	22,400	20,000	50
55		29,500	30,700	29,600	29,100	28,200	25,700	25,100	24,900	24,200	23,300	22,400	20,000	55
60			26,600	26,800	25,100	24,000	23,500	23,200	23,000	22,500	21,500	21,200	20,000	60
65			23,100	23,300	23,100	21,700	20,200	21,600	21,300	20,900	19,800	19,600	18,700	65
70			20,300	20,500	20,300	19,800	17,400	19,200	18,800	19,100	18,300	18,100	17,000	70
75				18,100	17,900	17,500	15,300	17,100	16,600	16,900	16,200	16,500	16,200	75
80				16,200	16,000	15,600	13,300	15,600	14,600	14,900	14,200	14,500	14,200	80
85				14,400	14,200	13,900	11,600	13,800	12,900	13,200	12,500	12,800	12,500	85
90					12,700	12,400	10,100	12,300	11,400	11,700	11,000	11,300	11,000	90
95					11,400	11,000	8,800	11,000	10,000	10,300	9,700	9,900	9,700	95
100					10,200	9,900	7,700	9,800	8,900	9,200	8,500	8,800	8,500	100
105						8,800	6,600	8,800	7,900	8,100	7,500	7,700	7,500	105
110						7,900	5,700	7,900	6,900	7,200	6,600	6,800	6,600	110
115						7,100	4,900	7,000	6,100	6,400	5,700	6,000	5,700	115
120							4,100	6,300	5,300	5,600	5,000	5,200	5,000	120
125							3,500	5,600	4,700	4,900	4,300	4,600	4,300	125
130								5,000	4,000	4,300	3,700	3,900	3,700	130
135									3,500	3,700	3,100	3,400	3,100	135
140									3,000	3,200	2,600	2,800	2,600	140
145										2,700	2,100	2,400	2,100	145
150											1,700	1,900	1,700	150
155												1,500	1,200	155

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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)														
Main Boom + 10 ft Manual Offset Fly (2°, 15°, 30°, 45° Offsets)														
Radius (ft)	Main Boom Length (ft)												Radius (ft)	
	41.4	55	70	85	100	115	124.7	130	140	145	150	155		162
10	51,800	51,800												10
12	47,300	51,800	51,800											12
15	46,400	46,800	51,800	51,800										15
20	45,200	45,700	46,000	45,800	51,800									20
25	44,600	44,900	45,100	45,000	44,300	50,700	43,400	36,300						25
30	44,600	44,400	44,500	44,400	43,800	42,800	41,600	36,300	29,900	25,600	25,400	22,400		30
35	44,600	44,300	44,100	44,000	41,300	40,100	37,300	34,100	29,900	25,600	25,400	22,400		35
40	44,600	44,300	44,000	43,700	37,500	36,400	34,000	32,200	29,900	25,600	25,400	22,400	20,000	40
45		44,300	44,000	43,500	34,500	33,400	31,000	29,500	29,500	25,600	25,400	22,400	20,000	45
50		43,600	44,000	43,500	31,800	30,600	28,300	27,100	27,100	25,600	25,400	22,400	20,000	50
55		41,600	44,000	41,300	29,400	28,200	25,700	25,100	24,900	24,200	23,300	22,400	20,000	55
60			43,300	38,400	27,300	26,000	23,500	23,200	23,000	22,500	21,500	21,200	20,000	60
65			38,300	35,800	25,400	24,100	21,500	21,600	21,300	20,900	19,800	19,600	18,700	65
70			34,200	33,800	23,700	22,400	19,800	20,100	19,700	19,400	18,400	18,100	17,000	70
75				30,400	22,200	20,900	18,200	18,800	18,400	18,100	17,200	17,100	16,300	75
80				27,400	20,900	19,500	17,000	17,600	17,200	17,100	16,000	15,900	15,100	80
85				24,900	19,600	18,300	15,700	16,700	16,200	16,000	14,900	14,800	14,100	85
90					18,600	17,200	14,600	15,700	15,200	14,900	13,900	13,800	13,100	90
95					17,600	16,300	13,500	14,800	14,200	14,000	12,900	12,900	12,200	95
100					16,900	15,300	12,500	13,900	13,300	13,100	12,000	12,000	11,400	100
105						14,400	11,600	13,200	12,500	12,400	11,100	11,200	10,600	105
110						13,600	10,800	12,500	11,800	11,600	10,300	10,400	9,900	110
115						12,900	10,000	11,800	11,100	11,000	9,600	9,700	9,200	115
120							9,300	11,200	10,500	10,300	9,000	9,000	8,500	120
125							8,700	10,700	9,900	9,700	8,300	8,400	7,900	125
130								10,200	9,300	9,200	7,700	7,800	7,400	130
135									8,800	8,700	7,200	7,300	6,800	135
140									8,400	8,200	6,700	6,800	6,300	140
145										7,800	6,200	6,300	5,900	145
150											5,800	5,900	5,400	150
155												5,500	5,000	155
160													4,600	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 and on tires do not exceed 75% of the tipping loads.

