

Technical Data

Specifications & Capacities

225|AT

Telescopic Boom All Terrain Crane
225 US ton
200 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 - Six section, formed construction of extra high tensile steel consisting of one base section and five telescoping sections. Two plate design of each section has multiple longitudinal bends for superior strength. Each telescoping section extends independently by means of one double - action, single stage hydraulic cylinder with integral holding valves.

Boom

- 44.9–202.1 ft (13.6–61.6m) six section boom
- Integral boom dolly connection
- Three pinned positions of 0%, 50%, and 100% on each boom section
- Mechanical boom angle indicator
- Wind speed indicator
- Eight boom extend modes (EM1–EM8), controlled from Operator's cab, provide superior capacities by varying extension of telescoping sections:
 - EM1 extends to 202.1 ft (61.6m)
 - EM2 extends to 185.9 ft (56.6m)
 - EM3 extends to 170.2 ft (51.9m)
 - EM4 extends to 155.0 ft (47.2m)
 - EM5 extends to 123.5 ft (37.6m)
 - EM6 extends to 125.4 ft (38.2m)
 - EM7 extends to 93.5 ft (28.5m)
- Maximum tip height for each extend mode is :
 - EM1 is 209 ft (63.7m)
 - EM2 is 193 ft (58.8m)
 - EM3 is 177 ft (53.9m)
 - EM4 is 162 ft (49.3m)
 - EM5 is 130 ft (39.6m)
 - EM6 is 132 ft (40.2m)
 - EM7 is 100 ft (30.5m)

Boom Wear Pads

- Wear pads with Teflon inserts that self-lubricate boom sections, inserts are universal for boom.
- Bottom rear wear pads are universal for all boom sections.
- Bottom front wear pads are common for base, T1, and T2 boom sections.
- Bottom front wear pads are common for T3 and T4 boom sections.
- Top front wear pads are universal for all boom sections.
- Top rear wear pads are common for T2, T3, T4, and T5 boom sections.

Boom Head

- Seven 16.5 in (41.9cm) root diameter nylon sheaves to handle up to 14 parts of line with auxiliary lifting sheave
- Easily removable hinged wire rope guards
- Rope dead end lugs on either side of boom head
- Boom head is designed for quick- reeve of hook block

Boom Elevation

- One hydraulic cylinder with integral holding valve
- Boom elevation: - 1.6° to 83°

Auxiliary Lifting Sheave - Optional

- Single 16.5 in (41.9cm) root diameter nylon sheave
- Easily removable wire rope guards
- Does not affect erection of fly or use of main head sheaves
- Can be stored on right side of boom without removal

Hook Blocks and Balls - Optional

- 40 ton (37mt) 1 sheave quick- reeve hook block with safety latch
- 75 ton (68mt) 3 sheave quick- reeve hook block with safety latch
- 120 ton (109mt) 5 sheave quick- reeve hook block with safety latch
- 160 ton (146mt) 7 sheave quick- reeve hook block with safety latch
- 225 ton (204mt) 10 sheave quick- reeve twin hook block with safety latch
- 12 ton (11mt) swivel hook ball with safety latch

Fly - Optional

- 8 ft (2.4m) heavy lift fly, fixed 30° offset. Maximum tip height is 217 ft (66.1m).
- 42-71 ft (12.8-21.6m) two piece bi-fold lattice fly, stowable hydraulically offsettable to 0° through 45°. Maximum tip height is 280 ft (85.3m).

Fly Extensions - Optional

- Two 25 ft (5.5m) lattice extensions to be mounted between boom head and fly options. Maximum tip height of 330 ft (100.6m).

■ Upper Operator's Cab and Controls

Environmental Cab - Fully enclosed, one person cab of tubular and sheet steel structure with formed plastic interior panels.

Equipped with:

- Tinted and tempered glass windows
- Extra-large fixed front window with time delayed windshield wiper and washer
- Swing up roof window with windshield wiper and washer
- Sliding left side door with large fixed window
- Pop- out rear window for ventilation
- Six way adjustable, cushioned seat with seat belt and storage compartment
- Diesel fired warm- water heater with ten air ducts for front windshield defroster and cab floor
- Air Conditioning - Integral with cab heating system utilizing same ventilation outlets and automatic temperature control (ATC)
- Adjustable sun screen
- Dome lights with red nighttime reading LED's
- Cup holder
- Fire extinguisher
- Two position travel swing lock
- AM/FM Bluetooth radio

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

- Swing hoist
- Boom hoist
- Main (front) winch
- Auxiliary (rear) winch - optional
- Winch high/low speed switch(es)
- Warning horn button
- Swing park brake switch
- Engine throttle lock switch
- Engine set/resume switch
- Cab tilt
- Counterweight removal
- Hydraulic offset fly - optional

Foot Controls

- Boom telescope
- Swing brake
- Engine throttle

Upper Right Console - Controls and indicators for:

- | | |
|-------------------------------------|--------------------------------|
| • Engine ignition | • Radio |
| • Engine stop | • DRI on/off selection |
| • Function lockout | • HVAC controller |
| • Front windshield wiper and washer | • Boom floodlights |
| • Cab lights and upper frame lights | • Rotating beacon/Strobe light |
| • Horn | • Top hatch wiper washer |
| • Dome light with switch | • Winch(es) disable |
| • E- stop switch | • Engine indicator gauge |

Rear Right Side Panel

- 12V accessory outlet (10 amp)
- USB charge port

Camera Display - Located on right A- post with an adjustable mount

- Displays right side of upper
- Displays front and rear winches

Diagnostic Center - Located on right rear wall behind seat.

- Engine diagnostic
- RCL CANBUS diagnostic
- Boom CANBUS diagnostic
- Outrigger CANBUS diagnostic

Fuse & Relay Panel - Located on left rear wall behind seat.

Link-Belt Pulse 2.0 – Link-Belt in-house designed, total crane operating system that utilizes a 10 in touch screen color display with integrated RCL and engine data, advanced diagnostics and systems monitoring, Wi-Fi capable for remote software updates, operator customizable, and a readout and operator interface for following systems:

- **Rated capacity limiter** – LCD graphic audio – visual warning system integrated into dash with anti – two block and function limiter. Operating data includes:
 - Crane configuration
 - Boom length and angle
 - Boom head height
 - Allowed load and percent of allowed load
 - RCL light bar
 - Boom angle
 - Radius of load
 - Actual load
 - Wind speed
 - Highlighted unit of measurement on working screen
 - Telescope operation displayed in real time
 - Outrigger position sensing
 - Drum rotation direction indication
 - Third wrap indicator
 - Diagnostics
 - Counterweight detection system
 - Ground Bearing Pressure on Jacks
 - Swing Motor Lockout For Transport Dolly
 - Operator settable alarms (include):
 - Maximum and minimum boom angles
 - Maximum tip height
 - Maximum boom length
 - Swing left/right positions
 - Operator defined area (imaginary plane)
- **Cab Instrumentation**
 - Tachometer
 - Engine water temperature
 - Fuel level
 - Hydraulic oil temperature
 - Stop engine
 - Check engine
 - Wait to start
 - Diesel exhaust fluid (DEF) level
 - Engine air filter high restriction light
 - Regeneration light
 - Regeneration inhibit switch
 - Regeneration initiate switch
 - High exhaust temperature light
 - Regeneration disabled light
 - Swing park brake light
 - Engine speed
 - Engine oil pressure
 - Battery voltage
 - Fuel rate (gal/hr)
 - Engine load
 - Engine Diagnostics
- **Telematics** – Cellular based data logging and monitoring system that provides:
 - Location and operational settings
 - Routine maintenance
 - Crane and engine monitoring
 - Diagnostic and fault codes

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

Integrated Third Wrap Function Kickout - Link-Belt Pulse 2.0 color display visually and audibly warns operator when wire rope is on first/bottom layer and provides a function kickout when wire rope is down to last three wraps.

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

■ Swing

Motor/Planetary - Two bi-directional hydraulic swing motors mounted to planetary reduction units for 360° continuous smooth swing at 1.31 rpm.

Swing Park Brake - 360°, electric over hydraulic, (spring applied/hydraulic released) multi-disc brake mounted between speed reducer and motor. Operated by a switch in operator's cab.

Swing Brake - 360°, foot operated, electric over hydraulic.

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

■ Central Lubrication System

Centralized grease bank that injects grease into turntable bearing, house lock (2- position).

■ Electrical

Swing Alarm - Audio/Visual warning device signals when upper is swinging.

Lights

- Two LED working lights on front of cab
- Work Lighting Package
 - Includes six LED lights
 - Working light on top of cab - optional
 - Right side of superstructure facing forward
 - Left upper work platform
 - Left & right sides of superstructure facing down
- Two amber strobe beacons on top of upper near winches
- Boom floodlight - Dual
- Boom floodlight - High intensity wirelessly remote controlled

Power Panel - Sealed power panel containing:

- Fuses, circuit breakers, relays, diodes, resistors
- Control modules

■ Hydraulic System

Power Transmission

- One 90° miter box driven by drive shaft from auxiliary transmission.
- One closed loop pump driving one closed loop hydraulic motor acting as main pump drive for crane functions.

Main Pumps

- One piston pump for boom hoist, telescope, and main and auxiliary winches
- One pump for swing gear
- One piston pump for counterweight removal, hydraulic fly option, cab tilt, and fly storage
- One gear pump for cab A/C

Hydraulic Reservoir - 181 gal (685.1L) capacity equipped with sight level gauge and magnetic drain plug.

Filtration

- One, 5–micron filter inside hydraulic reservoir, accessible for easy replacement with an in- cab indicator light.
- One, 3- micron filter for pilot circuit located in main valve area with an in- cab indicator light.

Load Holding Valves - Boom extend cylinder and boom hoist cylinder are equipped with load holding valves to provide load lowering and prevent accidental load drop when hydraulic power is suddenly reduced.

Hydraulic Oil Cooler - Mounted on left side. Removes heat from hydraulic oil.

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

Swing Brake Release Valve - For transporting boom over rear of crane with a boom dolly. Holds 360° swing park brake in released position allowing free rotation of upper structure.

■ 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	kN	ft/min	m/min	ft/min	m/min	ft	m	ft	m
1	29,392	130.7	181	55.2	334	101.8	197	60.0	197	60.0
2	26,996	120.1	195	59.4	371	113.1	215	65.5	412	125.6
3	24,961	111	209	63.7	397	121.0	232	70.7	644	196.3
4	23,212	103.3	223	68	424	129.2	250	76.2	893	272.2
5	21,691	96.5	337	102.7	450	137.2	267	81.4	1160	353.6

Wire Rope Application		Diameter		Type	Maximum Permissible Load	
		in	mm		lb	kN
Main	Standard	7/8	22	37x7 rotation resistant - right regular lay (Type KC)	21,625	96.2
	Optional	7/8	22	34x7 rotation resistant - right regular lay (Type YB)	21,920	97.5
Auxiliary	Standard	7/8	22	37x7 rotation resistant - right regular lay (Type KC)	21,625	96.2
	Optional	7/8	22	35x7 rotation resistant - right regular lay (Type YB)	21,920	97.5

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 followers - optional
- Drum rotation indicators
- Drum diameter: 18.5 in (47cm)
- Rope diameter: 7/8 in (22mm)
- Rope length:
 - Main (Front) 1,000 ft (290m)
 - Auxiliary (Rear) 775 ft (236.2m) or 1,000 ft (290m) - optional
- Last layer and third wrap function kick-out
- Poured socket rope termination

■ Counterweight

Standard - Total of 41,000 lb (18.6mt) of total counterweight consisting of three hydraulically removable counterweights. Assembled and disassembled by hydraulic cylinders controlled from operator's cab with capacities for:

