

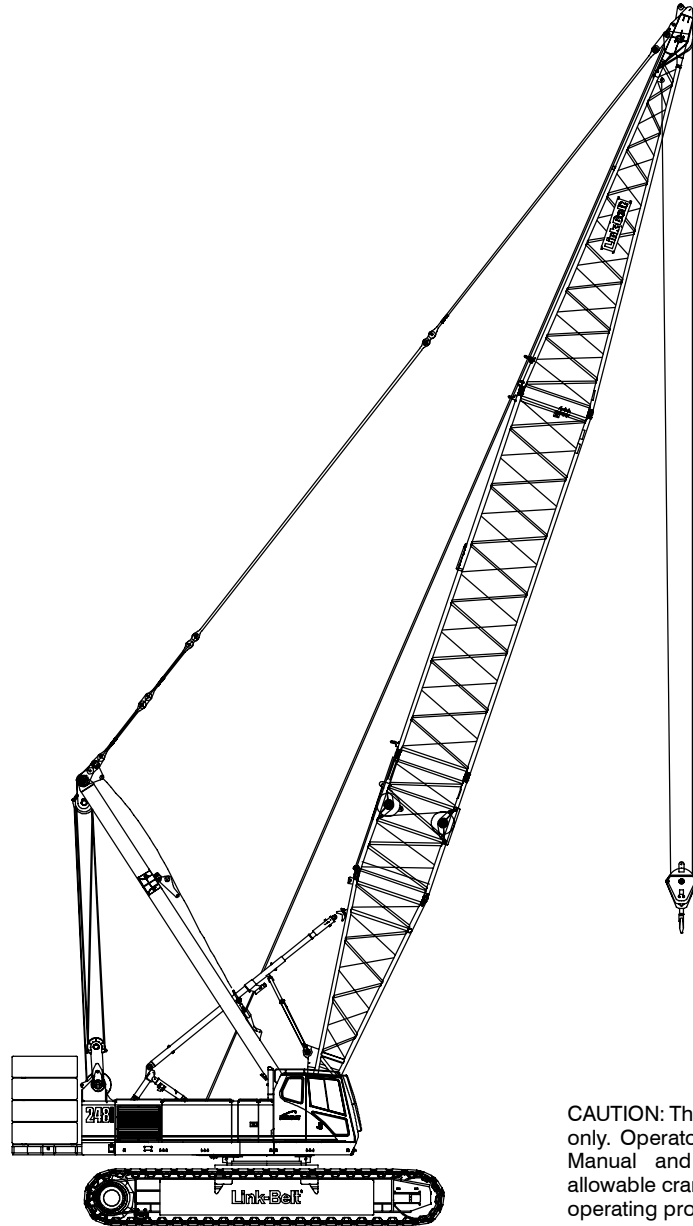
# Technical Data

## Specifications & Capacities

# 248

HYLAB 5

**Crawler Crane**  
200 Ton (181 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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# Upper Structure

## Frame

All welded and precision machined surfaces.

### Turntable Bearing

- Outer race bolted to upper frame; inner race with internal swing gears bolted to lower frame.

## Engine

### Engine

Full pressure lubrication, oil filter, air cleaner, hour meter, throttle, and electric control shutdown.

| Isuzu AH–6HK1X                |                                       |
|-------------------------------|---------------------------------------|
| Number of cylinders           | 6                                     |
| Bore and stroke               | 4.53 in x 4.92 in<br>(115 x 125mm)    |
| Piston displacement           | 475 in <sup>3</sup> (7.86L)           |
| Engine rpm at full load speed | 2,000 rpm                             |
| Hi–idle rpm                   | 2,050 rpm                             |
| Gross engine hp               | 284 hp (212kw)                        |
| Peak torque                   | 830 ft lb (1 125joule) @<br>1,500 rpm |
| Electrical system             | 24 volt                               |
| Fuel tank capacity            | 77 gal (291.5L)                       |
| Batteries                     | 2–12 volt                             |
| Approximate fuel consumption  | gal/hr (L/hr)                         |
| 100% hp                       | 14.4 (54.51)                          |
| 75% hp                        | 11.7 (44.29)                          |
| 50% hp                        | 8.4 (31.80)                           |
| 25% hp                        | 4.2 (15.89)                           |

### Fuel Tank

Equipped with fuel sight level gauges, flame arrester, and self–closing cap with locking eye for padlock.

## Hydraulic System

### Hydraulic Pumps

The pump arrangement is designed to provide hydraulically powered functions allowing positive, precise control with independent or simultaneous operation of all crane functions.

- Two variable displacement pumps operating at 4,451 psi (320kg/cm<sup>2</sup>) and 83 gal/min (314.2L/min) powers load hoist drums, boom hoist drum, optional third drum, and travel.
- Two fixed displacement gear type pumps operating at 3,342 psi (235kg/cm<sup>2</sup>) and 21 gal/min (79.5L/min) powers the swing motor, lower jacks, and counterweight removal.
- One fixed displacement gear type pump operating at 1,991 psi (140kg/cm<sup>2</sup>) and 8.4 gal/min (31.8L/min) powers the fan for the oil cooler.
- One fixed displacement gear type pump operating at 1,138 psi (80kg/cm<sup>2</sup>) and 10.8 gal/min (40.6L/min) powers the remote control valves.

### Remote Oil Cooler

Oil cooler, located behind the operator's cab, has a hydraulically driven, thermostatically controlled fan to control oil temperature.

### Pump Control “Fine Inching” Mode

Special pump setting, selectable from the operator's cab, that allows very slow movements of load hoist drums, boom hoist drum, and travel for precision work.

### Hydraulic Reservoir

42 gal (159.0L), equipped with sight level gauge. Diffusers built in for deaeration.

### Filtration

Ten micron, full flow, line filter in the control circuit. All oil is filtered prior to entering the reservoir.

### Counterbalance Valves

All hoist motors are equipped with counterbalance valves to provide positive load lowering and prevent accidental load drop if the hydraulic pressure is suddenly lost.

## Load Hoist Drums

Each drum contains a pilot controlled, bi–directional, axial piston motor and a planetary gear reduction unit to provide positive control under all load conditions.

- Power up/down and free–fall operation modes
- Automatic brake mode (spring applied, hydraulically released, band type brake)
- Grooved lagging
- Drum pawl controlled manually
- Electronic drum rotation indicators
- Mounted on anti–friction bearings
- 19.00 in (48.26cm) root diameter
- 33.86 in (86.00cm) flange diameter
- 22.52 in (57.20cm) width

The free–fall operation mode is designed to prevent load lowering even if the free–fall switch is accidentally activated.

The automatic brake mode meets all OSHA requirements for personnel handling.

### Drum Clutches

Hydraulic two shoe clutch design that uses a 30 in (762mm) diameter x 6.5 in (165mm) wide shoe that expands internally to provide load control. Swept area is 314.16 in<sup>2</sup> (2 026.83cm<sup>2</sup>).

## Optional Front–Mounted Third Hoist Drum

Mounts in the boom base section and is used in conjunction with a fleeting sheave and 3–sheave idler assembly to run the wire rope over the boom top section.

- Power up/down for luffer applications where a second load line is needed
- 18.70 in (475mm) root diameter
- 33.66 in (855mm) flange diameter
- 32.00 in (813mm) width
- Mounted on anti–friction bearings

## Boom Hoist Drum

Contains a pilot controlled, bi-directional, axial piston motor and a planetary gear reduction unit to provide positive control under all load conditions.

- Spring applied, hydraulically released, disc type brake controlled automatically
- Grooved lagging
- Drum pawl controlled automatically
- Mounted on anti-friction bearings
- 14.99 in (38.07cm) root diameter
- 30.71 in (78.00cm) flange diameter
- 11.55 in (29.34cm) width

## Swing System

Pilot controlled bi-directional axial piston motors and planetary gear reduction units to provide positive control under all load conditions.