20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)									
124.7 ft Main Boom Length									
Radius (ft)	31 ft Manual Offset Fly				55 ft Manual Offset Fly				Radius (ft)
	2°	15°	30°	45°	2°	15°	30°	45°	
30	28,100								30
35	27,000	20,400			15,300				35
40	26,000	20,400			14,800				40
45	24,900	19,300	16,600		14,300	12,000			45
50	24,000	18,700	16,300	14,700	13,800	11,600			50
55	23,100	18,200	15,900	14,500	13,300	11,200			55
60	20,400	17,700	15,600	14,300	12,800	10,900	9,300		60
65	19,800	17,300	15,300	14,100	12,400	10,500	9,100		65
70	18,300	16,900	15,000	14,000	12,000	10,200	8,900	8,000	70
75	16,200	16,500	14,800	13,800	11,600	9,900	8,700	7,800	75
80	14,200	15,000	14,600	13,700	11,200	9,700	8,500	7,700	80
85	12,500	13,200	13,900	13,700	10,800	9,400	8,300	7,600	85
90	11,000	11,600	12,300	12,700	10,500	9,200	8,200	7,600	90
95	9,600	10,200	10,800	11,200	10,200	9,000	8,000	7,500	95
100	8,500	9,000	9,500	9,900	9,600	8,800	7,900	7,400	100
105	7,400	7,900	8,400	8,600	8,500	8,600	7,800	7,400	105
110	6,500	7,000	7,300	7,600	7,600	8,400	7,700	7,300	110
115	5,700	6,100	6,400	6,600	6,700	7,500	7,600	7,300	115
120	4,900	5,300	5,600		6,000	6,600	7,300	7,200	120
125	4,300	4,600	4,800		5,300	5,900	6,500	6,900	125
130	3,600	3,900	4,100		4,600	5,200	5,700	6,000	130
135	3,100	3,300			4,000	4,500	5,000	5,200	135
140	2,600	2,700			3,500	3,900	4,300	4,500	140
145	2,100	2,200			3,000	3,400	3,700		145
150					2,500	2,900	3,200		150
155					2,100	2,400	2,600		155
160					1,700	2,000	2,100		160
165					1,400	1,500			165

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60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)									
124.7 ft Main Boom Length									
Radius (ft)	31 ft Manual Offset Fly				55 ft Manual Offset Fly				Radius (ft)
	2°	15°	30°	45°	2°	15°	30°	45°	
30	28,100								30
35	27,000	20,400			15,300				35
40	26,000	20,400			14,800				40
45	24,900	19,300	16,600		14,300	12,000			45
50	24,000	18,700	16,300	14,700	13,800	11,600			50
55	23,100	18,200	15,900	14,500	13,300	11,200			55
60	20,400	17,700	15,600	14,300	12,800	10,900	9,300		60
65	19,800	17,300	15,300	14,100	12,400	10,500	9,100		65
70	19,200	16,900	15,000	14,000	12,000	10,200	8,900	8,000	70
75	17,800	16,500	14,800	13,800	11,600	9,900	8,700	7,800	75
80	16,500	16,100	14,600	13,700	11,200	9,700	8,500	7,700	80
85	15,300	15,600	14,400	13,700	10,800	9,400	8,300	7,600	85
90	14,200	14,500	14,200	13,600	10,500	9,200	8,200	7,600	90
95	13,200	13,500	13,800	13,600	10,200	9,000	8,000	7,500	95
100	12,300	12,600	12,800	13,000	9,900	8,800	7,900	7,400	100
105	11,500	11,700	12,000	12,100	9,600	8,600	7,800	7,400	105
110	10,700	10,900	11,100	11,300	9,300	8,400	7,700	7,300	110
115	10,000	10,200	10,400	10,500	9,100	8,200	7,600	7,300	115
120	9,300	9,500	9,700		8,800	8,100	7,500	7,200	120
125	8,700	8,900	9,000		8,400	7,900	7,500	7,200	125
130	8,200	8,300	8,400		7,900	7,800	7,400	7,200	130
135	7,700	7,800	7,900		7,400	7,600	7,300	7,200	135
140	7,200	7,300			6,900	7,100	7,300	7,200	140
145	6,800	6,800			6,500	6,700	6,900		145
150					6,100	6,300	6,400		150
155					5,700	5,900	6,000		155
160					5,400	5,500	5,600		160
165					5,100	5,200			165
170					5,000				170