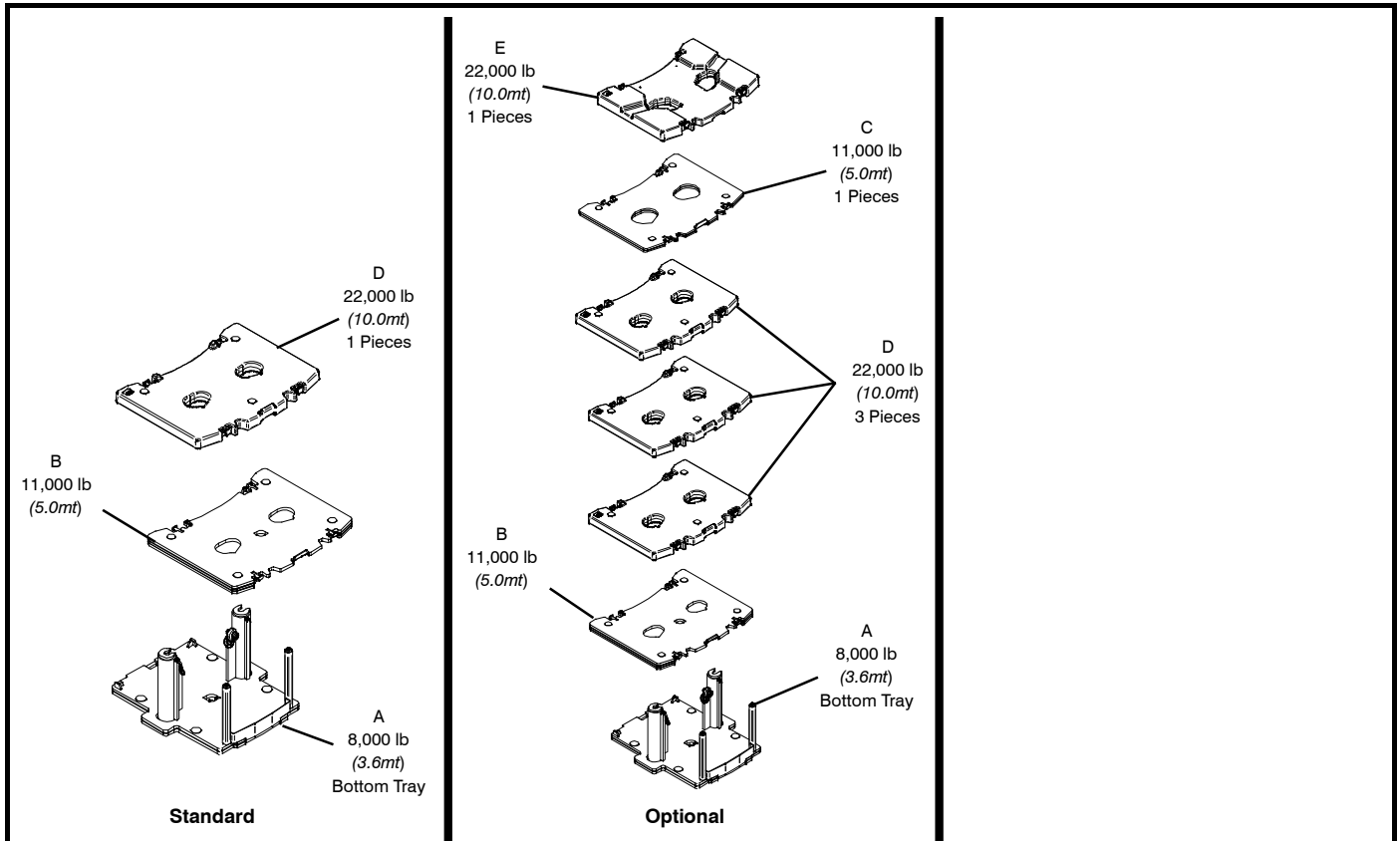
- 0 lb (0t) counterweight
- 8,000 lb (3.6t) counterweight
- 19,000 lb (8.6t) counterweight
- 41,000 lb (18.6t) counterweight

Optional - 80,000 lb (40.0t) in addition to standard counterweight for a total of 118,000 lb (53.5t) counterweight for additional capacities for:

- 52,000 lb (23.6t) counterweight
- 63,000 lb (28.6t) counterweight
- 74,000 lb (33.6t) counterweight
- 96,000 lb (43.6t) counterweight
- 118,000 lb (53.6t) counterweight

■ Additional Options

- Heavy lift package - (required for base rating) includes additional boom head sheave pack, boom hoist cylinder.
- Boom launching - includes hydraulically removable boom foot pins and hydraulic quick disconnects for boom plumbing.
- Hydraulic quick disconnects for boom plumbing.
- Upper mounted storage box.
- Working light bar mounts on top of operator's cab.



Counterweight Packages			41,000 lb (18.6mt) - Standard							
			118,000 lb (53.5mt) - Optional							
Counterweight Modules			A 8,000 lb (3.6mt)	B 11,000 lb (5.0mt)	C 11,000 lb (5.0mt)	D 22,000 lb (10.0mt)	D 22,000 lb (10.0mt)	D 22,000 lb (10.0mt)	E* 22,000 lb (10.0mt)	
Counterweight Usage Configurations		0 lb								
	A	8,000 lb (3.6mt)	X							
	A,B	19,000 lb (8.62mt)	X	X						
	A,B,D	41,000 lb (18.6mt)	X	X		X				
	A,B,C,D	52,000 lb (23.6mt)	X	X	X	X				
	A,B,D,D	63,000 lb (28.6mt)	X	X		X	X			
	A,B,C,D,D	74,000 lb (33.6mt)	X	X	X	X	X			
	A,B,C,D,D,D	96,000 lb (43.5mt)	X	X	X	X	X	X		
A,B,C,D,D,D,E	118,000 lb (53.5mt)	X	X	X	X	X	X	X		

Carrier

■ General

- 10 ft (3.04m) wide (525/80R25 tires)
- 27 ft 6.3 in (8.4m) wheel base (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 tie – down lugs and four carrier access ladders.

■ Outriggers

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

Beams and Jacks - Two, single stage front and two dual stage rear beams hydraulically controlled via

rigging remote control. Jacks with integral check valves, hydraulically controlled via wireless rigging remote control.

V- CALC - Variable confined area lifting capabilities that are incorporated into Pulse 2.0 display allowing multiple outrigger configurations of fully extended, intermediate, and fully retracted in infinite combinations, with live on screen working radii, utilizing 360° charts and swing arrest.

Pontoons

- **Main** - Four, stow'n go, 20 in (50.8cm) square steel pontoons with a contact area of 385 in² (2 483.8cm²) can be stored for road travel under outrigger boxes

Outrigger Work Station Floodlights - LED Flood lights are mounted at each side of carrier.

Jack Reaction

- **Main** - Rear: 260,000 lb (1156.5kN) force and 654 psi (4509.1kPa)
Front: 180,000 lb (800.7kN) and 453 (3123.3kPa) psi ground bearing pressure. Consult factory for base rating ground bearing pressure information.

■ Steering and Axles

- Full integral master gear/relay arm steering system provides hydraulic assisted steering with mechanical link between steering wheel and wheels.

On Highway (Primary) Steering Mode - Axles 3, 4, and 5 will automatically steer in combination with axles 1 and 2 based on travel speed:

On- Highway (Primary)			
Speed	Less than 18.6 mph (30km/h)	18.6-31 mph (30-50km/h)	Greater than 31 mph (50km/h)
Axle 1	Steered	Steered	Steered
Axle 2	Steered	Steered	Steered
Axle 3	Steered	Locked	Locked
Axle 4	Steered	Locked	Locked
Axle 5	Steered	Steered	Locked

Off Road (Auxiliary) Steering Modes - Four independent modes consisting of:

- **All Wheel:** Axles 1, 2, 3, 4, and 5
- **Diagonal (Crab):** Axles 1, 2, 3, 4, and 5
- **Independent Rear:** Axles 3, 4, and 5
- **Drive Away From Walls:** Temporary crab

Front, all wheel, and diagonal (crab) steering modes are controlled from steering wheel and are selected by controls in driver's cab. Switches in driver's cab control rear steering mode through steering module display.

- **Emergency Steering** - A pump is flange-mounted to transfer case and provides hydraulic pressure to steering circuit as long as crane is in motion
- **Drive** - 10 x 6 x 10 Standard
- **Axle 1** - Steered
- **Axle 2** - Steered, driven
- **Axle 3** - Steered
- **Axle 4** - Steered, driven
- **Axle 5** - Steered, driven
- **Drive** - 10 x 8 x 10 Optional
- **Axle 1** - Steered
- **Axle 2** - Steered, driven
- **Axle 3** - Steered, driven
- **Axle 4** - Steered, driven
- **Axle 5** - Steered, driven
- **Inter- Axle Differential Lock** - Traction aiding device that locks axles 2, 4, and 5. Operated by a switch in carrier cab.
- **Transverse (Cross- Axle) Differential Locks** - Traction aiding device that locks differentials within axles 2, 4, and 5. Operated by a momentary switch in 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. Carrier can be raised, lowered, and tilted side to side by controls in carrier cab that adjust suspension cylinders to aid in machine setup.

- Cylinder stroke: - 4.5 in (- 11.43cm)/+3.5 in (8.89cm) at ride height

■ Tires and Wheels

Standard - Ten, (single) 525/80R25 tires on aluminum disc wheels

- Lug nut torque indicator
- Tire pressure and temperature monitoring

Optional - Ten, (single) 445/95R25 tires on aluminum disc wheels

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

■ Brakes

Service - Air anti-lock (ABS) braking system. Disc brakes on all wheel ends. Dual circuit compressed air system with air dryer.

Parking/Emergency - Spring loaded type, acting on 2nd, 3rd, 4th, and 5th axles, automatically apply when air pressure drops below 40 psi (275kPa) in both circuits.

Intarder - Hydrodynamic driveline brake that is integral to transmission. Activated by a switch in carrier cab and controlled by paddle shifters on steering wheel.

Traction Control - ABS activated traction control to limit wheel slip of axles 1, 2, 4, and 5.

■ Central Lubrication System

Automated lubrication unit that injects grease into steering gear arms, steering knuckles, axle king pins, and suspension cylinders. Activated by a timer on ignition switch.

■ Electrical

Battery - Four batteries provide 24 volt starting and operation, easily accessible battery disconnects, and battery jumping charging posts

Lights

- Front lighting includes two main daytime running/headlights, two high beam lights, two LED parking/directional indicators, and five LED cab marker lights
- Side lighting includes four parking/directional indicators per side
- LED 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 LED light, instrument panel light, signal horn, and two outrigger LED lights on each side
- Two amber strobe beacon behind cab

■ Transmission

Main Transmission - Automated - ZF TraXon (no clutch pedal) manual transmission with 12 forward gears and 2 reverse gears.

2-Speed Transfer Case - Air actuated manual transmission with high/low/neutral range.

■ Fuel Tank

- Two, 79 gal (299L) capacity aluminum fuel tanks for a total capacity of 158 gallons (598.1L)
- One, 15 gal (56.8L) capacity plastic diesel exhaust fluid (DEF) tank

■ Engine

Specification	Cummins X 15
Emission Compliance Level:	EPA ON-ROAD
Maximum Allowable Sulfur Content of Fuel (PPM):	15
Numbers of cylinders	6
Cycle	4
Bore and Stroke: inch (mm)	5.39 x 6.65 (136.9x169)
Piston Displacement: in ³ (cm ³)	912 (14 945)
Max. Brake Horsepower: hp (kW)	548 (409) @ 2,000 rpm 580 (432) @ 1,800 rpm
Peak Torque: ft lb (Nm)	1,950 (2 644) @ 1,400 rpm
Alternator: volts - amps	24 - 200
Crankcase Capacity: qt (L)	48 (45.4)
<ul style="list-style-type: none"> • Cruise control • Three stage engine compression brake • Thermostatically controlled, hydraulically driven radiator fan • 120 volt engine block heater • Emergency shut-off valve - optional • Spark arrestor - optional • Air shut-off valve - optional 	

■ Hydraulic System

Main Pumps

- Two section, fixed displacement gear pump for 1st and 2nd axle steering circuits, suspension, outriggers, and 3rd and 4th axle steering circuits
- One, fixed displacement gear pump for 5th axle steering circuit
- One, variable displacement piston pump for cooling fan circuit

Hydraulic Reservoir - 48 gal (181.7L) capacity.

Filtration - One, 5- micron filter inside hydraulic reservoir. Accessible for easy filter replacement.