- Spring applied, hydraulically released, 360° multi-plate brake
- Free swing mode when lever is in neutral position
- Four position positive house lock
- Two-speed swing
- Audio/Visual swing alarm
- Maximum swing speed is 1.92 rpm

## Counterweight

Consists of a five-piece design that can be easily lowered to the ground using the hydraulic counterweight removal cylinders.

- “A” upper counterweight consists of one, 14,000 lb (6 350kg) base slab and two, 13,000 lb (5 897kg) wing weights.
- “B” upper counterweight consists of two, 13,000 lb (5 897kg) wing weights.
- “C” upper counterweight consists of two, 13,000 lb (5 897kg) wing weights.
- Optional “D” upper counterweight consists of two, 13,000 lb (5 897kg) wing weights.
- Two side frame counterweights – 24,000 lb (10 886kg) each for 44 in (1.12m) track shoes, 21,500 lb (9 752kg) each for 50 in (1.27m) track shoes.

Total combined counterweight, “ABCD” plus side frames counterweights, is 166,000 lb (75 296kg) for 44 in (1.12m) track shoes, 161,000 lb (73 030kg) for 50 in (1.27m) track shoes.

## Operator’s Cab

Fully enclosed modular steel compartment is independently mounted and padded to protect against vibration and noise.

- All tinted/tempered safety glass
- Folding hinge entry door and sliding front glass window
- 19,000 BTU hot water heater
- 18,600 BTU air conditioner
- Door and window locks
- Circulating fan
- Sun visor
- Cloth seat
- Defroster
- Windshield wipers and washer
- Dry chemical fire extinguisher
- Engine instrumentation panel (voltmeter, engine oil pressure, engine water temperature, fuel level, hydraulic oil temperature, hour meter, and service monitor system)
- Electronic drum rotation indicators for front and rear hoist drums
- Six way adjustable seat
- Hand and foot throttle
- Fully adjustable single axis controls
- Swing lever with swing brake and horn located on handle
- Bubble type level
- Ergonomic gauge layout
- Controls shut off lever
- Right hand control stand is adjustable by electric motor for operator comfort.

## Rated Capacity Limiter System

The rated capacity limiter system is a boom hoist load cell system. This system provides the operator with useful geometrical data, to include:

- Main Boom Length
- Main Boom Angle
- Jib Length
- Jib Angle
- Operating Mode

- Load Radius
- Boom Tip Height
- Audible Alarm
- Pre-Warning Light
- Overload Light
- Load On Hook
- Function kick-outs including over load
- Operator settable stops (ramped stops)
- Anti-Two Block Indicator
- Boom hoist dead end load cell (no lineriders)

## Boom Hoist System

Designed to lift off maximum boom or maximum boom plus jib and maximum luffing attachment unassisted. Operates up to a maximum boom angle of 80°. Boom hoist limit system limits maximum boom angle operation.

- Pin-on bail frame
- 16-part reeving with 7/8 in (22mm) wire rope
- Bridle assembly
- 30 ft (9.14m) live mast
- Tubular boom backstops (telescopic type)
- Sheaves contain sealed anti-friction bearings
- Boom speed from 10° – 70° is 90 seconds with no load. Speed was determined using 100 ft (30.48m) of tube boom.

## Machinery Cab

Hinged doors (one on right side, two on left side) for machinery access. Equipped with rooftop access ladder and skid resistant finish on roof.

## Catwalks

Standard on right and left sides. Catwalks are removable for reduced travel width.

# Lower Structure

## Carbody

### Lower Frame

All welded high strength steel [100,000 psi (689.48MPa) yield] box construction frame with precision machined surfaces for turntable bearing and rotating joint.

- 20 ft 4 in (6.20m) overall width
- 11 ft 9.75 in (3.60m) overall length

## Side Frames

### Side Frames

All welded, precision machined and removable. Carbody cross axles positioned by dowels and held in place with adjustable wedge packs.

- 18 ft 10 in (5.74m) gauge
- 28 ft 6 in (8.69m) overall length
- 44 in (1.12m) wide track shoes
- Sealed (oil filled) drive planetaries
- Compact travel drives
- Slide rails on top of each side frame
- Optional – 50 in (1.27m) wide track shoes

### Track Rollers

- Eleven sealed (oil filled) track rollers per side frame
- Heat treated, mounted on anti-friction bearings

### Tracks

Heat treated, self-cleaning, multiple hinged track shoes joined by one-piece full floating pins; 50 shoes per side frame

### Take Up Idlers

Cast steel, heat treated, self-cleaning, mounted on sealed tapered roller bearings.

- **Track Tension Adjustment** – Idler wheel adjusted by means of hydraulic cylinder and hand pump. Idler wheel shaft held in position with shims after adjustment is made.

## Travel and Steering

### Travel and Steering

Each side frame contains a pilot controlled, bi-directional, axial piston motor and a planetary gear reduction unit to provide positive control under all load conditions.

- 2-speed travel.
- Individual control provides smooth, precise maneuverability including full counter-rotation.
- Spring applied, hydraulically released disc type brake controlled automatically
- Maximum travel speed is 0.85 mph (1.37km/h).
- Designed to 30% gradeability

## Jack System

System contains four hydraulic cylinders individually pinned on the carbody.

- Standard; four ground controlled, power hydraulic jacks, pinned to the lower carbody frame, used to raise the crane to facilitate removal and installation of the crawler side frames.
- Individual controls are mounted on carbody.
- Minimum height of carbody when resting on pontoons is 21.50 in (54.61cm).
- Maximum height of carbody when resting on pontoons is 37.50 in (0.95m).

# Attachment and Options

## Conventional Tubular Boom 50–280 ft (15.24–83.34m)

### Basic Boom

50 ft (15.24m) two-piece design that utilizes a 20 ft (6.10m) base section and a 30 ft (9.14m) open throat top section with in-line connecting pins on 80 in (2.03m) wide and 68 in (1.73m) deep centers.

- Boom foot on 55 in (1.40m) centers
- 4 in (10.16cm) diameter chords
- Lugs on base section to attach carrying links
- Skywalk platform
- Deflector roller on top section
- Permanent skid pads mounted on top section to protect head machinery
- Appropriate length bar pendants stored on top section.

- Six, 21 in, (0.53m) root diameter steel sheaves mounted on sealed anti-friction bearings
- Tip extension and jib connecting lugs on top section
- Mechanical boom angle indicator

### Tube Boom Extensions

The following table provides the lengths available and the suggested quantity to obtain maximum boom in 10 ft (3.05m) increments. Midpoint pendant connections are required at 110 ft (33.5m) for boom lengths of 250–280 ft (76.20–85.34m).

- Polyamide wear blocks on top of each extension
- Appropriate length bar pendants stored on extension

| Tube Boom Extensions |       | Quantity For Max Boom |
|----------------------|-------|-----------------------|
| ft                   | m     |                       |
| 10                   | 3.05  | 1*                    |
| 20                   | 6.10  | 1                     |
| 30                   | 9.14  | 2                     |
| 40                   | 12.19 | 1                     |
| 50                   | 15.24 | 2                     |

\* Assumes one 10 ft (3.05m) extension is the self-assembly section.

- Maximum tip height of 285 ft (86.87m)
- Boom connecting pins storage on each extension

## Tubular Jib 30–100 ft (9.14–30.48m)

### Basic Tube Jib

30 ft (9.14m) two-piece design that utilizes a 15 ft (4.57m) base section and a 15 ft (4.57m) top section with in-line connecting pins on 32 in (0.81m) wide and 24 in (0.61m) deep centers.

- 2.25 in (57.15mm) diameter tubular chords
- One 21 in (0.53m) root diameter steel sheave mounted on sealed anti-friction bearings
- 10 ft (3.05m) and 20 ft (6.10) jib extensions are available to provide jib lengths of 30–100 ft (9.14–30.48m) in 10 ft (3.05m) increments
- Jib offset angles at 5°, 15°, and 25°
- The maximum tip height of tube boom + jib [240 ft + 100 ft (73.15 + 30.5m)] is 345 ft (105m).
- Basic tube jib can be used as fixed jib on luffing jib

## Auxiliary Tip Extension 5 ft (1.5m)

Designed to use in place of jib to provide clearance between working hoist lines. The extension is equipped with two 21 in (0.53m) root diameter nylon sheaves mounted on sealed anti-friction bearings. Maximum capacity is 20 Tons (18.14mt).