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20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)									
162.0 ft Main Boom Length									
Radius (ft)	31 ft Manual Offset Fly				55 ft Manual Offset Fly				Radius (ft)
	2°	15°	30°	45°	2°	15°	30°	45°	
35	14,600								35
40	14,600				10,600				40
45	14,600	14,600			10,600				45
50	14,600	14,600			10,600				50
55	14,600	14,600	14,300		10,600				55
60	14,600	14,600	14,100	13,200	10,600	9,700			60
65	14,600	14,600	14,000	13,100	10,600	9,500			65
70	14,600	14,600	13,800	13,100	10,500	9,400	8,300		70
75	14,600	14,600	13,700	13,000	10,300	9,200	8,200		75
80	14,200	14,400	13,600	12,900	10,200	9,000	8,100		80
85	12,900	13,400	13,500	12,800	10,000	8,900	8,000	7,300	85
90	11,400	12,100	12,800	12,800	9,800	8,700	7,800	7,300	90
95	10,000	10,700	11,300	11,800	9,600	8,600	7,700	7,200	95
100	8,900	9,500	10,100	10,500	9,500	8,500	7,600	7,100	100
105	7,800	8,400	8,900	9,300	8,600	8,300	7,600	7,100	105
110	6,900	7,400	7,900	8,200	7,600	8,200	7,500	7,100	110
115	6,100	6,500	7,000	7,300	6,800	7,600	7,400	7,000	115
120	5,300	5,700	6,100	6,400	6,000	6,800	7,300	7,000	120
125	4,600	5,000	5,400	5,600	5,300	6,000	6,700	7,000	125
130	4,000	4,400	4,700	4,900	4,600	5,300	6,000	6,500	130
135	3,400	3,700	4,000	4,200	4,100	4,700	5,300	5,700	135
140	2,900	3,200	3,500	3,600	3,500	4,100	4,700	5,000	140
145	2,400	2,700	2,900	3,000	3,000	3,600	4,100	4,400	145
150	1,900	2,200	2,400		2,600	3,100	3,500	3,800	150
155	1,500	1,800	1,900		2,100	2,600	3,000	3,300	155
160		1,300	1,500		1,700	2,200	2,500	2,700	160
165					1,400	1,800	2,100	2,200	165
170						1,400	1,700	1,800	170
175							1,300		175

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60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)									
162.0 ft Main Boom Length									
Radius (ft)	31 ft Manual Offset Fly				55 ft Manual Offset Fly				Radius (ft)
	2°	15°	30°	45°	2°	15°	30°	45°	
35	14,600								35
40	14,600				10,600				40
45	14,600	14,600			10,600				45
50	14,600	14,600			10,600				50
55	14,600	14,600	14,300		10,600				55
60	14,600	14,600	14,100	13,200	10,600	9,700			60
65	14,600	14,600	14,000	13,100	10,600	9,500			65
70	14,600	14,600	13,800	13,100	10,500	9,400	8,300		70
75	14,600	14,600	13,700	13,000	10,300	9,200	8,200		75
80	14,200	14,400	13,600	12,900	10,200	9,000	8,100		80
85	13,200	13,400	13,500	12,800	10,000	8,900	8,000	7,300	85
90	12,300	12,500	12,800	12,800	9,800	8,700	7,800	7,300	90
95	11,500	11,700	11,900	12,100	9,600	8,600	7,700	7,200	95
100	10,700	10,900	11,100	11,300	9,500	8,500	7,600	7,100	100
105	10,000	10,200	10,400	10,600	9,200	8,300	7,600	7,100	105
110	9,400	9,600	9,800	9,900	8,600	8,200	7,500	7,100	110
115	8,800	8,900	9,100	9,300	8,000	8,100	7,400	7,000	115
120	8,200	8,400	8,600	8,700	7,500	7,800	7,300	7,000	120
125	7,700	7,800	8,000	8,100	7,000	7,300	7,300	7,000	125
130	7,200	7,300	7,500	7,600	6,600	6,800	7,000	6,900	130
135	6,700	6,900	7,000	7,100	6,100	6,300	6,600	6,800	135
140	6,300	6,400	6,600	6,700	5,700	5,900	6,100	6,300	140
145	5,900	6,000	6,100	6,200	5,300	5,500	5,700	5,900	145
150	5,400	5,600	5,700		5,000	5,200	5,400	5,500	150
155	5,100	5,200	5,300		4,600	4,800	5,000	5,100	155
160	4,700	4,800	4,900		4,300	4,500	4,700	4,800	160
165	4,300	4,500	4,500		4,000	4,200	4,300	4,400	165
170	4,000	4,100	4,200		3,800	3,900	4,000	4,100	170
175	3,700	3,800			3,500	3,600	3,700		175
180	3,500	3,500			3,200	3,400	3,500		180
185					2,900	3,100	3,200		185
190					2,700	2,800	2,900		190
195					2,500	2,600	2,700		195
200					2,300	2,400			200
205					2,200	2,200			205