Pump Drive

- Engine fan, outriggers, steering, and suspension pumps mounted to engine
- Rear steering pump mounted to back of air compressor
- Ground driven pump mounted to back of transfer case

Carrier Speeds and Gradeability

ZF TraXon Transmission		Governed Speed*			Peak Torque**		
Gear	Ratio	Vehicle Speed		Gradeability	Vehicle Speed		Gradeability
		mph	km/h	% Grade	mph	km/h	% Grade
12th	0.77	55.00	88.00	0.5	50.00	81.00	1.5
11th	1.00	49.00	78.00	1.0	39.00	62.00	2.5
10th	1.30	37.00	60.00	2.5	30.00	48.00	4.0
9th	1.68	29.00	46.00	4.0	23.00	37.00	5.0
8th	2.19	22.00	36.00	5.0	18.00	28.00	7.5
7th	2.83	17.00	27.00	6.0	14.00	22.00	10.0
6th	3.53	14.00	22.00	9.0	11.00	18.00	12.5
5th	4.57	11.00	17.00	12.0	9.00	14.00	16.5
4th	5.94	8.00	13.00	15.0	7.00	10.00	22.5
3rd	7.69	6.00	10.00	22.5	5.00	8.00	30.0
2nd	9.98	5.00	8.00	30.0	4.00	6.00	40.0
1st	12.92	4.00	6.00	37.5	3.00	5.00	40.0
Reverse (1)	12.03	4.00	6.00	35.7	3.00	5.00	40.0
Reverse (2)	9.29	5.00	8.00	27.1	4.00	7.00	36.7

Based on a gross vehicle weight of 135,000 lb (61 235kg) using 525/80R25 tires

* Governed Speed represents maximum speed achieved by each gear on flat road and maximum % grade to maintain that speed.

** Peak Torque represents maximum grade achieved at each gear and corresponding speed at each grade and gear (Engine rpm @ 1,600 rpm for all gears).

ZF TraXon Transmission		Transfer Case High			Transfer Case Low		
Gear	Ratio	Vehicle Speed		Gradeability	Vehicle Speed		Gradeability
		mph	km/h	% Grade	mph	km/h	% Grade
6th	3.53	4.80	8.00	6.0	1.20	2.00	57.0
5th	4.57	3.70	6.00	8.0	0.90	1.00	57.0
4th	5.94	2.90	5.00	11.0	0.70	1.00	57.0
3rd	7.69	2.20	4.00	15.0	0.50	1.00	57.0
2nd	9.98	1.70	3.00	20.0	0.40	1.00	57.0
1st	12.92	1.30	2.00	26.0	0.30	1.00	57.0
Reverse (1)	12.03	1.40	2.00	24.2	0.30	1.00	57.0
Reverse (2)	9.29	1.80	3.00	18.3	0.40	1.00	57.0

Cross - Axle Lock are limited to 1st gear; Inter - Axle Lock is limited to 1st through 6th gears.

ZF TraXon Transmission		Governed Speed*			Peak Torque**		
Gear	Ratio	Vehicle Speed		Gradeability	Vehicle Speed		Gradeability
				% Grade			% Grade
		mph	km/h	Min.	mph	km/h	Min.
12th	0.77	55.00	88.00	0.5	50.00	81.00	1.0
11th	1.00	49.00	78.00	1.0	39.00	62.00	2.0
10th	1.30	37.00	60.00	2.0	30.00	48.00	3.0
9th	1.68	29.00	46.00	3.0	23.00	37.00	4.5
8th	2.19	22.00	36.00	4.0	18.00	28.00	6.0
7th	2.83	17.00	27.00	6.0	14.00	22.00	8.0
6th	3.53	14.00	22.00	7.0	11.00	18.00	10.0
5th	4.57	11.00	17.00	10.0	9.00	14.00	14.0
4th	5.94	8.00	13.00	13.0	7.00	10.00	18.0
3rd	7.69	6.00	10.00	15.0	5.00	8.00	25.0
2nd	9.98	5.00	8.00	25.0	4.00	6.00	33.0
1st	12.92	4.00	6.00	30.0	3.00	5.00	33.0
Reverse (1)	12.03	4.00	6.00	28.2	3.00	5.00	33.0
Reverse (2)	9.29	5.00	8.00	21.4	4.00	7.00	30.3

Based on a gross vehicle weight of 162,000 lb (72 575kg) using 525/80R25 tires

* Governed Speed represents maximum speed achieved by each gear on flat road and maximum % grade to maintain that speed.

** Peak Torque represents maximum grade achieved at each gear and corresponding speed at each grade and gear (Engine rpm @ 1,600 rpm for all gears).

ZF TraXon Transmission		Transfer Case High			Transfer Case Low		
Gear	Ratio	Vehicle Speed		Gradeability	Vehicle Speed		Gradeability
				% Grade			% Grade
		mph	km/h	Min.	mph	km/h	Min.
6th	3.53	4.80	8.00	5.0	1.20	2.00	44.0
5th	4.57	3.70	6.00	7.0	0.90	1.00	44.0
4th	5.94	2.90	5.00	10.0	0.70	1.00	44.0
3rd	7.69	2.20	4.00	12.5	0.50	1.00	44.0
2nd	9.98	1.70	3.00	17.5	0.40	1.00	44.0
1st	12.92	1.30	2.00	21.0	0.30	1.00	46.0
Reverse (1)	12.03	1.40	2.00	20.1	0.30	1.00	46.0
Reverse (2)	9.29	1.80	3.00	15.4	0.40	1.00	44.0

Cross- Axle Lock are limited to 1st gear; Inter- Axle Lock is limited to 1st through 6th gears.

■ Lower Cab and Controls

Environmental Cab - Fully enclosed, dual occupancy cab of aluminum constructed with acoustical insulation.

Equipped with:

- Tinted and tempered glass windows
- Power left and right door windows for ventilation
- Intermittent windshield wiper and washer
- Six- way adjustable and air suspended driver's seat with seat belt
- Passenger seat with integrated storage
- Two heated and electrically adjustable side view mirrors with passenger infrared camera
- Engine dependent warm- water heater with air ducts for chest/face, foot, and windshield defroster
- Adjustable sun visor
- LED dome lights
- Fire extinguisher

Air Conditioning - Integral with cab heating system utilizing same ventilation outlets

- Automatic temperature control

Overhead Console - Located above sun visor

- AM/FM Bluetooth radio
- Dome light switch
- 12V accessory power outlet

Camera Display - Integrated with right side LCD display

- Displays right side of machine
- Displays rear view
- Displays dolly rear view - option

Cab Instrumentation - Ergonomically positioned instrumentation for driving including:

- Digital speedometer with odometer, hour meter, trip meter, clock and outside temperature.
- Tachometer
- Fuel and diesel exhaust fluid (DEF) level with warning indicator

Indicator Lights

- Regeneration inhibit
- Check engine
- Stop engine
- Exhaust regeneration
- High exhaust temperature
- Engine air filter high restriction light
- Cruise
- Park brake
- Tire pressure warning
- ABS
- Trailer ABS
- Steer computer
- Steer pump
- Steer hydraulic oil level
- Intarder level
- Engine brake level
- Transaxle (cross- axle) differential lock
- Inter- axle differential lock
- Transfer case
- Travel mode
- Ride height
- Diesel Exhaust Fluid (DEF)
- Seat belt
- Traction control
- Hill hold start

Dash Mounted Controls For:

- Carrier lights
- Console dimmer switch
- Remote mirror control switches
- Mirror heating switch
- Cab heater/air conditioning switch
- Fresh/Recirculation air switch
- Park brake air valve
- Trailer brake air valve
- Carrier engine ignition switch

Dash Mounted Indicators For:

- Turn signal indication
- High beam headlights

Right Side LCD Display - Ergonomically positioned on right of driver's dash panel, digital instrumentation and indicators for crane operations including:

- Transmission digital readout

Gauges

- Engine water temperature
- Engine oil pressure

Diagnostic Screens

- Engine
- After treatment
- Suspension/Outriggers
- Intarder
- Tire Pressure Monitoring Screen (TPMS)

Right Side Console - Controls and indicators for:

- Transmission gear shifting
- Steering electronic control panel
- Auxiliary transmission range selector switch
- Intarder on/off switch
- Diesel particulate filter switch
- Regeneration inhibit switch
- Fan override switch
- ABS Traction control switch
- Transaxle (cross- axle) differential lock switch with indicator light
- Inter- axle differential lock switch with indicator light
- Travel mode switch
- Front axles (axles 1 & 2) suspension height switch
- Rear axles (axles 3- 5) suspension height switch
- Ride height switch
- Hill hold start switch

Steering Column/Wheel Controls For:

- Turn signal switch
- High beam switch
- Tilt/telescope adjustments
- Cruise Control
- Engine brake control
- Warning horn
- Hazard light switch
- Intarder brake control
- Intermittent windshield wiper and washer

Foot Controls For:

- Carrier service brakes
- Engine throttle

Carrier Fuse & Relay Center - Located inside cab passenger dash contains:

- Fuses and relays for carrier functions

Diagnostic Ports - Located under dash to left of steer column:

- OBD
- Transmission
- CANBUS
- CB radio hook ups

■ Additional Equipment

Standard:

- Aluminum full deck fenders
- Two storage boxes located between axle 4 and 5, one on each side
- Air hose connection ports
- Clearance flags
- Front and rear anchor shackles
- Pneumatic and electrical quick disconnect connections mounted to rear for trailer or boom dolly brakes and lights

Optional:

- Rear mounted pintle hook
- Oversize load sign mounted below front bumper
- Third axle lift
- Hydraulic quick disconnects for outrigger beam removal

Transport Scenarios - Axle Loads

Machine Configuration:

Base crane equipped with 525/80R25 tires, main winch with 1,000 ft (305m) KC wire rope, hoist drum follower, 40 ton (37mt) 1- sheave hook block at front bumper, auxiliary lifting sheave, full tank of fuel, 250 lb driver, and 500 lb in storage boxes.



Axle 1
24,221 lb
11mt

Axle 2
24,772 lb
11.2mt

Axle 3
25,893 lb
11.7mt

Axle 4
26,565 lb
12mt

Axle 5
26,399 lb
12mt

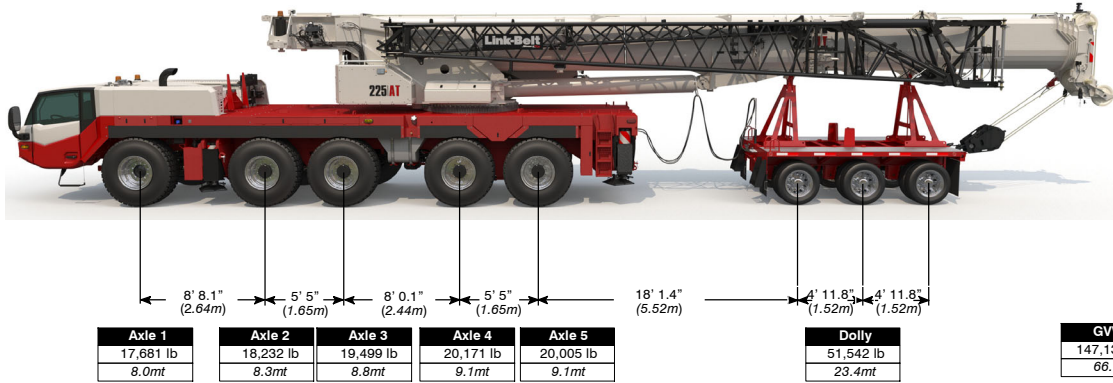
GVW
127,850 lb
58mt

Axle Load Transfer Option Substitution (Boom Over Front)		Axle 1	Axle 2	Axle 3	Axle 4	Axle 5
Add: 42' - 71' Hyd Offsetable Fly	lb	2,893	2,893	- 203	- 203	- 203
	mt	1.3	1.3	- 0.10	- 0.10	- 0.10
Add: Auxiliary winch w/ 775 ft wire rope	lb	- 1,995	- 1,995	2,678	2,678	2,678
	mt	- 0.90	- 0.90	1.2	1.2	1.2
Add: Counterweight Tray	lb	2,799	2,799	800	800	800
	mt	1.3	1.3	0.40	0.40	0.40
Add: 12 ton Hook Ball	lb	763	763	- 225	- 225	- 225
	mt	0.30	0.30	- 0.10	- 0.10	- 0.10
Substitute: 445/95R25 tires	lb	- 183	- 183	- 183	- 183	- 183
	mt	- 0.10	- 0.10	- 0.10	- 0.10	- 0.10
Remove: 40 ton Hook Block	lb	- 1,340	- 1,340	395	395	395
	mt	- 0.60	- 0.60	0.20	0.20	0.20