## Luffing Boom 80–190 ft (24.38–57.91m)

- Common base and extensions as open throat boom (“FE” boom only).
- 10 ft (3.05m) luffing extension required for bail anchor
- Working angles of 90°, 85°, 80°, 75°, 70°, and 65°
- Working lengths of 80 ft (24.38m) to 190 ft (57.91m)

## Luffing Boom Extensions

The following table provides the lengths available and the suggested quantity to obtain the maximum luffing boom in 10 ft (3.05m) increments. Midpoint pendants are not required.

| Luffing Boom Extensions |       | Quantity For Max Luffing Boom |
|-------------------------|-------|-------------------------------|
| ft                      | m     |                               |
| 10*                     | 3.05  | 1                             |
| 20                      | 6.10  | 1                             |
| 30                      | 9.14  | 1                             |
| 40                      | 12.19 | 1                             |
| 50                      | 15.24 | 2                             |

\* 10 ft (3.05m) extension is the self-assembly section. Required for luffer operation.

Note: “FE” type boom must be used.

- Rear hoist drum becomes luffing jib hoist
- Optional third drum provides second working hoist line, if required.
- Designed for self-assembly
- Luffing jib hoist bridle and bail can remain reeved for crane transport
- Job site mobility with attachment
- Rolled out or rolled under erection methods
- Compact transport module

## Luffing Jib 80–160 ft (24.38–48.77m)

### Basic Luffing Jib

80 ft (24.38m) five-piece design utilizes a 4 ft (1.12m) luffing boom top section, 10 ft (3.05m) luffing jib base section, 20 ft (6.10m) jib extension, 30 ft (6.10m) extension, and 20 ft (6.10m) top section with in-line connecting pins. Jib extensions are 60 in (1.52m) wide and 50 in (1.27m) deep at the centers.

- 42.5 Tons (38.56mt) maximum capacity
- Working lengths of 80 ft (24.38m) to 160 ft (48.77m)
- Top section includes mounting lugs for all attachment options

- Five 21 in (0.53m) diameter luffing jib steel head sheaves
- Pin-on nose wheel
- Ten-part luffing jib hoist
- 1 in (25.40mm) diameter type “N” pendants

## Luffing Jib Extensions

The following table provides the lengths available and the suggested quantity to obtain the maximum luffing jib in 10 ft (3.05m) increments. Midpoint pendants are not required.

| Luffing Jib Extensions |       | Quantity For Max Luffing Jib |
|------------------------|-------|------------------------------|
| ft                     | m     |                              |
| 10                     | 3.05  | 1                            |
| 20                     | 6.10  | 1                            |
| 30                     | 9.14  | 1                            |
| 40                     | 12.19 | 1                            |

### Notes:

- These extensions, combined with extensions included in basic luffing jib, make up all jib lengths to 160 ft (48.77m).
- 50 ft (15.24m) of extensions are included with basic jib.
  - Deflector roller on top of each extension
  - Appropriate length pendants
  - Maximum luffing jib tip height of 350.8 ft (107m)

## Fixed Jib 30 ft (9.14m)

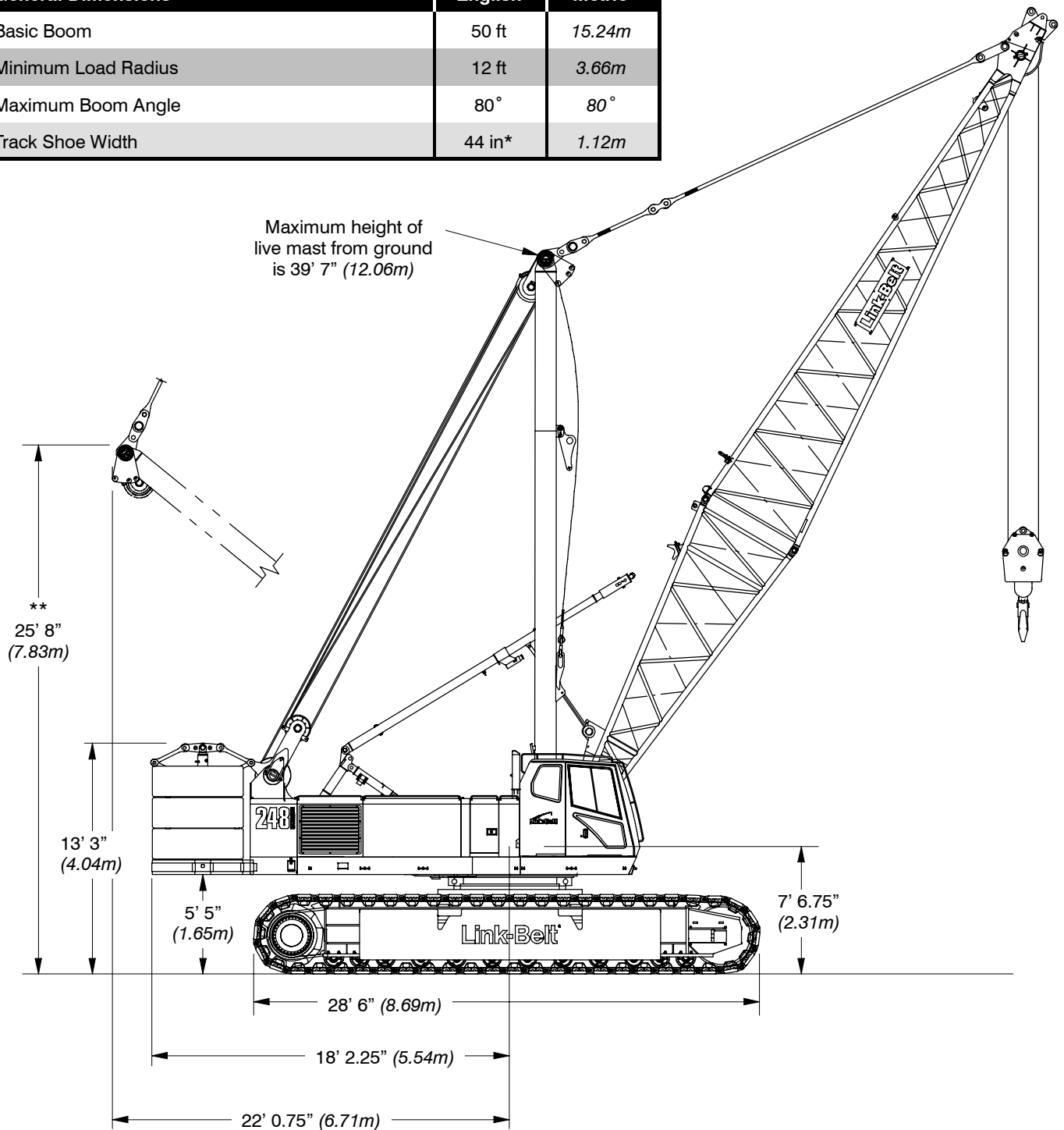
30 ft (9.14m) two-piece design common with basic tube jib that utilizes a 15 ft (4.57m) base section and a 15 ft (4.57m) top section with in-line connecting pins on 32 in (0.81m) wide and 24 in (0.61m) deep centers.