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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
124.7 ft Main Boom Length													
Radius (ft)	73 ft Manual Offset Fly				91 ft Manual Offset Fly				109 ft Manual Offset Fly				Radius (ft)
	2°	15°	30°	45°	2°	15°	30°	45°	2°	15°	30°	45°	
40	13,200												40
45	12,900												45
50	12,600				10,700								50
55	12,300	10,900			10,700				8,300				55
60	12,000	10,600			10,700	9,900			8,300				60
65	11,700	10,400	9,000		10,400	9,400			8,100	7,600			65
70	11,400	10,100	8,800		9,700	8,900			7,500	7,100			70
75	11,200	9,900	8,600		9,200	8,400	7,500		7,000	6,600			75
80	10,900	9,700	8,500	7,700	8,600	7,900	7,200		6,600	6,200	5,800		80
85	10,600	9,500	8,300	7,500	8,100	7,500	6,800	6,400	6,200	5,800	5,500		85
90	10,300	9,200	8,000	7,300	7,700	7,100	6,500	6,100	5,800	5,500	5,100	4,900	90
95	9,900	8,800	7,700	7,100	7,300	6,700	6,200	5,800	5,400	5,100	4,800	4,600	95
100	9,400	8,400	7,400	6,800	6,900	6,400	5,900	5,500	5,100	4,800	4,500	4,400	100
105	9,000	8,100	7,200	6,600	6,600	6,100	5,600	5,300	4,800	4,500	4,300	4,100	105
110	8,600	7,800	7,000	6,500	6,200	5,800	5,400	5,100	4,500	4,300	4,000	3,900	110
115	8,300	7,500	6,700	6,300	5,900	5,500	5,100	4,900	4,300	4,000	3,800	3,700	115
120	7,900	7,200	6,500	6,100	5,700	5,300	4,900	4,700	4,000	3,800	3,600	3,500	120
125	7,600	7,000	6,300	6,000	5,400	5,100	4,700	4,500	3,800	3,600	3,400	3,300	125
130	7,300	6,700	6,200	5,800	5,200	4,800	4,500	4,300	3,600	3,400	3,200	3,100	130
135	7,000	6,500	6,000	5,700	4,900	4,600	4,300	4,200	3,400	3,200	3,000	2,900	135
140	6,500	6,300	5,900	5,600	4,700	4,400	4,200	4,000	3,200	3,000	2,800	2,800	140
145	6,100	6,200	5,700	5,600	4,500	4,300	4,000	3,900	3,000	2,800	2,700	2,600	145
150	5,700	5,900	5,600	5,500	4,400	4,100	3,900	3,800	2,800	2,700	2,500	2,500	150
155	5,300	5,500	5,500	5,400	4,200	4,000	3,800	3,700	2,700	2,500	2,400	2,400	155
160	4,900	5,100	5,300	5,400	4,000	3,800	3,600	3,600	2,600	2,400	2,300	2,200	160
165	4,600	4,700	4,900		3,900	3,700	3,500	3,500	2,400	2,300	2,200	2,100	165
170	4,200	4,400	4,500		3,700	3,600	3,500	3,400	2,300	2,200	2,100	2,000	170
175	3,900	4,100	4,200		3,400	3,500	3,400		2,200	2,100	2,000	1,900	175
180	3,700	3,800			3,100	3,300	3,300		2,100	2,000	1,900	1,900	180
185	3,400	3,500			2,800	3,000	3,100		2,000	1,900	1,800	1,800	185
190					2,600	2,700	2,800		1,900	1,800	1,700		190
195					2,400	2,500	2,600		1,800	1,700	1,700		195
200					2,200	2,300			1,600	1,700	1,600		200
205					2,100	2,100			1,400	1,500	1,600		205
210									1,200	1,300	1,400		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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)													
162.0 ft Main Boom Length													
Radius (ft)	73 ft Manual Offset Fly				91 ft Manual Offset Fly				109 ft Manual Offset Fly				Radius (ft)
	2°	15°	30°	45°	2°	15°	30°	45°	2°	15°	30°	45°	
55	8,500												55
60	8,500				6,500								60
65	8,500				6,500				5,000				65
70	8,500	8,500			6,500				5,000				70
75	8,500	8,500			6,500	6,500			5,000				75
80	8,500	8,500			6,500	6,500			5,000				80
85	8,500	8,400	7,600		6,500	6,500			5,000	5,000			85
90	8,500	8,300	7,500		6,500	6,500	6,100		5,000	5,000			90
95	8,500	8,200	7,500	6,800	6,500	6,500	5,900		5,000	4,900			95
100	8,500	8,100	7,400	6,600	6,500	6,300	5,600	5,200	5,000	4,600	4,200		100
105	8,500	8,000	7,100	6,400	6,500	6,000	5,400	5,000	4,700	4,400	4,000		105
110	8,000	7,900	6,900	6,300	6,400	5,800	5,200	4,800	4,500	4,100	3,800	3,500	110
115	7,400	7,700	6,700	6,100	6,100	5,500	5,000	4,600	4,200	3,900	3,600	3,400	115
120	6,900	7,100	6,500	6,000	5,800	5,300	4,800	4,500	4,000	3,700	3,400	3,200	120
125	6,400	6,600	6,300	5,800	5,500	5,100	4,600	4,300	3,800	3,500	3,200	3,000	125
130	6,000	6,200	6,200	5,700	5,100	4,900	4,400	4,200	3,600	3,300	3,000	2,900	130
135	5,500	5,800	6,000	5,600	4,700	4,700	4,300	4,000	3,400	3,200	2,900	2,700	135
140	5,100	5,400	5,600	5,500	4,300	4,500	4,100	3,900	3,200	3,000	2,700	2,600	140
145	4,800	5,000	5,200	5,400	4,000	4,200	4,000	3,800	3,100	2,800	2,600	2,400	145
150	4,400	4,600	4,800	5,000	3,600	3,900	3,900	3,700	2,900	2,700	2,500	2,300	150
155	4,100	4,300	4,500	4,700	3,300	3,500	3,700	3,600	2,600	2,600	2,300	2,200	155
160	3,700	3,900	4,100	4,300	3,000	3,200	3,500	3,500	2,300	2,400	2,200	2,100	160
165	3,400	3,600	3,800	4,000	2,700	2,900	3,200	3,400	2,000	2,200	2,100	2,000	165
170	3,200	3,300	3,500	3,700	2,500	2,700	2,900	3,100	1,800	2,000	2,000	1,900	170
175	2,900	3,000	3,200	3,300	2,200	2,400	2,600	2,800	1,500	1,700	1,900	1,800	175
180	2,600	2,800	2,900	3,000	2,000	2,100	2,300	2,500	1,300	1,500	1,700	1,700	180
185	2,400	2,500	2,700	2,800	1,700	1,900	2,100	2,200		1,200	1,400	1,600	185
190	2,200	2,300	2,400	2,500	1,500	1,700	1,800	1,900			1,200	1,300	190
195	1,900	2,100	2,200		1,300	1,400	1,600	1,700					195
200	1,700	1,800	1,900			1,200	1,400	1,400					200
205	1,500	1,600	1,700					1,200					205
210	1,300	1,400	1,500										210
215		1,200											215