Transport Scenarios - 3- Axle Boom Dolly

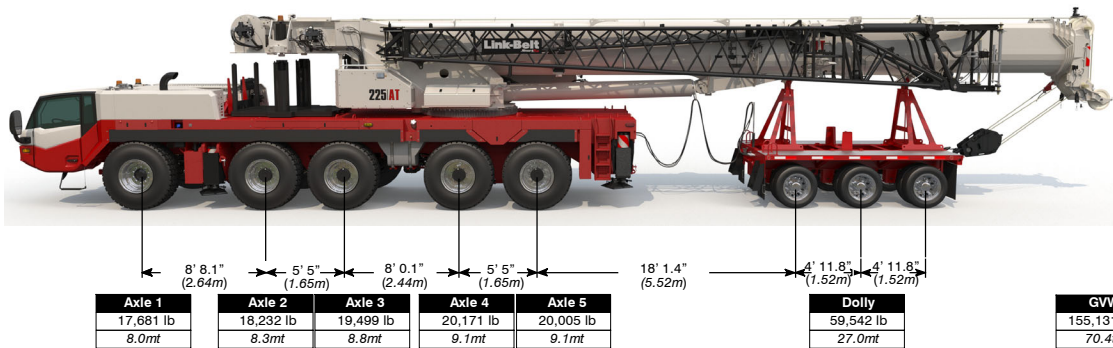
Machine Configuration:

Base crane equipped with 525/80R25 tires, main winch with 1,000 ft (305m) KC wire rope hoist drum follower, aux (rear) winch with 775' KC wire rope, 42' – 71' hydraulically offsettable fly stored, 75 ton 3 sheave hook block, auxiliary lifting sheave, boom extended, full tank of fuel, 250 lb driver. Boom Dolly: Nelson Manufacturing 3- axle close couple dolly. Est weight 9000lbs (4082kg)



**0 lb
(0 mt)**

With Counterweight Tray Installed:

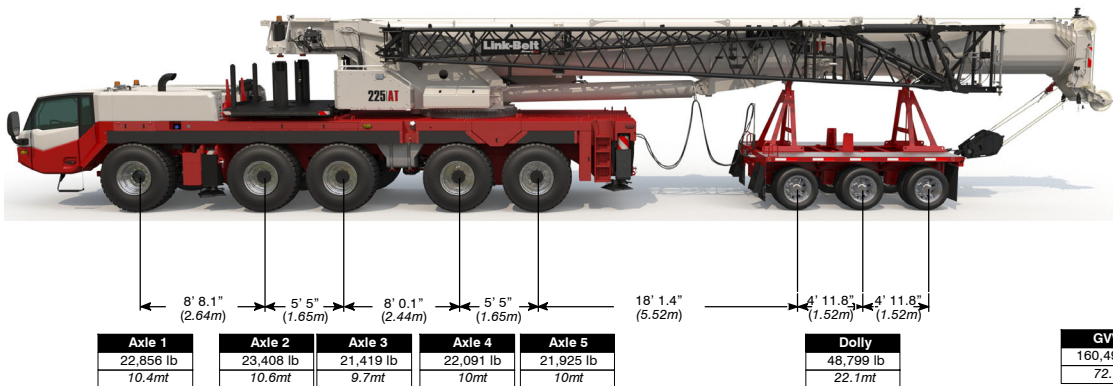


**8,000 lb
(3.6 mt)**

Machine Configuration:

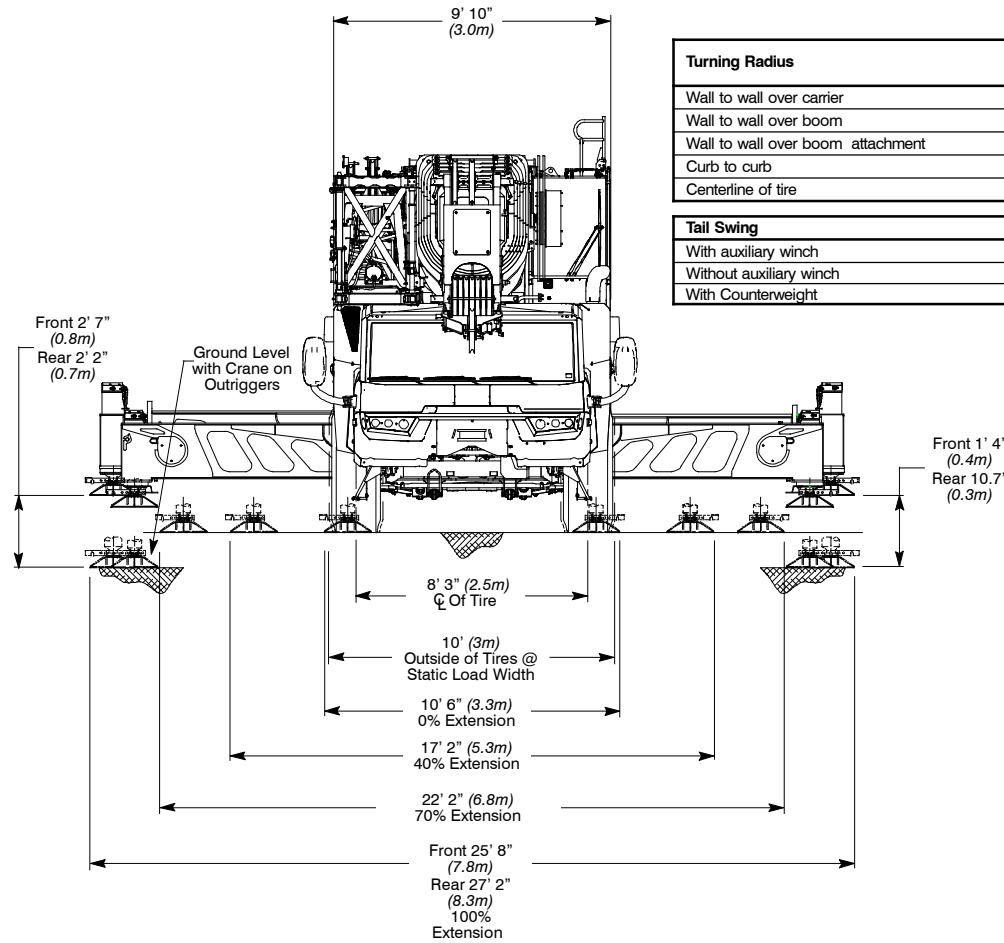
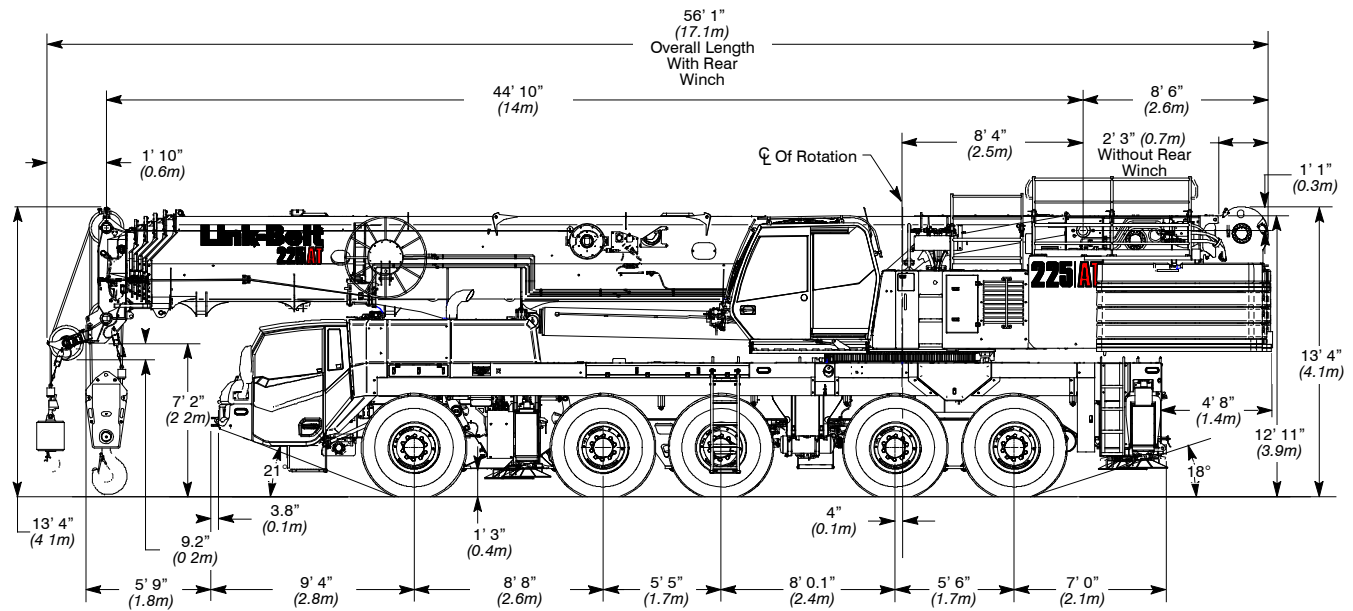
Base crane equipped with 525/80R25 tires, main winch with 1,000 ft (305m) KC wire rope hoist drum follower, 42' – 71' hydraulically offsettable fly stored, 40 ton 1 sheave hook block, auxiliary lifting sheave, boom extended, full tank of fuel, 250 lb driver. Boom Dolly: Nelson Manufacturing 3- axle close couple dolly. Est weight 9000lbs (4082kg)

With Counterweight Tray + 11K Installed:



**19,000 lb
(8.6 mt)**

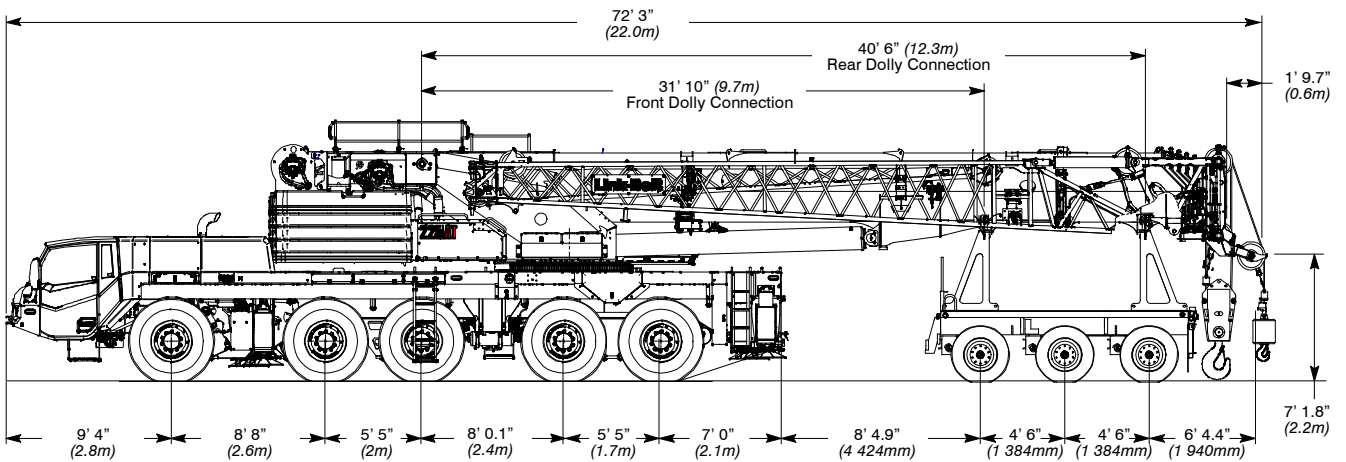
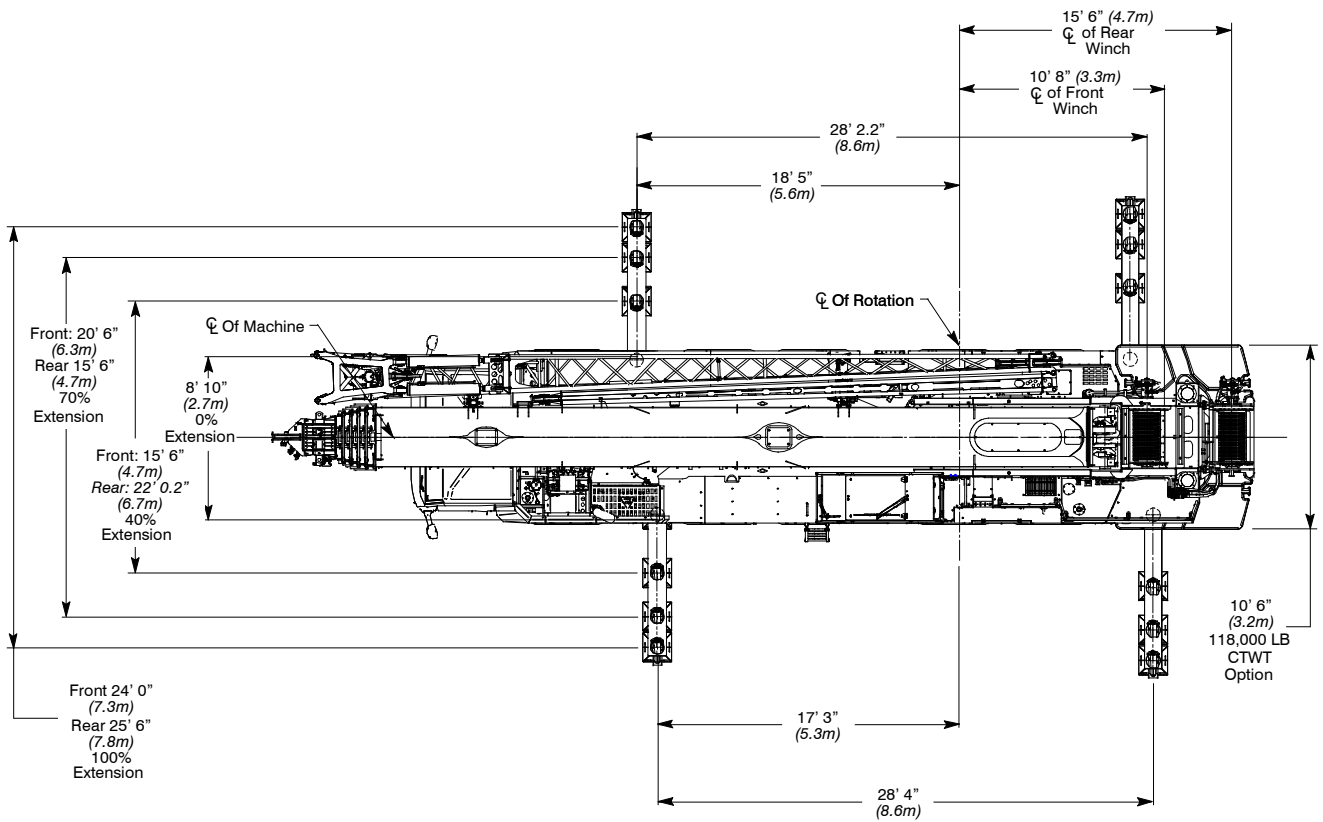
General Dimensions



Turning Radius	525/80R25	
	English	Metric
Wall to wall over carrier	46'- 11.3"	14.3m
Wall to wall over boom	42'- 5.6"	12.9m
Wall to wall over boom attachment	44'- 4"	13.5m
Curb to curb	34'- 10.9"	10.6m
Centerline of tire	41'- 11.2"	12.8m

Tail Swing	English	Metric
	With auxiliary winch	16'- 10.3"
Without auxiliary winch	36'- 3.9"	11.1m
With Counterweight	17'- 0"	5.2m

Not To Scale

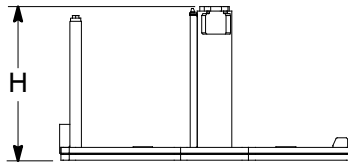
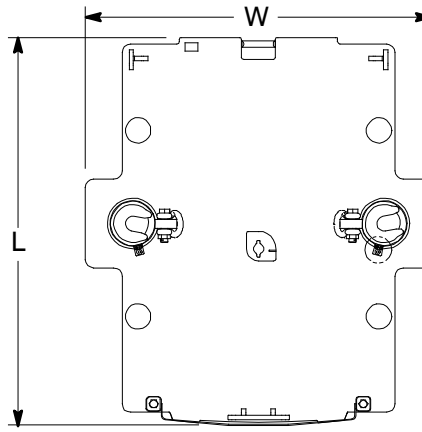


Not To Scale

Counterweights

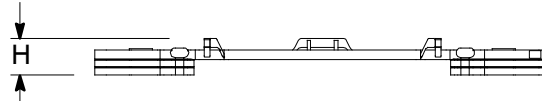
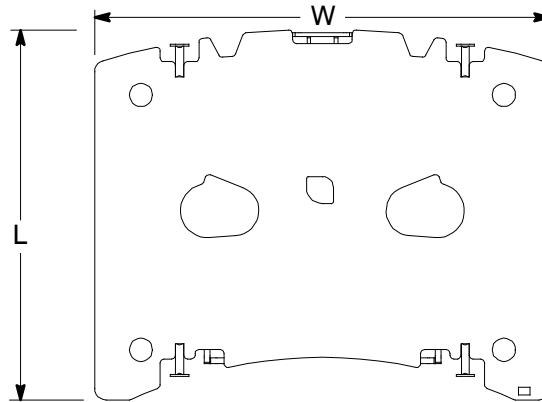
Counterweight Tray (A) ①

Length	91.73 in	(2 330mm)
Width	82.0 in	(2 082mm)
Height	47.38 in	(1 203mm)
Weight	8,019 lb	(3.64mt)



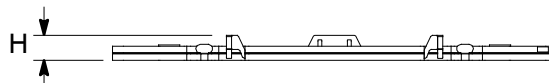
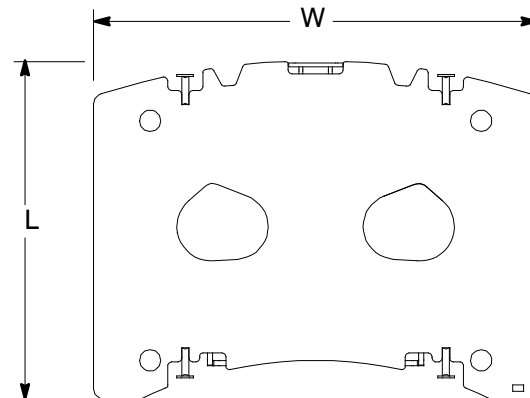
Counterweight (B) ①

Length	95.81 in	(2 433mm)
Width	118.0 in	(2 997mm)
Height	9.44 in	(240 mm)
Weight	11,083 lb	(5mt)



Counterweight (C) ①

Length	95.81 in	(2 434mm)
Width	126 in	(3 200mm)
Height	6.94 in	(176mm)
Weight	11,000 lb	(5.0mt)

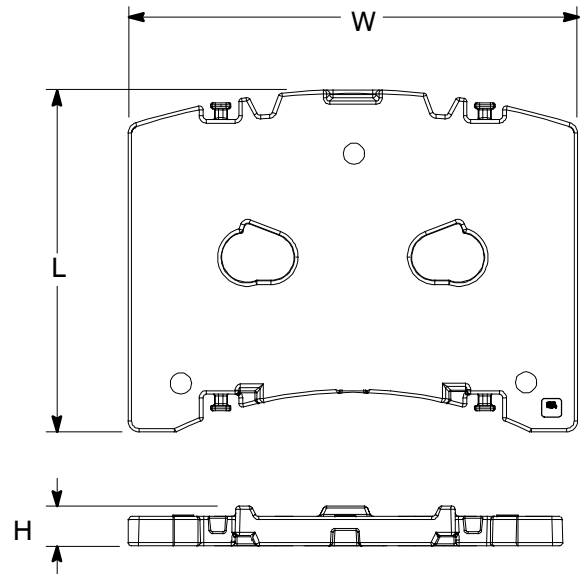


Number inside black circle “①” = # of components

* - Optional equipment

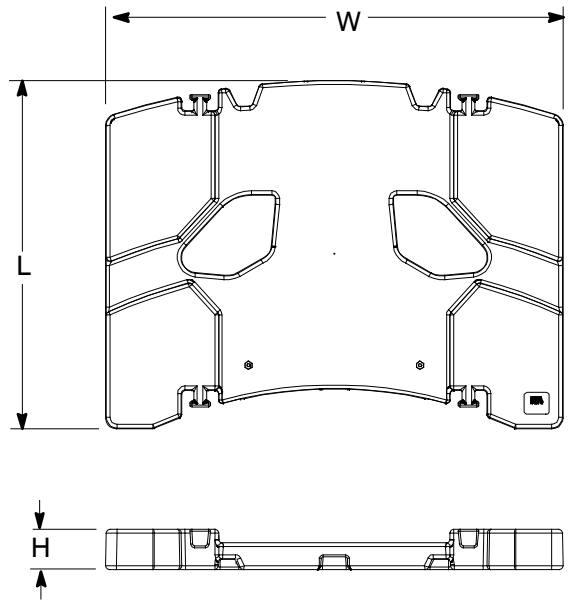
Counterweight (D) ③

Length	95.9 in	(2 436mm)
Width	126.00 in	(3 199mm)
Height	11.6 in	(294mm)
Weight	22,000 lb	(6.4mt)



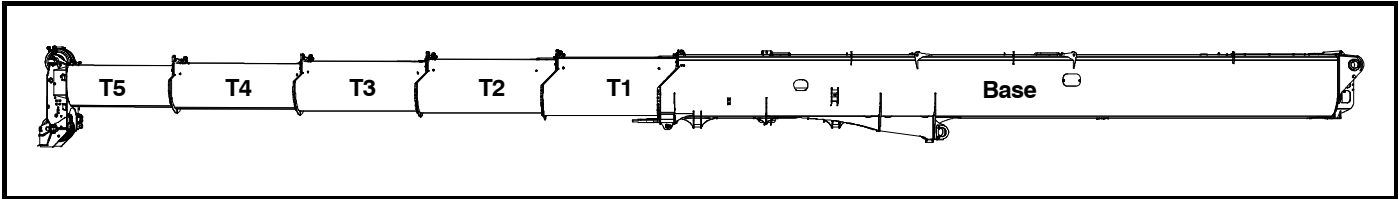
Top Counterweight (E) ①

Length	95.9 in	(2 436mm)
Width	126.00 in	(3 199mm)
Height	11.0 in	(280mm)
Weight	22,000 lb	(10.0mt)



Number inside black circle “①” = # of components
 * - Optional equipment

Boom Extend Modes



EM 1	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.9	13.68					
74.4	22.68	100%					
104.9	31.97	100%	100%				
136.35	41.56	100%	100%	100%			
168.79	51.45	100%	100%	100%	100%		
185.48	56.53	100%	100%	100%	100%	50%	
202.17	61.52	100%	100%	100%	100%	100%	

EM 2	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.86	13.67					
74.37	22.67	100%					
104.89	31.97	100%	100%				
136.35	41.56	100%	100%	100%			
152.57	46.50	100%	100%	100%	50%		
169.26	51.59	100%	100%	100%	50%	50%	
185.95	55.69	100%	100%	100%	50%	100%	

EM 3	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.86	13.67					
74.37	22.67	100%					
104.89	31.97	100%	100%				
120.62	36.76	100%	100%	50%			
136.84	41.71	100%	100%	50%	50%		
153.53	46.80	100%	100%	50%	50%	50%	
170.22	51.88	100%	100%	50%	50%	100%	