- 2.25 in (57.15mm) diameter tubular chords
- One 21 in (0.53m) root diameter steel sheave mounted on sealed anti-friction bearings
- Fixed jib offset angle is 5°
- Maximum luffing jib + fixed jib tip height of 379.4 ft (115.6m)



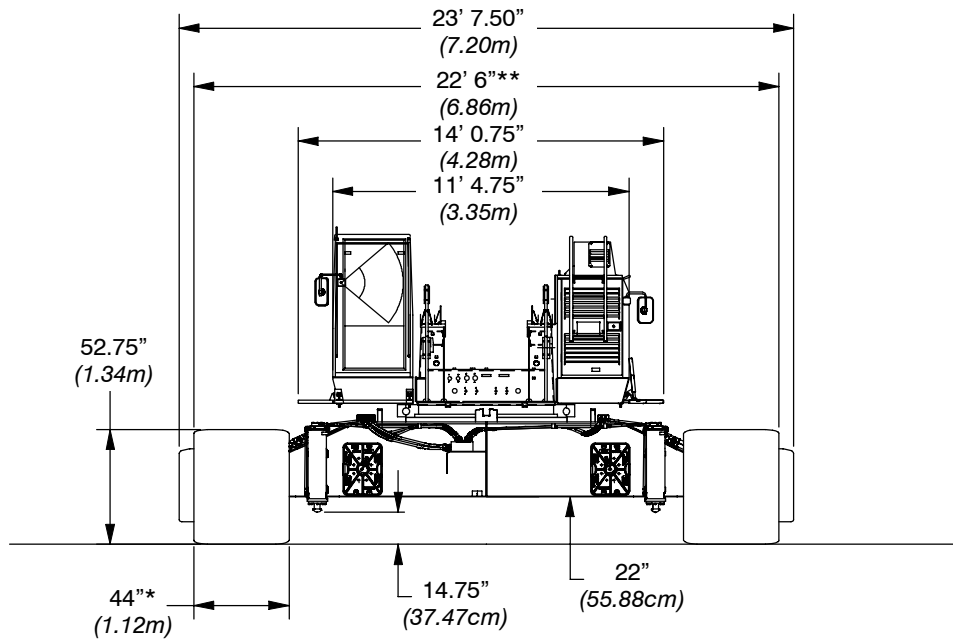
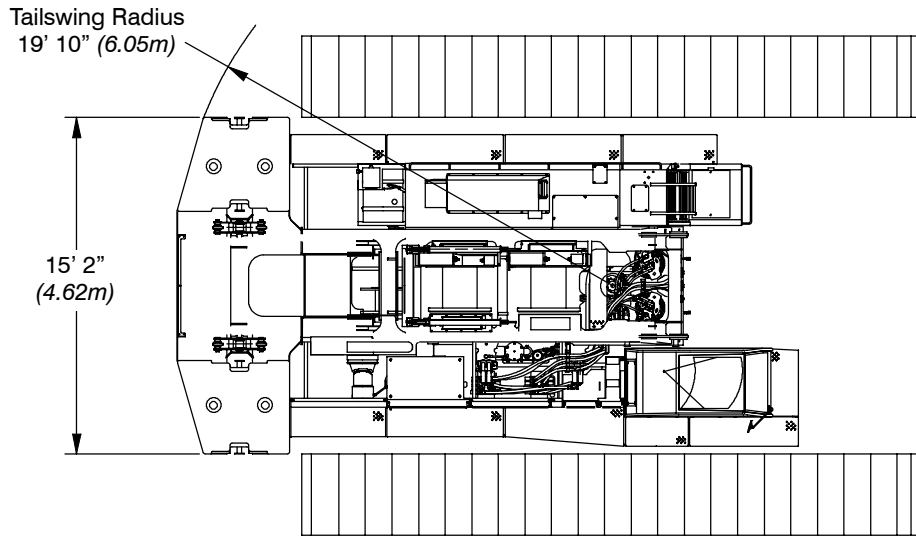
# Dimensions

| General Dimensions  | English | Metric |
|---------------------|---------|--------|
| Basic Boom          | 50 ft   | 15.24m |
| Minimum Load Radius | 12 ft   | 3.66m  |
| Maximum Boom Angle  | 80°     | 80°    |
| Track Shoe Width    | 44 in*  | 1.12m  |



Note: \* Optional – 50 in (1.27m) track shoe width

\*\* @ Maximum boom angle (80°) with maximum boom [280 ft (85.34m)], maximum rotation radius occurs.



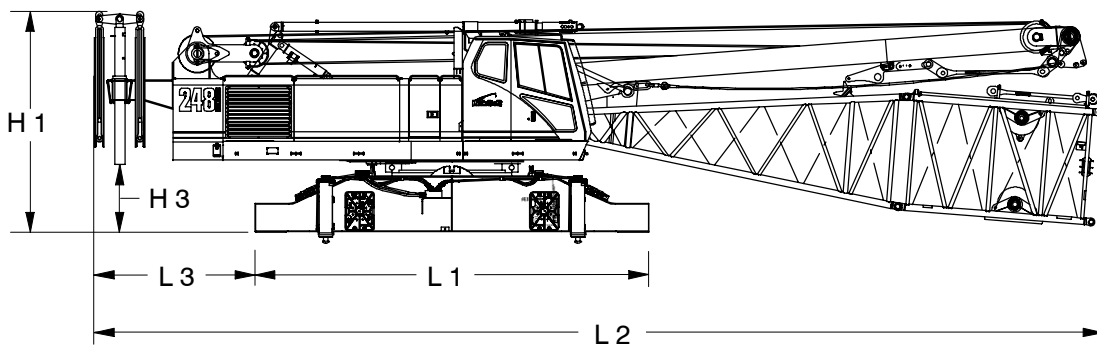
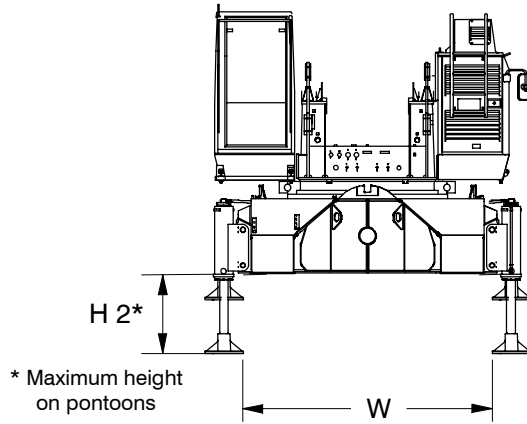
\* Optional – 50" (1.27m)

\*\* With 50" (1.27m) track shoes, dimension is 23' 0" (7.01m).

# Base Crane

## Base Crane ①

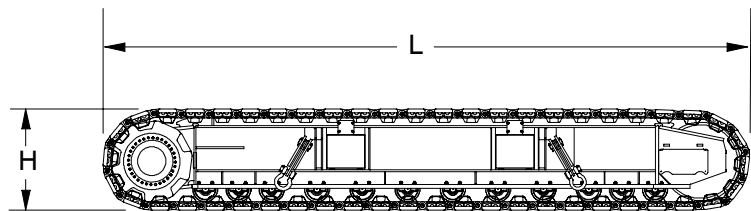
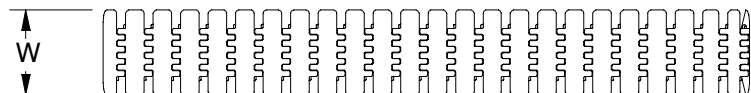
|          |              |            |
|----------|--------------|------------|
| Length 1 | 20 ft 4 in   | (6.20m)    |
| Length 2 | 52 ft        | (15.85m)   |
| Length 3 | 8 ft 4 in    | (2.54m)    |
| Width    | 9 ft 1.50 in | (2.78m)    |
| Height 1 | 11 ft 3 in   | (3.43m)    |
| Height 2 | 37.50 in     | (0.95m)    |
| Height 3 | 44.0 in      | (1.12m)    |
| Weight   | 83,332 lb    | (37 799kg) |



# Side Frames

## With 44 in (1.12m) Track Shoes ②

|        |            |            |
|--------|------------|------------|
| Length | 28 ft 6 in | (8.69m)    |
| Width  | 44 in      | (1.12m)    |
| Height | 52.75 in   | (1.34m)    |
| Weight | 36,410 lb  | (16 515kg) |