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 and on tires do not exceed 75% of the tipping loads.

# Hydraulic Offset Fly Attachment Lift Capacity Charts – Optional

20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)														
Main Boom + 10 ft Hydraulic Offset Fly (2° –45° Offsets)														
Radius (ft)	Main Boom Length (ft)													Radius (ft)
	41.4	55	70	85	100	115	124.7	130	140	145	150	155	162	
10	51,800	51,800												10
12	47,200	51,800	51,800											12
15	46,200	46,700	51,800	51,800										15
20	45,000	45,500	45,800	45,600	51,800									20
25	44,400	44,700	45,000	44,900	44,200	50,300	43,300	36,100						25
30	44,400	44,200	44,400	44,300	43,600	42,700	41,200	36,100	29,800	25,400	25,300	22,300		30
35	44,400	44,100	44,000	43,800	40,900	39,700	36,900	33,800	29,800	25,400	25,300	22,300		35
40	44,400	44,100	43,800	43,500	37,100	36,000	33,600	31,800	29,800	25,400	25,300	22,300	19,900	40
45		41,600	42,100	41,700	34,200	33,000	30,600	29,100	29,100	25,400	25,300	22,300	19,900	45
50		34,600	34,900	34,600	31,400	30,200	27,900	26,700	26,700	25,400	25,000	22,300	19,900	50
55		29,200	30,400	29,200	28,700	27,800	25,300	24,700	24,500	23,800	22,900	22,300	19,900	55
60			26,200	26,400	24,700	23,700	23,100	22,800	22,600	22,100	21,100	20,800	19,900	60
65			22,800	23,000	22,700	21,600	19,800	21,200	20,900	20,500	19,400	19,200	18,300	65
70			20,000	20,100	19,900	19,800	17,200	18,900	18,400	18,700	17,900	17,700	16,900	70
75				17,700	17,800	17,400	14,900	16,700	16,200	16,500	15,800	16,100	15,900	75
80				15,800	15,900	15,500	12,900	15,200	14,200	14,500	13,800	14,100	13,800	80
85				14,100	14,200	13,800	11,200	13,500	12,500	12,800	12,100	12,400	12,100	85
90					12,700	12,300	9,700	11,900	11,000	11,300	10,600	10,900	10,600	90
95					11,400	10,900	8,400	10,600	9,700	10,000	9,300	9,600	9,300	95
100					10,200	9,800	7,300	9,500	8,500	8,800	8,100	8,400	8,200	100
105						8,700	6,300	8,400	7,500	7,800	7,100	7,400	7,100	105
110						7,800	5,300	7,500	6,500	6,800	6,200	6,400	6,200	110
115						7,000	4,500	6,600	5,700	6,000	5,300	5,600	5,400	115
120							3,800	5,900	5,000	5,200	4,600	4,900	4,600	120
125							3,100	5,200	4,300	4,600	3,900	4,200	3,900	125
130								4,600	3,700	3,900	3,300	3,500	3,300	130
135									3,100	3,400	2,700	3,000	2,700	135
140									2,600	2,800	2,200	2,500	2,200	140
145										2,400	1,700	2,000	1,700	145
150											1,300	1,500	1,300	150