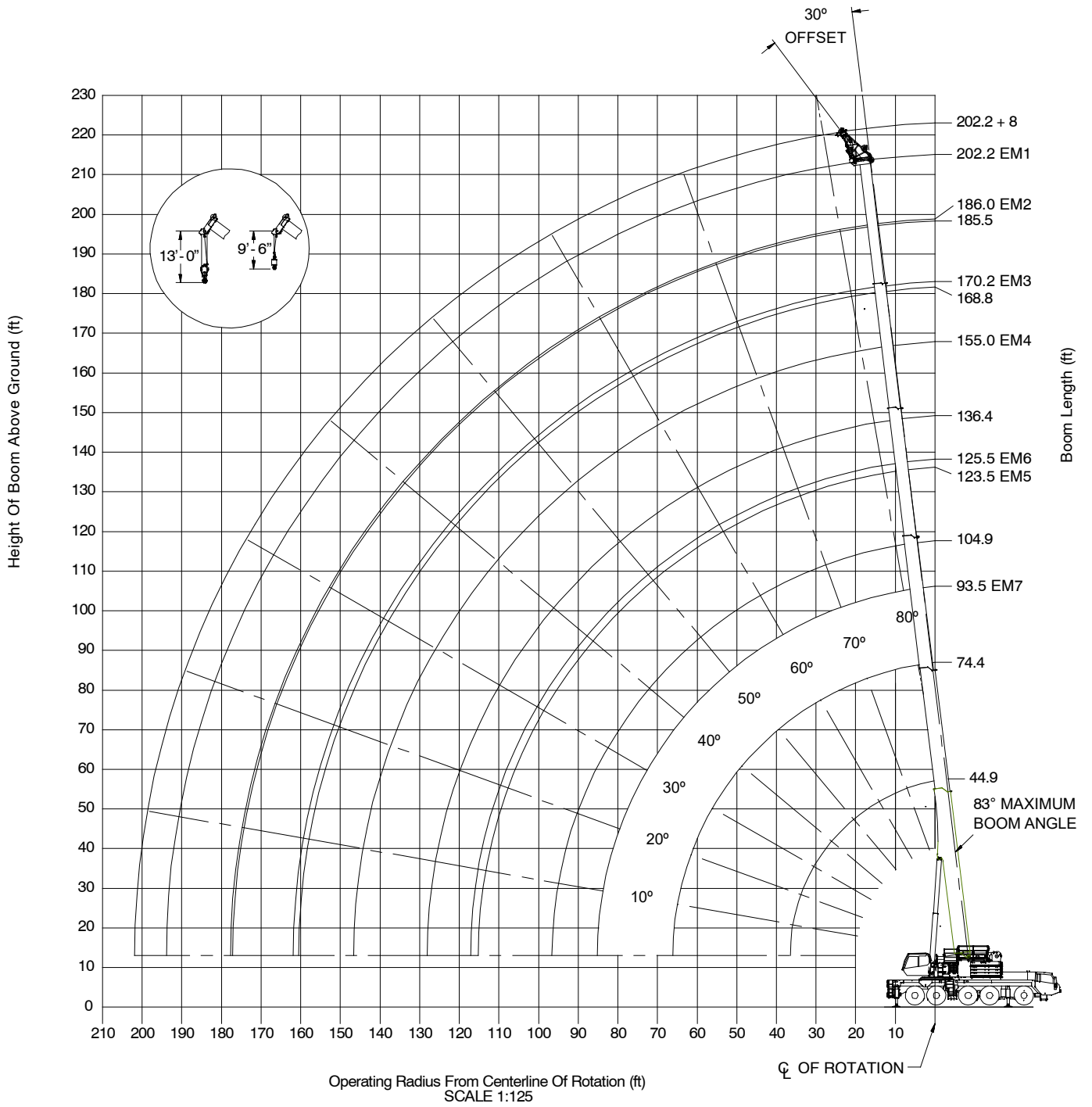
EM 4	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.86	13.67					
74.37	22.67	100%					
89.63	27.32	100%	50%				
105.36	32.11	100%	50%	50%			
121.58	37.06	100%	50%	50%	50%		
138.27	42.14	100%	50%	50%	50%	50%	
154.96	47.23	100%	50%	50%	50%	100%	

EM 5	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.86	13.67					
59.62	18.17	50%					
74.87	22.82	50%	50%				
90.61	27.62	50%	50%	50%			
106.82	32.56	50%	50%	50%	50%		
123.51	37.64	50%	50%	50%	50%	50%	

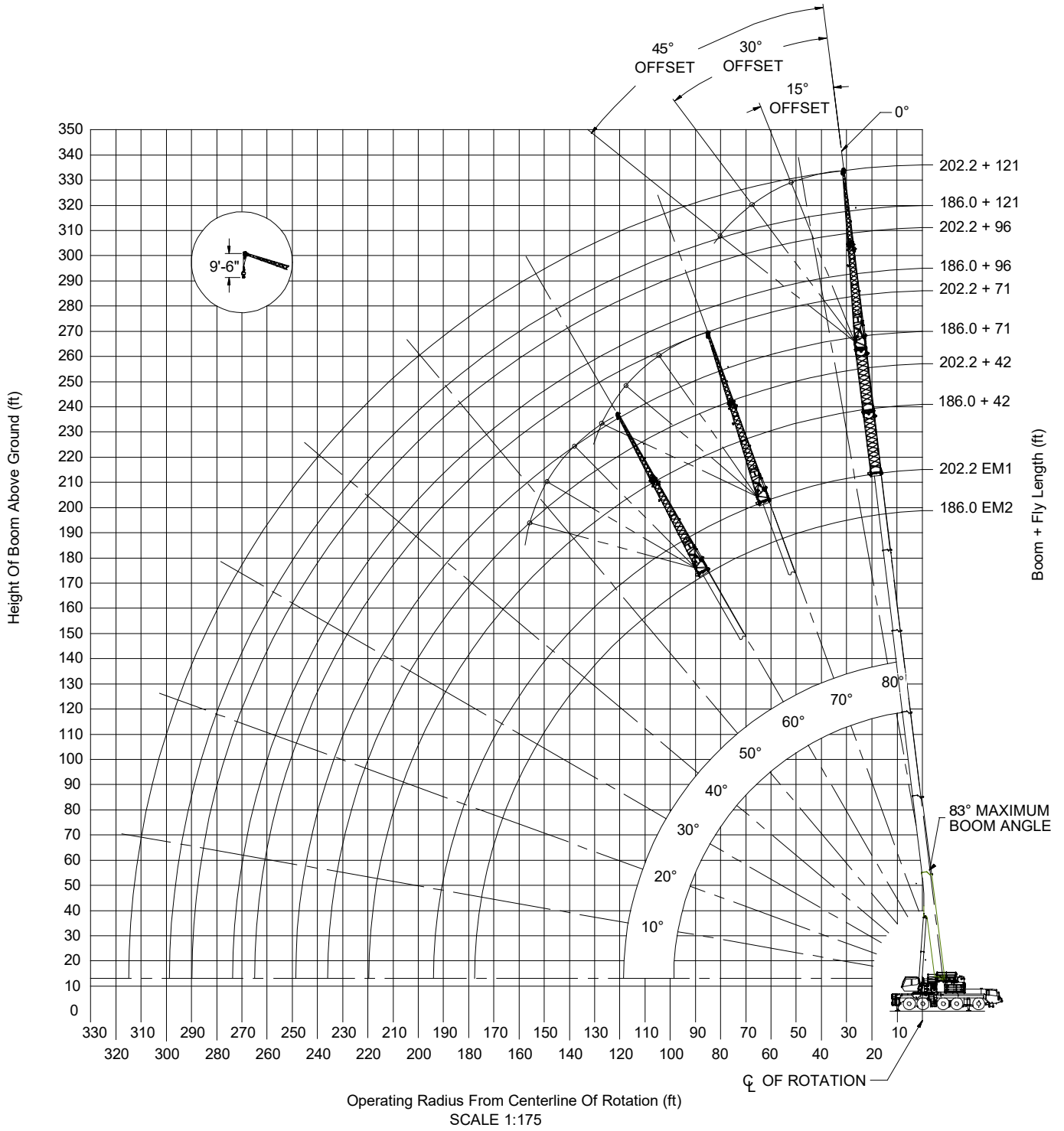
EM 6	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.86	13.67					
60.12	18.32		50%				
75.85	23.12		50%	50%	0%		
92.07	28.06		50%	50%	50%		
108.76	33.15		50%	50%	50%	50%	
125.45	38.24		50%	50%	50%	100%	

EM 7	Boom Length		Telescope Length				
	ft	m	T5	T4	T3	T2	T1
	44.86	13.67					
60.59	18.47			50%			
76.81	23.41			50%	50%		
93.50	28.50			50%	50%	50%	