## With 50 in (1.27m) Track Shoes ②

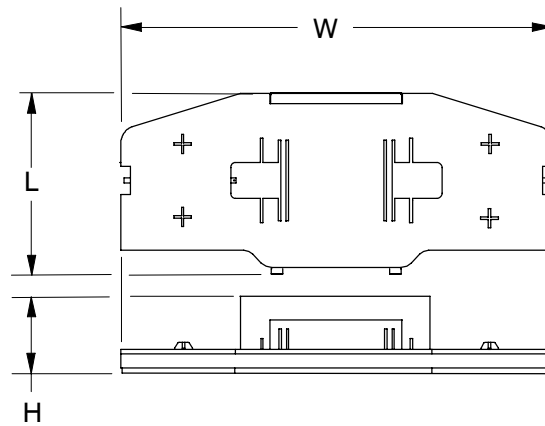
|        |            |            |
|--------|------------|------------|
| Length | 28 ft 6 in | (8.69m)    |
| Width  | 50 in      | (1.27m)    |
| Height | 52.75 in   | (1.34m)    |
| Weight | 37,610 lb  | (17 060kg) |

Number inside black circle “①” = # of components

# Upper Counterweights

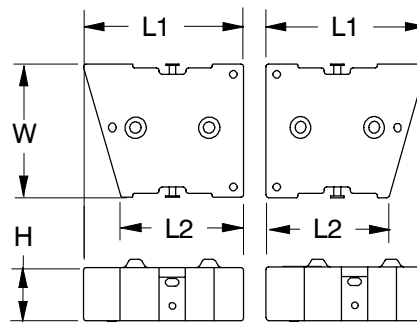
## “A” Slab Counterweight ①

|        |              |           |
|--------|--------------|-----------|
| Length | 5 ft 9.50 in | (1.77m)   |
| Width  | 15 ft 2 in   | (4.62m)   |
| Height | 32.25 in     | (0.82m)   |
| Weight | 14,000 lb    | (6 350kg) |



## “A”, “B”, “C”, and “D” (2 Each) Wing Counterweights ⑧

|          |           |           |
|----------|-----------|-----------|
| Length 1 | 61 in     | (1.55m)   |
| Length 2 | 46.50 in  | (1.18m)   |
| Width    | 50.75 in  | (1.29m)   |
| Height   | 20.25 in  | (51.44cm) |
| Weight   | 13,000 lb | (5 897kg) |

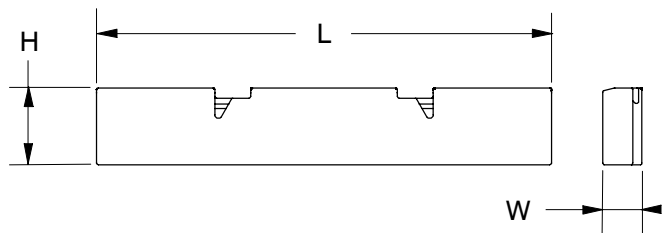


# Lower Counterweights

## Side Frame Counterweights With 44 in (1.12m) Track

### Shoes ②

|        |            |            |
|--------|------------|------------|
| Length | 16 ft 8 in | (5.08m)    |
| Width  | 17.50 in   | (44.45cm)  |
| Height | 33.75 in   | (0.86m)    |
| Weight | 24,000 lb  | (10 886kg) |



## Side Frame Counterweights With 50 in (1.27m) Track

### Shoes ②

|        |           |           |
|--------|-----------|-----------|
| Length | 16 ft     | (4.88m)   |
| Width  | 17.40 in  | (44.20cm) |
| Height | 31.10 in  | (0.79m)   |
| Weight | 21,500 lb | (9 752kg) |

Number inside black circle “①” = # of components

# Boom/Luffing Boom

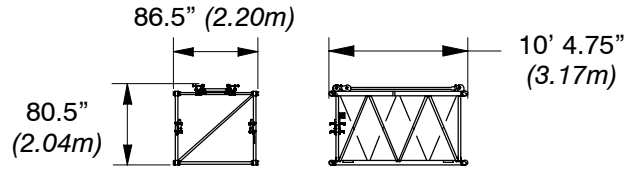
**80 in (2.03m) x 86 in (2.19m)**

## **Boom/Luffing Boom Extensions\***

*Weights Include Pendants and Hardware*

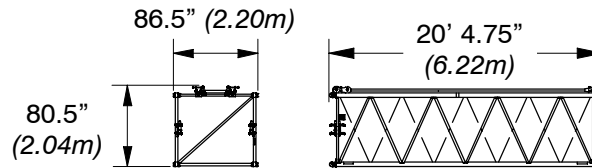
### **10 ft (3.05m) Extension**

Weight: 1,151 lb (522kg)



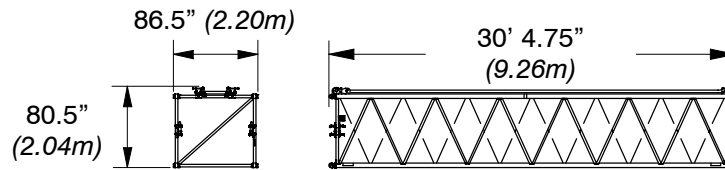
### **20 ft (6.10m) Extension**

Weight: 1,862 lb (845kg)



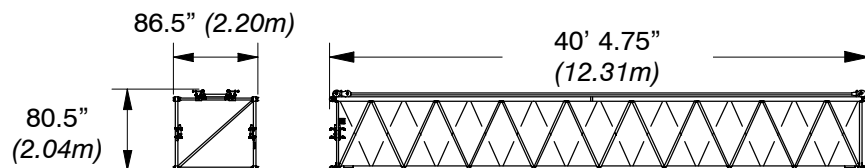
### **30 ft (9.14m) Extension**

Weight: 2,590 lb (1 175kg)



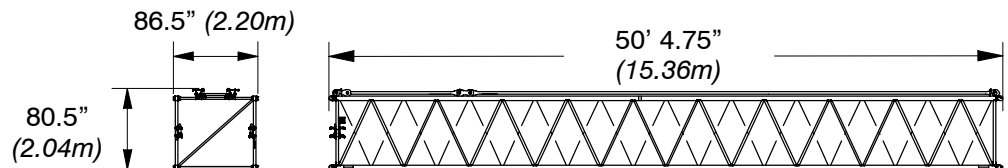
### **40 ft (12.19m) Extension**

Weight: 3,292 lb (1 493kg)



### **50 ft (15.24m) Extension**

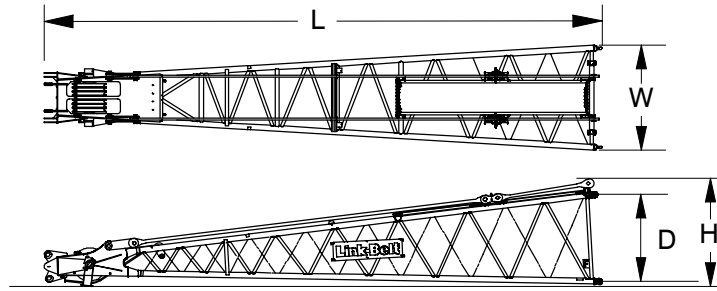
Weight: 4,149 lb (1 882kg)



\* Standard, conventional boom uses bar pendants as shown. Bar pendants must be removed and replaced with wire rope pendants for luffing boom make-up.