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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)														
Main Boom + 10 ft Hydraulic Offset Fly (2° –45° Offsets)														
Radius (ft)	Main Boom Length (ft)													Radius (ft)
	41.4	55	70	85	100	115	124.7	130	140	145	150	155	162	
10	51,800	51,800												10
12	47,200	51,800	51,800											12
15	46,200	46,700	51,800	51,800										15
20	45,000	45,500	45,800	45,600	51,800									20
25	44,400	44,700	45,000	44,900	44,200	50,300	43,300	36,100						25
30	44,400	44,200	44,400	44,300	43,600	42,700	41,200	36,100	29,800	25,400	25,300	22,300		30
35	44,400	44,100	44,000	43,800	40,900	39,700	36,900	33,800	29,800	25,400	25,300	22,300		35
40	44,400	44,100	43,800	43,500	37,100	36,000	33,600	31,800	29,800	25,400	25,300	22,300	19,900	40
45		44,100	43,800	43,400	34,200	33,000	30,600	29,100	29,100	25,400	25,300	22,300	19,900	45
50		43,300	43,800	43,400	31,400	30,200	27,900	26,700	26,700	25,400	25,000	22,300	19,900	50
55		41,200	43,800	40,800	29,000	27,800	25,300	24,700	24,500	23,800	22,900	22,300	19,900	55
60			42,900	38,000	26,900	25,600	23,100	22,800	22,600	22,100	21,100	20,800	19,900	60
65			37,900	35,400	25,000	23,700	21,100	21,200	20,900	20,500	19,400	19,200	18,300	65
70			33,900	33,300	23,300	22,000	19,300	19,700	19,300	19,000	17,900	17,700	16,900	70
75				30,000	21,800	20,500	17,800	18,400	17,900	17,600	16,800	16,700	15,900	75
80				27,100	20,400	19,100	16,600	17,200	16,900	16,700	15,600	15,500	14,700	80
85				24,500	19,200	17,800	15,300	16,300	15,800	15,500	14,500	14,400	13,600	85
90					18,100	16,900	14,100	15,300	14,700	14,500	13,500	13,400	12,700	90
95					17,200	15,800	13,000	14,400	13,800	13,600	12,500	12,500	11,800	95
100					16,500	14,900	12,100	13,500	12,900	12,700	11,500	11,600	11,000	100
105						14,000	11,200	12,800	12,100	11,900	10,700	10,800	10,200	105
110						13,200	10,300	12,000	11,400	11,200	9,900	10,000	9,500	110
115						12,500	9,600	11,400	10,700	10,500	9,200	9,300	8,800	115
120							8,900	10,800	10,000	9,900	8,500	8,600	8,100	120
125							8,200	10,200	9,500	9,300	7,900	8,000	7,500	125
130								9,800	8,900	8,800	7,300	7,400	6,900	130
135									8,400	8,300	6,800	6,900	6,400	135
140									8,000	7,800	6,300	6,400	5,900	140
145										7,400	5,800	5,900	5,400	145
150											5,400	5,500	5,000	150
155												5,100	4,600	155
160													4,200	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 and on tires do not exceed 75% of the tipping loads.

20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)							
124.7 ft Main Boom Length							
Radius (ft)	31 ft Hydraulic Offset Fly			55 ft Hydraulic Offset Fly			Radius (ft)
	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	
30	27,800						30
35	20,200	20,200		15,100			35
40	19,600	16,800	16,800	14,600			40
45	19,000	16,400	14,700	11,700	11,700		45
50	18,500	16,000	14,500	11,300	11,300		50
55	18,000	15,700	14,300	11,000	11,000		55
60	17,500	15,400	14,100	10,600	9,000	9,000	60
65	17,100	15,100	13,900	10,300	8,800	8,800	65
70	16,600	14,800	13,800	10,000	8,600	7,700	70
75	15,900	14,600	13,700	9,700	8,400	7,600	75
80	13,900	14,400	13,600	9,400	8,300	7,500	80
85	12,200	12,900	13,500	9,200	8,100	7,400	85
90	10,600	11,300	12,000	8,900	7,900	7,300	90
95	9,300	10,000	10,500	8,700	7,800	7,300	95
100	8,200	8,700	9,300	8,500	7,700	7,200	100
105	7,100	7,600	8,100	8,300	7,600	7,100	105
110	6,200	6,700	7,100	7,300	7,500	7,100	110
115	5,400	5,800	6,100	6,500	7,200	7,100	115
120	4,600	5,000	5,300	5,700	6,400	7,100	120
125	3,900	4,200	4,500	5,000	5,600	6,200	125
130	3,300	3,600	3,700	4,300	4,900	5,500	130
135	2,800	3,000		3,800	4,300	4,800	135
140	2,200	2,400		3,200	3,700	4,100	140
145	1,800	1,900		2,700	3,100	3,500	145
150				2,300	2,600	2,900	150
155				1,900	2,200	2,200	155
160				1,500	1,700	1,800	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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)							
124.7 ft Main Boom Length							
Radius (ft)	31 ft Hydraulic Offset Fly			55 ft Hydraulic Offset Fly			Radius (ft)
	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	
30	27,800						30
35	20,200	20,200		15,100			35
40	19,600	16,800	16,800	14,600			40
45	19,000	16,400	14,700	11,700	11,700		45
50	18,500	16,000	14,500	11,300	11,300		50
55	18,000	15,700	14,300	11,000	11,000		55
60	17,500	15,400	14,100	10,600	9,000	9,000	60
65	17,100	15,100	13,900	10,300	8,800	8,800	65
70	16,600	14,800	13,800	10,000	8,600	7,700	70
75	16,200	14,600	13,700	9,700	8,400	7,600	75
80	15,600	14,400	13,600	9,400	8,300	7,500	80
85	14,400	14,200	13,500	9,200	8,100	7,400	85
90	13,300	13,600	13,400	8,900	7,900	7,300	90
95	12,300	12,600	12,900	8,700	7,800	7,300	95
100	11,400	11,700	12,000	8,500	7,700	7,200	100
105	10,600	10,800	11,100	8,300	7,600	7,100	105
110	9,800	10,000	10,300	8,200	7,500	7,100	110
115	9,100	9,300	9,500	8,000	7,400	7,100	115
120	8,400	8,600	8,800	7,800	7,300	7,100	120
125	7,800	8,000	8,200	7,600	7,200	7,100	125
130	7,300	7,400	7,600	7,100	7,200	7,100	130
135	6,800	6,900	7,000	6,600	6,800	7,100	135
140	6,300	6,400		6,100	6,300	6,500	140
145	5,900	6,000		5,700	5,900	6,100	145
150				5,300	5,400	5,600	150
155				4,900	5,100	5,200	155
160				4,600	4,700	4,800	160
165				4,300	4,400		165
170				4,200			170