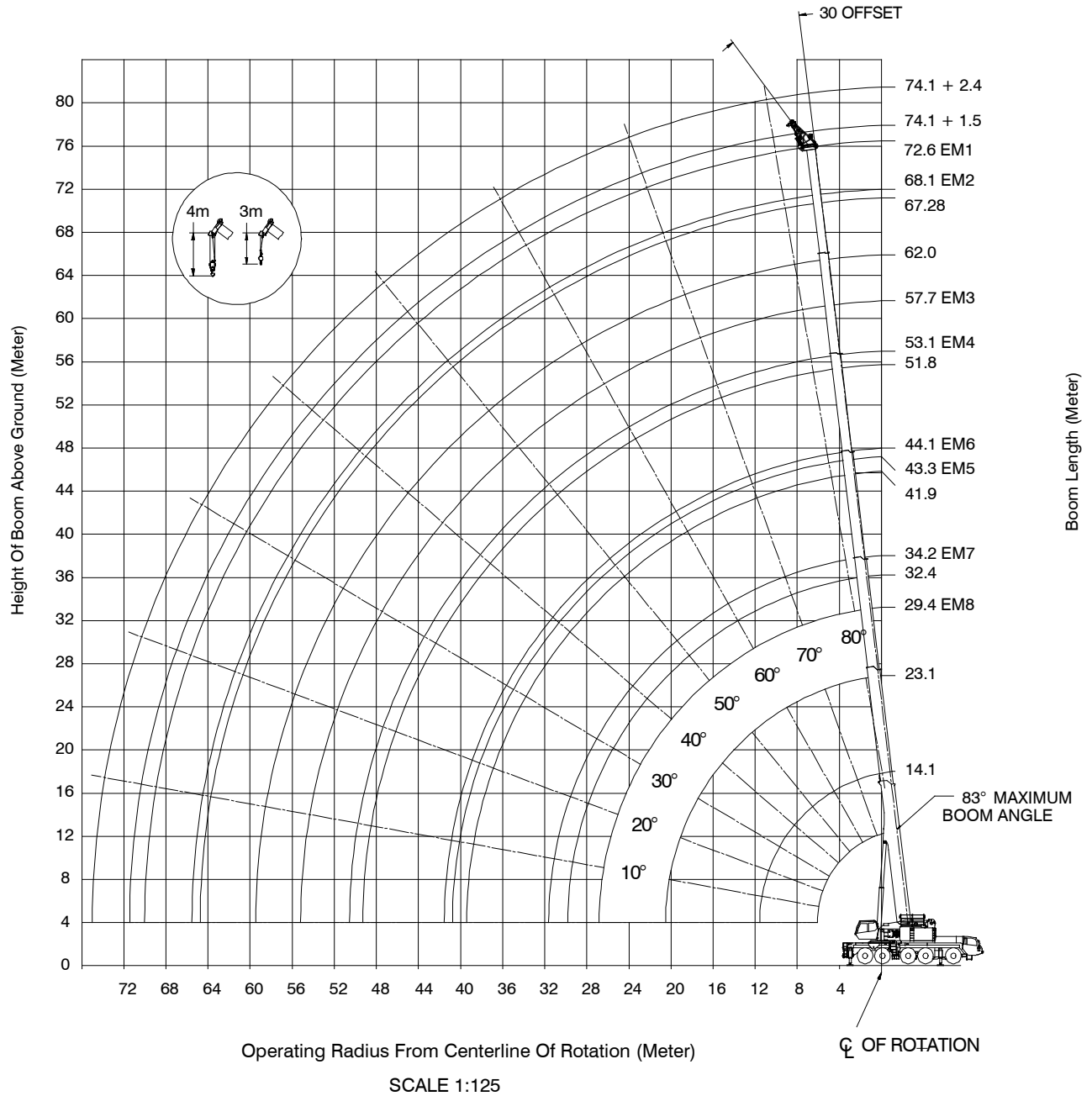
Working Range Diagram - Main Boom



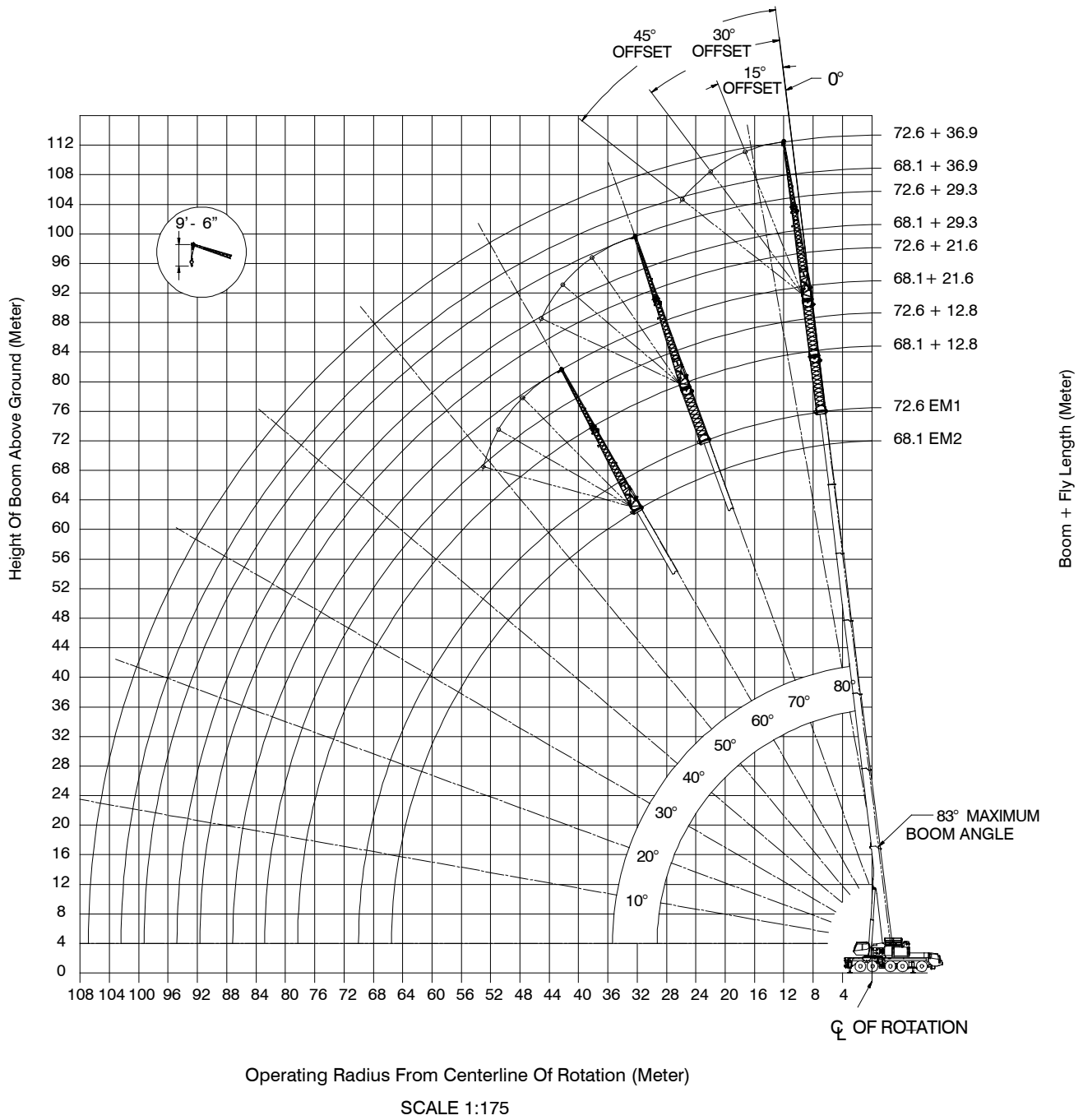
Working Range Diagram - Main Boom + Fly



Working Range Diagram - Main Boom (Metric)



Working Range Diagram - Main Boom + Fly (Metric)



Main Boom Lift Capacity Charts - Standard

8,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation (All Capacities Are Listed In Pounds)												
Radius	Boom Length (ft)											Radius
	44.86	59.55 - 60.53	74.24 - 76.68	89.44 - 93.37	104.63 - 108.56	120.3 - 125.25	135.97 - 137.95	152.12 - 154.64	168.27 - 169.83	184.96 - 185.5	201.65	
10	287,100	280,300	271,700	251,900								10
12	245,500	243,900	238,000	228,900	162,900							12
15	199,600	201,000	198,500	193,700	176,200	125,400						15
20	149,500	152,900	152,900	150,900	147,700	130,400	91,100					20
25	97,100	104,300	107,000	107,300	106,400	104,100	91,100	73,300	56,100			25
30	65,400	72,800	75,500	75,900	78,200	77,000	75,800	72,900	56,100	44,900		30
35	46,000	53,400	57,000	58,400	58,500	59,100	59,000	58,000	54,600	44,900	36,500	35
40		41,000	44,400	45,600	46,500	46,300	46,100	45,200	44,500	42,700	36,500	40
45		32,100	35,700	36,900	37,800	37,600	37,500	36,600	36,000	34,700	33,500	45
50		25,600	29,200	30,400	31,200	31,100	31,000	30,200	29,500	28,300	27,200	50
55			24,100	25,500	26,300	26,100	26,000	25,200	24,600	23,400	22,300	55
60			20,200	21,600	22,300	22,200	22,000	21,300	20,900	19,800	18,800	60
65			16,900	18,400	19,300	19,200	19,100	18,400	17,800	16,700	15,700	65
70				15,700	16,600	16,500	16,400	15,700	15,200	14,100	13,100	70
75				13,400	14,400	14,300	14,200	13,500	13,000	11,900	11,000	75
80				11,500	12,400	12,400	12,300	11,700	11,100	10,100	9,100	80
85					10,700	10,800	10,700	10,100	9,500	8,500	7,600	85
90					9,300	9,300	9,300	8,600	8,100	7,100	6,200	90
95					8,000	8,000	8,100	7,400	6,900	5,800	5,000	95
100						6,900	6,900	6,300	5,800	4,800	3,900	100
105						5,900	5,900	5,400	4,800	3,800	3,000	105
110						5,000	5,000	4,500	3,900	2,900	2,100	110
115							4,200	3,600	3,200	2,200		115
120							3,400	2,900	2,400			120
125							2,800	2,200				125

Note: Capacities depict multiple boom modes.

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

41,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)											Radius (ft)
	44.86	59.55-60.53	74.24-76.68	89.44-93.37	104.63-108.56	120.3-125.25	135.97-137.95	152.12-154.64	168.27-169.83	184.96-185.5	201.65	
10	296,800	291,100	282,700	256,100								10
12	270,700	266,500	260,000	243,100	162,900							12
15	221,400	221,800	218,200	212,300	176,200	125,400						15
20	166,700	169,800	169,200	166,600	162,500	130,400	91,100					20
25	131,500	135,600	136,300	135,100	132,600	125,400	91,100	73,300	56,100			25
30	100,300	107,400	109,600	110,000	109,000	106,900	91,100	73,300	56,100	44,900		30
35	75,500	82,500	84,800	85,200	84,300	82,500	84,100	73,300	56,100	44,900	36,500	35
40		65,700	68,200	68,500	67,700	69,300	67,500	66,100	56,100	44,900	36,500	40
45		53,900	56,500	56,900	58,500	57,600	56,000	56,700	55,400	44,900	36,500	45
50		44,500	47,200	49,300	49,300	48,300	49,000	48,200	48,200	44,900	36,500	50
55			40,800	42,300	42,200	42,700	42,500	42,000	41,300	40,100	36,500	55
60			35,100	36,600	36,600	37,200	37,100	36,300	35,700	34,500	33,500	60
65			30,500	31,900	32,700	32,600	32,400	31,700	31,100	30,000	29,000	65
70				28,000	28,900	28,800	28,600	27,900	27,300	26,200	25,200	70
75				24,700	25,700	25,600	25,400	24,700	24,100	23,000	22,100	75
80				22,000	22,900	22,900	22,700	22,000	21,400	20,600	19,700	80
85					20,600	20,600	20,600	19,900	19,300	18,300	17,400	85
90					18,500	18,500	18,500	17,900	17,300	16,300	15,400	90
95					16,600	16,700	16,700	16,100	15,500	14,500	13,600	95
100					9,300	15,000	15,100	14,500	13,900	12,900	12,100	100
105						13,600	13,600	13,100	12,500	11,500	10,700	105
110						12,300	12,300	11,800	11,300	10,300	9,400	110
115						4,800	11,100	10,600	10,100	9,100	8,300	115
120							10,100	9,500	9,100	8,100	7,300	120
125							9,100	8,600	8,100	7,200	6,300	125
130								7,700	7,200	6,300	5,500	130
135								6,900	6,400	5,500	4,700	135
140								6,100	5,700	4,800	4,000	140
145								2,600	5,000	4,100	3,300	145
150									4,400	3,400	2,700	150
155									3,800	2,900	2,100	155
160									2,700	2,300		160

Note: Capacities depict multiple boom modes.

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

63,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation												
(All Capacities Are Listed In Pounds)												
Radius (ft)	Boom Length (ft)											Radius (ft)
	44.86	59.55-60.53	74.24-76.68	89.44-93.37	104.63-108.56	120.3-125.25	135.97-137.95	152.12-154.64	168.27-169.83	184.96-185.5	201.65	
10	298,600	292,000	282,600	256,100								10
12	272,800	269,000	262,400	251,800	162,900							12
15	235,800	234,300	231,100	224,200	176,200	125,400						15
20	178,100	180,800	179,900	176,800	168,900	130,400	91,100					20
25	141,000	144,900	145,400	144,000	141,200	125,400	91,100	73,300	56,100			25
30	115,100	119,600	120,800	120,200	118,300	115,500	91,100	73,300	56,100	44,900		30
35	93,300	100,200	102,500	102,400	101,000	98,800	84,800	73,300	56,100	44,900	36,500	35
40		80,500	83,000	83,300	82,500	80,800	77,800	73,300	56,100	44,900	36,500	40
45		66,400	69,000	69,400	68,600	67,300	68,400	67,000	56,100	44,900	36,500	45
50		56,000	58,500	59,100	58,300	59,800	58,200	56,900	56,100	44,900	36,500	50
55			50,300	51,000	52,500	51,700	50,100	50,800	49,600	44,900	36,500	55
60			43,800	44,400	46,100	45,200	43,700	44,400	44,400	43,300	36,500	60
65			38,500	40,400	40,900	40,100	40,700	39,300	40,000	39,000	36,500	65
70				36,200	36,400	35,600	36,200	35,200	35,600	34,500	33,500	70
75				32,400	32,600	31,900	32,400	32,300	31,700	30,600	29,700	75
80				29,000	29,200	29,900	29,100	29,100	28,500	27,400	26,500	80
85					26,300	27,100	26,900	26,200	25,700	24,600	23,700	85
90					24,000	24,500	24,500	23,800	23,200	22,100	21,200	90
95					22,400	22,300	22,300	21,600	21,200	20,300	19,400	95
100					14,700	20,500	20,500	19,900	19,400	18,400	17,500	100
105						18,700	18,800	18,200	17,700	16,700	15,800	105
110						17,200	17,200	16,600	16,100	15,100	14,300	110
115						9,400	15,800	15,200	14,800	13,800	12,900	115
120							14,500	14,000	13,500	12,500	11,700	120
125							13,300	12,800	12,300	11,400	10,600	125
130								11,700	11,300	10,400	9,500	130
135								10,800	10,300	9,400	8,600	135
140								9,900	9,400	8,500	7,700	140
145								6,200	8,600	7,700	6,900	145
150									7,800	6,900	6,100	150
155									7,100	6,200	5,400	155
160									5,900	5,500	4,800	160
165										4,900	4,100	165
170										4,400	3,600	170
175										3,800	3,000	175
180											2,500	180
185											2,100	185

Note: Capacities depict multiple boom modes.