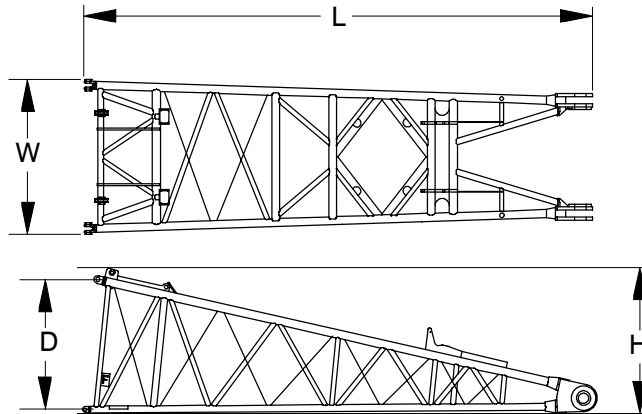
### 30 ft (9.14m) Boom Top Section ①

|        |             |           |
|--------|-------------|-----------|
| Length | 32 ft 10 in | (10.01m)  |
| Width  | 86.50 in    | (2.20m)   |
| Deep   | 68 in       | (1.73m)   |
| Height | 80.50 in    | (2.04m)   |
| Weight | 4,488 lb    | (2 036kg) |



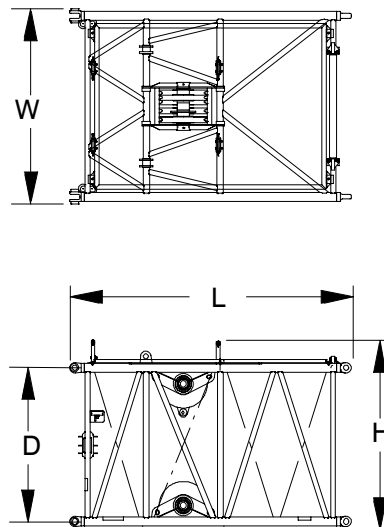
### 20 ft (6.10m) Boom Base Section ①

|                                   |            |           |
|-----------------------------------|------------|-----------|
| Length                            | 20 ft 8 in | (6.30m)   |
| Width                             | 86.38 in   | (2.19m)   |
| Deep                              | 68 in      | (1.73m)   |
| Height                            | 76.40 in   | (1.94m)   |
| Weight Without 3rd Drum           | 4,479 lb   | (2 032kg) |
| Weight With 3rd Drum & Wire Rope* | 9,035 lb   | (4 098kg) |



### 10 ft (3.05m) Self Assembly Section\* ①

|        |            |           |
|--------|------------|-----------|
| Length | 10 ft 4 in | (3.15m)   |
| Width  | 86.50 in   | (2.20m)   |
| Deep   | 68.00 in   | (1.73m)   |
| Height | 80.50 in   | (2.04m)   |
| Weight | 2,422 lb   | (1 099kg) |

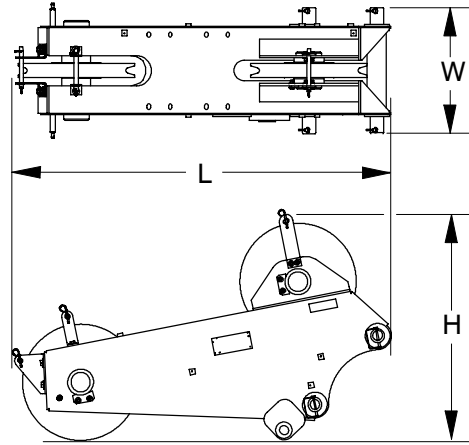


Number inside black circle “①” = # of components

\* – Optional equipment

### 5 ft (1.52m) Auxiliary Tip Extension\* ①

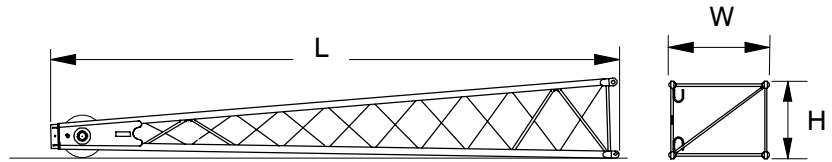
|        |          |         |
|--------|----------|---------|
| Length | 70.35 in | (1.79m) |
| Width  | 24.50 in | (0.62m) |
| Height | 42.91 in | (1.09m) |
| Weight | 671 lb   | (304kg) |



### Jib 15 ft (4.57m) Jib Top Section\* ①

|         |               |         |
|---------|---------------|---------|
| Length  | 16 ft 1.50 in | (4.91m) |
| Width   | 34.50 in      | (0.88m) |
| Height  | 26.75 in      | (0.68m) |
| Weight† | 607 lb        | (275kg) |

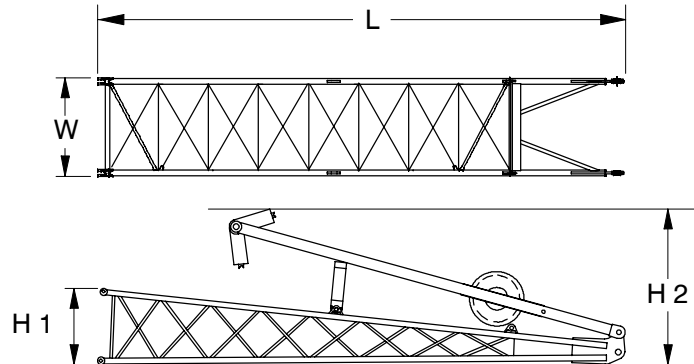
† Weight includes sheaves and hardware.



### 15 ft (4.57m) Jib Base Section\* ①

|          |               |         |
|----------|---------------|---------|
| Length   | 15 ft 3.50 in | (4.66m) |
| Width    | 34.50 in      | (0.88m) |
| Height 1 | 26.75 in      | (0.68m) |
| Height 2 | 54.50 in      | (1.38m) |
| Weight†  | 1,602 lb      | (727kg) |

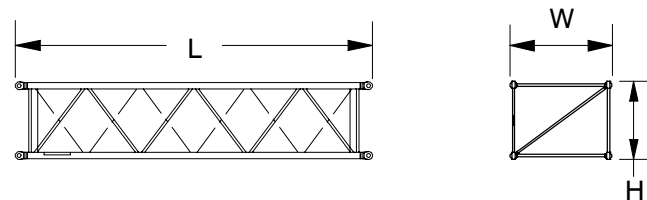
† Weight includes pins, basic frontstay & backstay pendants, and hardware.



### 10 ft (3.05m) Jib Extension\* ①

|         |               |         |
|---------|---------------|---------|
| Length  | 10 ft 2.75 in | (3.12m) |
| Width   | 34.50 in      | (0.88m) |
| Height  | 26.75 in      | (0.68m) |
| Weight† | 254 lb        | (115kg) |

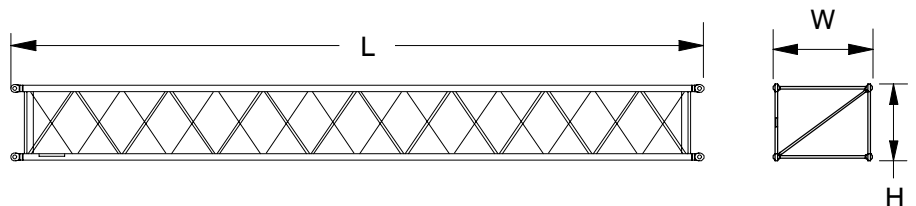
† Weights includes pins, pendants, and hardware.



### 20 ft (6.10m) Jib Extension\* ①

|         |               |         |
|---------|---------------|---------|
| Length  | 20 ft 2.75 in | (6.17m) |
| Width   | 34.50 in      | (0.88m) |
| Height  | 26.75 in      | (0.68m) |
| Weight† | 439 lb        | (199kg) |

† Weights includes pins, pendants, and hardware.