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 and on tires do not exceed 75% of the tipping loads.

**20,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation**  
**(All Capacities Are Listed In Pounds)**

**162.0 ft Main Boom Length**

Radius (ft)	31 ft Hydraulic Offset Fly			55 ft Hydraulic Offset Fly			Radius (ft)
40	14,400	14,400					40
45	14,400	14,400		10,400			45
50	14,400	14,200	14,200	10,400			50
55	14,400	14,100	13,100	10,400			55
60	14,400	13,900	13,000	9,500	9,500		60
65	14,400	13,800	12,900	9,300	9,300		65
70	14,400	13,600	12,800	9,100	9,100		70
75	14,400	13,500	12,800	9,000	7,900	7,900	75
80	13,300	13,300	12,700	8,800	7,800	7,200	80
85	12,300	12,500	12,600	8,600	7,700	7,100	85
90	11,000	11,600	11,900	8,500	7,600	7,000	90
95	9,700	10,400	11,100	8,400	7,500	7,000	95
100	8,600	9,200	9,800	8,200	7,400	6,900	100
105	7,500	8,100	8,600	8,100	7,300	6,900	105
110	6,600	7,100	7,600	7,300	7,200	6,800	110
115	5,700	6,200	6,700	6,500	7,200	6,800	115
120	5,000	5,400	5,800	5,700	6,500	6,800	120
125	4,300	4,700	5,100	5,000	5,800	6,500	125
130	3,700	4,000	4,400	4,400	5,100	5,700	130
135	3,100	3,400	3,700	3,800	4,400	5,100	135
140	2,500	2,900	3,100	3,200	3,800	4,400	140
145	2,100	2,300	2,600	2,700	3,300	3,800	145
150	1,600	1,900	2,100	2,300	2,800	3,300	150
155	1,200	1,400	1,600	1,800	2,300	2,800	155
160				1,400	1,900	2,300	160
165					1,500	1,800	165
170						1,400	170

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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)							
162.0 ft Main Boom Length							
Radius (ft)	31 ft Hydraulic Offset Fly			55 ft Hydraulic Offset Fly			Radius (ft)
	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	
40	14,400	14,400					40
45	14,400	14,400		10,400			45
50	14,400	14,200	14,200	10,400			50
55	14,400	14,100	13,100	10,400			55
60	14,400	13,900	13,000	9,500	9,500		60
65	14,400	13,800	12,900	9,300	9,300		65
70	14,400	13,600	12,800	9,100	9,100		70
75	14,400	13,500	12,800	9,000	7,900	7,900	75
80	13,300	13,300	12,700	8,800	7,800	7,200	80
85	12,300	12,500	12,600	8,600	7,700	7,100	85
90	11,400	11,600	11,900	8,500	7,600	7,000	90
95	10,600	10,800	11,100	8,400	7,500	7,000	95
100	9,800	10,000	10,300	8,200	7,400	6,900	100
105	9,100	9,300	9,500	8,100	7,300	6,900	105
110	8,500	8,700	8,900	7,700	7,200	6,800	110
115	7,900	8,100	8,200	7,200	7,200	6,800	115
120	7,300	7,500	7,700	6,600	6,900	6,800	120
125	6,800	6,900	7,100	6,100	6,400	6,700	125
130	6,300	6,400	6,600	5,700	5,900	6,200	130
135	5,800	6,000	6,100	5,300	5,500	5,700	135
140	5,400	5,500	5,700	4,800	5,100	5,300	140
145	4,900	5,100	5,200	4,500	4,700	4,900	145
150	4,500	4,700	4,800	4,100	4,300	4,500	150
155	4,100	4,300	4,400	3,800	4,000	4,100	155
160	3,800	3,900	4,000	3,400	3,600	3,800	160
165	3,400	3,500	3,600	3,100	3,300	3,500	165
170	3,100	3,200	3,300	2,900	3,000	3,100	170
175	2,800	2,900		2,600	2,700	2,900	175
180	2,600	2,600		2,300	2,500	2,600	180
185				2,000	2,200	2,300	185
190				1,800	1,900	2,000	190
195				1,600	1,700		195
200				1,400	1,500		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 and on tires do not exceed 75% of the tipping loads.