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

118,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation
(All Capacities Are Listed In Pounds)

Radius (ft)	Boom Length (ft)										Radius (ft)	
	44.86	59.55-60.53	74.24-76.68	89.44-93.37	104.63-108.56	120.3-125.25	135.97-137.95	152.12-154.64	168.27-169.83	184.96-185.5		201.65
8	450,000**											
10	300,000	291,000	278,600	256,100								10
12	277,100	271,000	262,200	249,300	162,900							12
15	245,100	242,500	238,700	228,900	176,200	125,400						15
20	202,900	204,000	202,400	196,600	176,200	130,400	91,100					20
25	164,500	167,900	167,700	165,600	162,000	125,400	91,100	73,300	56,100			25
30	135,100	139,300	140,100	139,000	136,600	125,400	91,100	73,300	56,100	44,900		30
35	113,500	118,100	119,400	118,900	117,200	114,600	84,800	73,300	56,100	44,900	36,500	35
40		101,900	103,500	103,400	102,100	99,900	77,800	73,300	56,100	44,900	36,500	40
45		89,100	90,800	90,900	89,800	87,900	71,900	70,400	56,100	44,900	36,500	45
50		77,700	80,600	80,800	79,900	78,200	66,800	64,000	56,100	44,900	36,500	50
55			72,100	72,300	71,600	70,000	62,200	58,400	54,200	44,900	36,500	55
60			64,900	65,200	64,500	63,200	58,400	53,600	50,600	44,900	36,500	60
65			56,600	59,100	58,600	57,200	55,000	49,400	47,400	44,200	36,500	65
70				52,900	52,500	51,100	51,900	45,700	44,100	41,200	36,500	70
75				47,800	47,300	46,000	47,300	42,600	41,000	38,700	36,500	75
80				43,300	43,000	42,900	42,900	39,700	38,300	36,400	35,100	80
85					39,100	40,600	39,300	37,000	35,800	34,400	33,000	85
90					35,800	37,200	36,000	34,700	33,600	32,300	30,900	90
95					33,600	34,200	33,000	32,000	31,500	30,300	28,900	95
100					20,700	31,600	30,400	30,000	29,700	28,500	27,200	100
105						29,300	28,000	28,700	27,700	26,800	25,600	105
110						27,200	25,900	26,600	25,600	25,300	24,100	110
115						20,300	24,000	24,700	23,700	23,900	22,700	115
120							22,600	22,900	22,000	22,200	21,400	120
125							21,800	21,400	20,900	20,800	20,300	125
130								20,100	20,000	19,400	19,100	130
135								18,700	18,900	18,000	17,800	135
140								17,500	17,600	16,800	16,600	140
145								13,400	16,500	15,700	15,400	145
150									15,400	15,000	14,400	150
155									14,500	14,100	13,400	155
160									11,400	13,200	12,500	160
165										12,400	11,600	165
170										11,600	10,800	170
175										9,800	10,100	175
180											9,400	180
185											8,700	185

**Special Equipment required. Base Rating pick on 70% extended outriggers

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

Main Boom Offset Fly Attachment Lift Capacity Charts - Optional

118,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation (All Capacities Are Listed In Pounds)												
Radius (ft)	Main Boom + 8' Heavy Lift Fly (ft)											Radius (ft)
	44.86	59.55-60.53	74.24-76.68	89.44-93.37	104.63-108.56	120.3-125.25	135.97-137.95	152.12-154.64	168.27-169.83	184.96-185.5	201.65	
10	86,100	86,000	85,900									10
12	86,100	86,000	85,900	85,800								12
15	86,100	86,000	85,900	85,800	85,700							15
20	86,100	86,000	85,900	85,800	85,700	85,600						20
25	86,100	86,000	85,900	85,800	85,700	85,600	79,800					25
30	86,100	86,000	85,900	85,800	85,700	85,600	75,800	65,900	51,500			30
35	86,100	86,000	85,900	85,800	85,700	85,600	69,200	65,900	51,500	41,900		35
40	86,100	86,000	85,900	85,800	85,700	85,600	63,900	65,600	51,500	41,900	35,100	40
45		86,000	85,900	85,800	85,700	85,600	59,100	61,100	51,500	41,900	35,100	45
50		79,900	81,100	81,000	80,000	78,200	55,000	57,100	51,500	41,900	35,100	50
55			72,500	72,500	71,600	69,900	51,400	53,600	48,100	41,900	35,100	55
60			65,300	65,400	64,500	63,100	48,300	50,500	44,900	41,900	35,100	60
65			59,200	59,400	58,600	57,100	45,500	47,200	42,100	40,600	35,100	65
70				53,400	52,800	51,300	43,100	43,700	39,600	38,000	35,100	70
75				48,100	47,500	46,200	40,900	40,800	37,300	35,700	35,100	75
80				43,600	43,000	41,900	38,900	38,000	35,300	33,500	33,000	80
85					39,300	38,100	37,100	35,400	33,400	31,600	30,900	85
90					35,900	34,700	35,400	33,100	31,800	29,800	29,000	90
95					32,900	31,700	32,800	31,000	30,000	28,200	27,300	95
100						29,900	30,200	29,100	28,200	26,700	25,800	100
105						28,700	27,800	26,800	26,600	25,400	24,300	105
110						24,500	25,600	24,700	25,000	24,000	22,800	110
115							23,700	23,200	23,300	22,600	21,600	115
120							22,000	22,300	21,600	21,500	20,300	120
125								21,100	20,200	20,300	19,200	125
130								19,600	18,700	18,800	18,100	130
135								18,200	17,400	17,500	17,100	135
140								15,500	16,600	16,200	16,000	140
145									15,900	15,100	14,800	145
150										14,000	13,800	150
155										13,000	12,800	155
160										12,300	11,800	160
165										11,700	11,000	165
170											10,100	170
175											9,400	175
180											8,700	180
185											8,000	185
190												190

Hydraulic Offset Fly Attachment Lift Capacity Charts - Optional

118,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation (All Capacities Are Listed In Pounds)									
Radius (ft)	202' Main Boom Length								Radius (ft)
	42' Hydraulic Offset Fly				71' Hydraulic Offset Fly				
	0°	15°	30°	45°	0°	15°	30°	45°	
35	19,200								35
40	19,200								40
45	19,200				12,700				45
50	19,200				12,600				50
55	19,200	19,500			12,400				55
60	19,200	19,500			12,300				60
65	19,200	19,500	19,400		12,100	10,900			65
70	19,200	19,500	19,300		12,000	10,700			70
75	19,200	19,500	19,200	18,500	11,900	10,600			75
80	19,200	19,400	19,100	18,400	11,700	10,500			80
85	19,200	19,300	19,000	18,300	11,600	10,400	9,500		85
90	19,200	19,300	19,000	18,100	11,500	10,300	9,400		90
95	19,200	19,200	18,900	17,900	11,300	10,200	9,400	8,700	95
100	19,200	19,100	18,900	17,700	11,200	10,100	9,300	8,700	100
105	19,200	19,000	18,800	17,500	11,100	9,900	9,200	8,600	105
110	19,200	19,000	18,800	17,200	11,000	9,800	9,100	8,500	110
115	19,200	18,900	18,600	17,100	10,800	9,700	9,000	8,500	115
120	18,300	18,300	18,300	16,900	10,700	9,700	8,900	8,400	120
125	17,400	17,300	17,300	16,700	10,600	9,600	8,900	8,400	125
130	16,400	16,400	16,500	16,500	10,500	9,500	8,800	8,300	130
135	15,600	15,600	15,600	15,700	10,400	9,400	8,700	8,300	135
140	14,800	14,800	14,900	14,900	10,200	9,300	8,700	8,300	140
145	13,900	14,100	14,100	14,200	10,100	9,200	8,600	8,200	145
150	13,100	13,400	13,400	13,500	10,000	9,100	8,500	8,200	150
155	12,400	12,700	12,800	12,800	9,900	9,000	8,500	8,200	155
160	11,700	12,000	12,200	12,200	9,800	9,000	8,400	8,100	160
165	11,000	11,300	11,600	11,600	9,700	8,900	8,400	8,100	165
170	10,300	10,700	10,900	11,000	9,600	8,800	8,300	8,100	170
175	9,600	10,100	10,300	10,400	9,500	8,700	8,300	8,100	175
180	8,900	9,400	9,700	9,800	9,000	8,700	8,300	8,100	180
185	8,200	8,700	9,000	9,100	8,500	8,600	8,200	8,100	185
190	7,600	8,000	8,300	8,400	8,000	8,400	8,200	8,100	190
195	7,000	7,400	7,700	7,700	7,500	8,000	8,200	8,100	195
200	6,500	6,800	7,000		7,000	7,500	7,800	7,900	200
205	6,000	6,300	6,400		6,500	7,100	7,400	7,500	205
210	5,500	5,700	5,900		6,000	6,600	6,900	7,000	210
215	5,000	5,200	5,300		5,500	6,100	6,500	6,600	215
220	4,600	4,800	4,800		5,100	5,600	6,000	6,100	220
225	4,200	4,300			4,600	5,100	5,400	5,500	225
230	3,800				4,200	4,700	4,900		230
235					3,800	4,200	4,500		235
240					3,500	3,800	4,000		240
245					3,100	3,400	3,500		245
250					2,800	3,000	3,100		250
255					2,500	2,700			255

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

118,000 lb Counterweight - Fully Extended Outriggers - 360° Rotation (All Capacities Are Listed In Pounds)									
Radius (ft)	202' Main Boom Length								Radius (ft)
	96' Hydraulic Offset Fly				121' Hydraulic Offset Fly				
	0°	15°	30°	45°	0°	15°	30°	45°	
35									35
40									40
45									45
50	9,900								50
55	9,900				7,400				55
60	9,900				7,400				60
65	9,900				7,400				65
70	9,900				7,400				70
75	9,900	10,000			7,400				75
80	9,900	9,900			7,400				80
85	9,900	9,800			7,400	7,800			85
90	9,900	9,700			7,400	7,800			90
95	9,900	9,700	9,100		7,400	7,800			95
100	9,900	9,600	9,000		7,400	7,800			100
105	9,900	9,500	9,000		7,400	7,800	7,600		105
110	9,900	9,400	8,900	8,300	7,400	7,800	7,400		110
115	9,900	9,400	8,800	8,200	7,400	7,700	7,200		115
120	9,900	9,300	8,600	8,000	7,400	7,500	7,000	6,700	120
125	9,900	9,200	8,500	7,900	7,400	7,400	6,800	6,500	125
130	9,900	9,200	8,300	7,700	7,400	7,200	6,700	6,300	130
135	9,900	9,000	8,200	7,600	7,400	7,000	6,500	6,200	135
140	9,900	8,800	8,000	7,500	7,400	6,800	6,300	6,100	140
145	9,800	8,700	7,900	7,400	7,400	6,700	6,200	5,900	145
150	9,700	8,500	7,700	7,300	7,200	6,500	6,000	5,800	150
155	9,500	8,300	7,600	7,200	7,000	6,300	5,900	5,600	155
160	9,300	8,200	7,500	7,000	6,800	6,200	5,800	5,500	160
165	9,100	8,000	7,300	7,000	6,600	6,000	5,600	5,400	165
170	8,900	7,900	7,200	6,900	6,500	5,900	5,500	5,300	170
175	8,400	7,700	7,100	6,800	6,300	5,700	5,400	5,200	175
180	8,000	7,600	7,000	6,700	6,100	5,600	5,200	5,000	180
185	7,500	7,400	6,900	6,600	6,000	5,400	5,100	4,900	185
190	7,100	7,300	6,800	6,500	5,800	5,300	5,000	4,800	190
195	6,600	7,000	6,700	6,400	5,600	5,200	4,900	4,700	195
200	6,200	6,600	6,600	6,400	5,200	5,100	4,800	4,600	200
205	5,800	6,200	6,500	6,300	4,900	4,900	4,700	4,500	205
210	5,400	5,800	6,100	6,200	4,500	4,800	4,600	4,500	210
215	5,000	5,400	5,700	5,900	4,200	4,600	4,500	4,400	215
220	4,600	5,100	5,400	5,500	3,900	4,200	4,400	4,300	220
225	4,300	4,700	5,000	5,100	3,600	3,900	4,200	4,200	225
230	3,900	4,300	4,600	4,700	3,200	3,600	3,900	4,000	230
235	3,600	4,000	4,200	4,300	2,900	3,400	3,600	3,700	235
240	3,200	3,600	3,900	4,000	2,600	3,100	3,300	3,400	240
245	2,900	3,300	3,500	3,600	2,300	2,700	3,000	3,100	245
250	2,500	3,000	3,200			2,400	2,700	2,800	250
255	2,200	2,600	2,800			2,100	2,400	2,500	255
260		2,200	2,400				2,100	2,200	260

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

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