Number inside black circle “①” = # of components

\* – Optional equipment

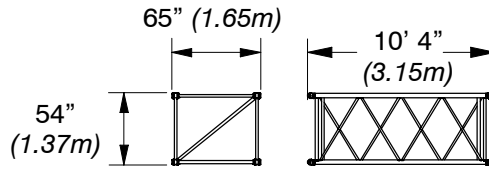
# Luffing Jib

## Luffing Jib Extensions\*

Weights Include Pendants and Hardware

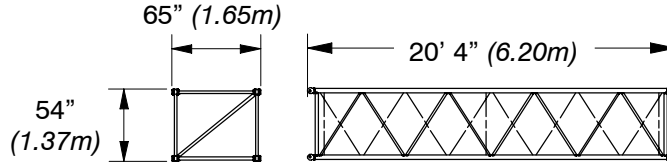
### 10 ft (3.05m) Extension

Weight: 550 lb (249kg)



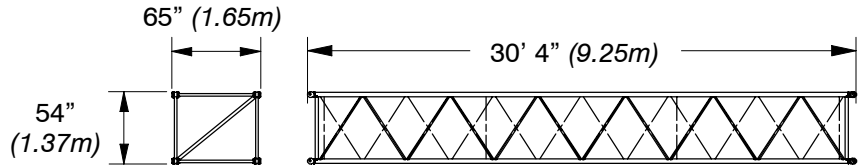
### 20 ft (6.10m) Extension

Weight: 1,100 lb (499kg)



### 30 ft (9.14m) Extension

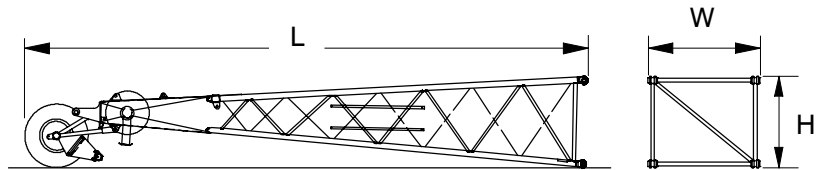
Weight: 1,650 lb (748kg)



## 20 ft (6.14m) Luffing Jib Top Section\* ①

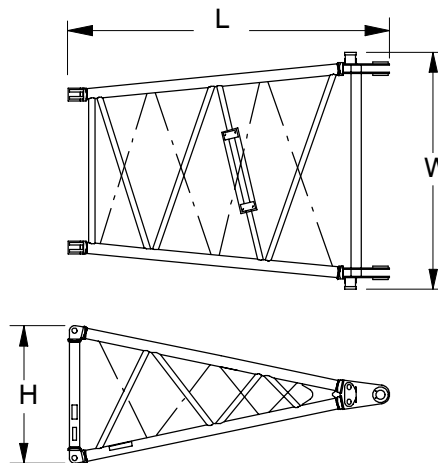
|         |               |           |
|---------|---------------|-----------|
| Length  | 24 ft 8.25 in | (7.52m)   |
| Width   | 65.00 in      | (1.65m)   |
| Height  | 54.00 in      | (1.37m)   |
| Weight† | 4,092 lb      | (1 856kg) |

† Weight includes pendants and hardware.



## 10 ft (3.05m) Luffing Jib Base Section\* ①

|         |            |         |
|---------|------------|---------|
| Length  | 10 ft 7 in | (3.20m) |
| Width   | 94.00 in   | (2.39m) |
| Height  | 54.00 in   | (1.37m) |
| Weight† | 920 lb     | (417kg) |



Number inside black circle “①” = # of components

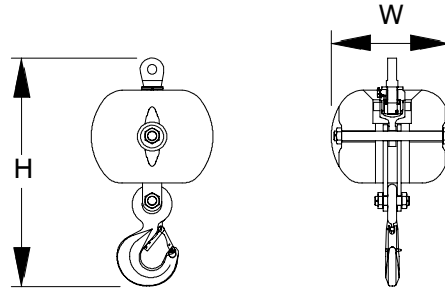
\* – Optional equipment



# Hook Balls

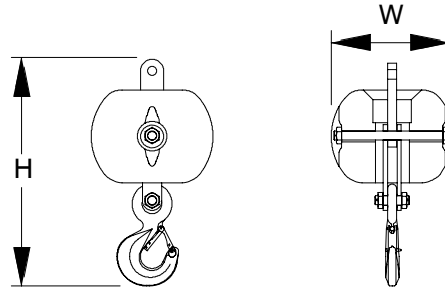
## 15 Ton (13.6mt) Swivel Hook Ball\* ①

|        |          |         |
|--------|----------|---------|
| Width  | 21.75 in | (0.55m) |
| Height | 40.50 in | (1.03m) |
| Weight | 1,215 lb | (551kg) |



## 15 Ton (13.6mt) Non-Swivel Hook Ball\* ①

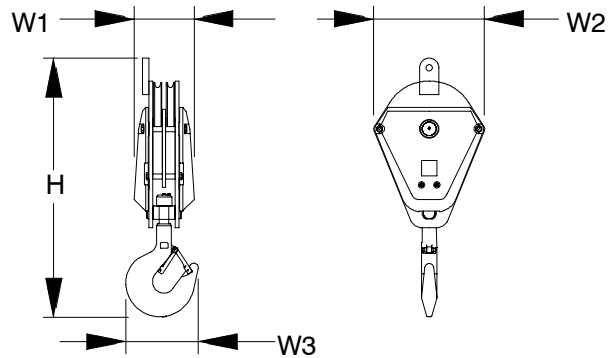
|        |          |         |
|--------|----------|---------|
| Width  | 21.75 in | (0.55m) |
| Height | 39.75 in | (1.01m) |
| Weight | 1,200 lb | (544kg) |



# Hook Blocks

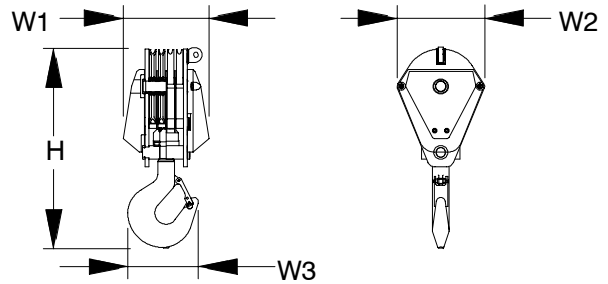
## 60 Ton (54.4mt) 2-Sheave Hook Block\* ①

|        |          |         |
|--------|----------|---------|
| Width1 | 15.50 in | (0.39m) |
| Width2 | 28.75 in | (0.73m) |
| Width3 | 18.75 in | (0.48m) |
| Height | 67.00 in | (1.70m) |
| Weight | 1,650 lb | (747kg) |



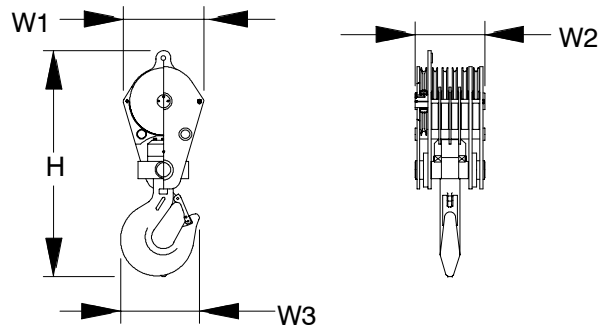
## 110 Ton (100.0mt) 4-Sheave Hook Block\* ①

|        |          |           |
|--------|----------|-----------|
| Width1 | 28.00 in | (0.71m)   |
| Width2 | 28.75 in | (0.73m)   |
| Width3 | 23.00 in | (0.58m)   |
| Height | 65.50 in | (1.66m)   |
| Weight | 3,000 lb | (1 361kg) |



## 175 Ton (158.8mt) 6-Sheave Hook Block\* ①

|        |          |           |
|--------|----------|-----------|
| Width1 | 28.75 in | (0.73m)   |
| Width2 | 23.50 in | (0.60m)   |
| Width3 | 28.25 in | (0.72m)   |
| Height | 80.75 in | (2.05m)   |
| Weight | 3,000 lb | (1 361kg) |