60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)										
124.7 ft Main Boom Length										
Radius (ft)	73 ft Hydraulic Offset Fly			91 ft Hydraulic Offset Fly			109 ft Hydraulic Offset Fly			Radius (ft)
	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	
40	13,000									40
45	12,700									45
50	12,400			10,500			8,000			50
55	10,700	10,700		10,500			8,000			55
60	10,400	10,400		9,200	9,200		7,300	7,300		60
65	10,100	8,700	8,700	8,600	8,600		6,800	6,800		65
70	9,900	8,600	8,600	8,100	8,100		6,300	6,300		70
75	9,700	8,400	8,400	7,600	6,800	6,800	5,800	5,400	5,400	75
80	9,400	8,000	7,100	7,100	6,400	6,400	5,400	5,000	5,000	80
85	8,900	7,700	6,800	6,700	6,000	5,600	5,000	4,600	4,400	85
90	8,500	7,300	6,600	6,300	5,700	5,300	4,600	4,300	4,100	90
95	8,100	7,000	6,300	5,900	5,400	5,000	4,300	4,000	3,800	95
100	7,700	6,700	6,100	5,600	5,100	4,800	4,000	3,700	3,500	100
105	7,400	6,500	5,900	5,300	4,800	4,500	3,700	3,400	3,200	105
110	7,100	6,200	5,700	5,000	4,600	4,300	3,400	3,100	3,000	110
115	6,800	6,000	5,600	4,700	4,300	4,100	3,200	2,900	2,800	115
120	6,500	5,800	5,400	4,500	4,100	3,900	2,900	2,700	2,500	120
125	6,300	5,600	5,300	4,300	3,900	3,700	2,700	2,500	2,300	125
130	6,000	5,500	5,100	4,000	3,700	3,500	2,500	2,300	2,100	130
135	5,800	5,300	5,000	3,800	3,500	3,400	2,300	2,100	2,000	135
140	5,600	5,200	4,900	3,700	3,400	3,200	2,100	1,900	1,800	140
145	5,200	5,000	4,900	3,500	3,200	3,100	1,900	1,700	1,600	145
150	4,800	4,900	4,800	3,300	3,100	3,000	1,800	1,600	1,500	150
155	4,400	4,600	4,800	3,200	3,000	2,900	1,600	1,400	1,300	155
160	4,000	4,200	4,500	3,000	2,800	2,800	1,500	1,300	1,200	160
165	3,700	3,900	4,100	2,900	2,700	2,700	1,300			165
170	3,400	3,500	3,700	2,800	2,700	2,600	1,200			170
175	3,100	3,200	3,300	2,500	2,600	2,600				175
180	2,800	2,900		2,200	2,400	2,500				180
185	2,600	2,700		2,000	2,100	2,200				185
190				1,700	1,800	1,900				190
195				1,500	1,600					195
200				1,300						200

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60,000 lb Counterweight – Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Pounds)										
162.0 ft Main Boom Length										
Radius (ft)	73 ft Hydraulic Offset Fly			91 ft Hydraulic Offset Fly			109 ft Hydraulic Offset Fly			Radius (ft)
	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	2° – 15°	15° – 30°	30° – 45°	
55	8,300									55
60	8,300			6,300						60
65	8,300	8,300		6,300			4,800			65
70	8,300	8,300		6,300			4,800			70
75	8,300	8,300		6,300	6,300		4,800			75
80	8,200	7,500	7,500	6,300	6,300		4,800	4,900		80
85	8,100	7,400	7,400	6,300	6,300		4,600	4,600		85
90	8,000	7,100	6,200	6,100	5,300	5,300	4,300	4,300		90
95	7,900	6,900	6,000	5,800	5,100	5,100	4,000	3,500	3,500	95
100	7,800	6,600	5,800	5,500	4,800	4,400	3,700	3,300	3,300	100
105	7,500	6,400	5,700	5,200	4,600	4,200	3,400	3,100	2,800	105
110	7,100	6,200	5,500	4,900	4,400	4,000	3,200	2,800	2,600	110
115	6,500	5,900	5,300	4,700	4,100	3,800	3,000	2,600	2,400	115
120	6,000	5,800	5,200	4,500	3,900	3,600	2,800	2,400	2,200	120
125	5,500	5,600	5,100	4,300	3,800	3,400	2,600	2,200	2,000	125
130	5,100	5,300	4,900	4,100	3,600	3,300	2,400	2,100	1,900	130
135	4,600	4,900	4,800	3,800	3,400	3,200	2,200	1,900	1,700	135
140	4,200	4,500	4,700	3,400	3,300	3,000	2,000	1,700	1,500	140
145	3,900	4,100	4,300	3,000	3,100	2,900	1,900	1,600	1,400	145
150	3,500	3,700	4,000	2,700	2,900	2,800	1,700	1,400	1,200	150
155	3,200	3,400	3,600	2,400	2,600	2,700	1,600	1,300		155
160	2,800	3,000	3,300	2,100	2,300	2,600	1,300			160
165	2,500	2,700	2,900	1,800	2,000	2,200				165
170	2,200	2,400	2,600	1,500	1,700	1,900				170
175	2,000	2,100	2,300	1,200	1,400	1,600				175
180	1,700	1,900	2,000			1,400				180
185	1,500	1,600	1,800							185
190	1,200	1,300	1,500							190
195			1,200							195

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