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

# Working Weights

|  |                    |                   |                                    |                                     |
|--|--------------------|-------------------|------------------------------------|-------------------------------------|
| Based on basic crane including <b>Mitsubishi 6D24 – TLA2L</b> diesel engine, turntable bearing, independent hydraulic powered drums, boom hoist limiting device, independent hydraulic swing and travel, counterweight, swing brake, drum rotation indicators, and crawler lower with 44 in (1.12m) wide track shoes, sealed track rollers, catwalks, hydraulic boom foot pin removal, plus the following: | <b>Ctwt “A”</b>    | <b>Ctwt “AB”</b>  | <b>Ctwt “ABC” + “A” Lower Ctwt</b> | <b>Ctwt “ABCD” + “A” Lower Ctwt</b> |
|  | lb (kg)            | lb (kg)           | lb (kg)                            | lb (kg)                             |
| Lifting crane – includes 50 ft (15.24m) basic tubular boom, 30 ft (9.14m) live mast, 1,050 ft (320.04m) of 7/8 in (22mm) diameter wire rope, 850 ft (259.08m) of 7/8 in (22mm) diameter boom hoist rope, 125 Ton (113.4mt) hook block, and basic pendants.   | 198,217 (89 910)   | 224,217 (101 703) | 298,217 (135 269)                  | 324,217 (147 062)                   |
| Ground Bearing Pressure  | psi                | 7.3               | 8.3                                | 11.0                                |
|  | kg/cm <sup>2</sup> | 0.51              | 0.58                               | 0.77                                |

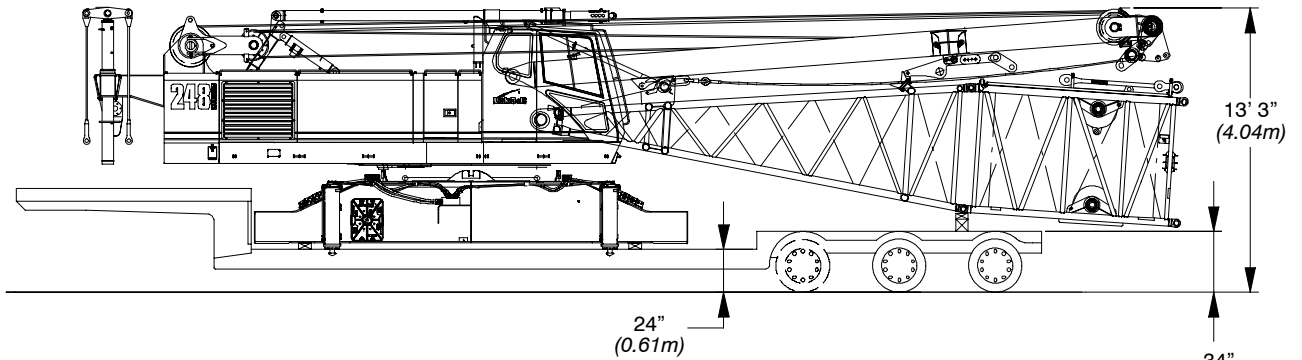
# Transport Weights

Base Crane: Rigid boom backstops, 77 gal (291L) of fuel, catwalks (both sides), 30 ft (9.14m) live mast, bail, boom hoist rope, boom base section, 10 ft (3.05m) self-assembly section, 1,050 ft (320.04m) of type “LB” front hoist rope, and 850 ft (259.08m) of type “RB” rear hoist rope.

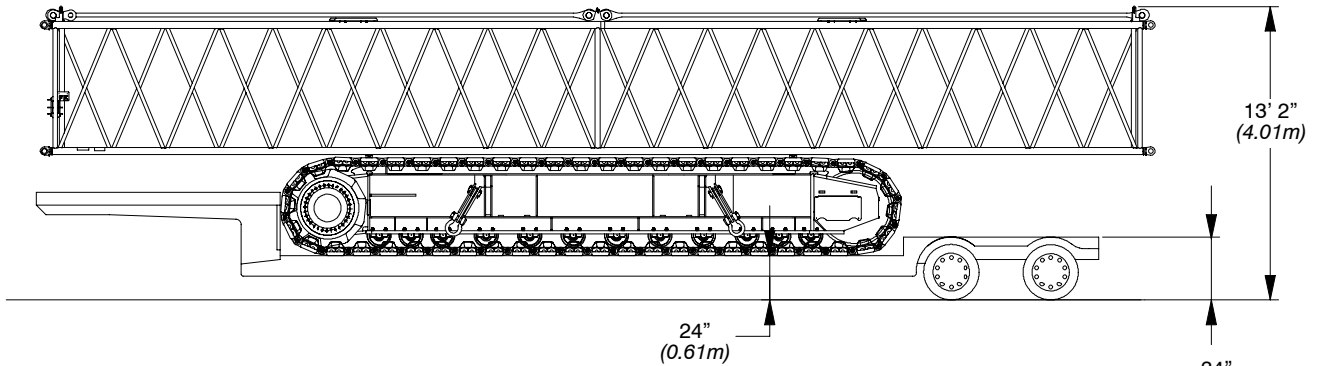
| Item Description                                    | Gross Weight |        | Transport Loads |        |        |        |        |        |        |    |
|---|--------------|--------|-----------------|--------|--------|--------|--------|--------|--------|----|
|   | lb           | (kg)   | #1              | #2     | #3     | #4     | #5     | #6     | #7     | #8 |
| Base Crane  | 83,332       | 37 799 | 1               |        |        |        |        |        |        |    |
| Add Side Frame with Wedge Packs – Two Required      | 36,410       | 16 515 |                 | 1      | 1      |        |        |        |        |    |
| Add “A” Base Counterweight                          | 14,000       | 6 350  |                 |        |        | 1      |        |        |        |    |
| Add “A” Wing Counterweight – Two Required           | 13,000       | 5 897  |                 |        |        |        |        | 1      |        | 1  |
| Add “B” Wing Counterweight – Two Required           | 13,000       | 5 897  |                 |        |        |        |        | 1      |        | 1  |
| Add “C” Wing Counterweight – Two Required           | 13,000       | 5 897  |                 |        |        |        |        | 1      |        | 1  |
| Add “D” Wing Counterweight – Two Required           | 13,000       | 5 897  |                 |        |        |        |        |        | 2      |    |
| Add “A” Lower Counterweight – Two Required          | 24,000       | 10 886 |                 |        |        | 1      | 1      |        |        |    |
| Add Hydraulic Third Drum without Rope               | 2,000        | 907    |                 |        |        |        |        |        |        |    |
| Add 30 ft (9.14m) Boom Top Section                  | 4,488        | 2 036  |                 |        |        |        |        |        |        | 1  |
| Add 10 ft (3.05m) Extension w/Pins and Pendants     | 1,151        | 522    |                 |        |        |        |        |        |        |    |
| Add 20 ft (6.10m) Extension w/Pins and Pendants     | 1,862        | 845    |                 |        |        |        | 1      |        |        |    |
| Add 30 ft (9.14m) Extension w/Pins and Pendants     | 2,590        | 1 175  |                 |        |        | 1      | 1      |        |        |    |
| Add 40 ft (12.19m) Extension w/Pins and Pendants    | 3,292        | 1 493  |                 |        |        |        |        | 1      |        |    |
| Add 50 ft (15.24m) Extension w/Pins and Pendants    | 4,149        | 1 882  |                 | 1      | 1      |        |        |        |        |    |
| Add 30 ft (9.14m) Basic Jib                         | 2,209        | 1 002  |                 |        |        |        |        |        | 1      |    |
| Add 10 ft (3.05m) Jib Extension w/Pins and Pendants | 254          | 115    |                 |        |        |        |        |        | 1      |    |
| Add 20 ft (6.10m) Jib Extension w/Pins and Pendants | 439          | 199    |                 |        |        |        |        |        | 3      |    |
| Add 5 ft (1.52m) Auxiliary Tip Extension            | 671          | 304    |                 |        |        |        |        |        |        |    |
| Add 15 Ton (13.6mt) Hook Ball (Non-swivel)          | 1,200        | 544    |                 |        | 1      |        |        |        |        |    |
| Add 15 Ton (13.6mt) Hook Ball (Swivel)              | 1,215        | 551    |                 |        |        |        |        |        |        |    |
| Add 175 Ton (158.8mt) Six-sheave Hook Block         | 3,000        | 1 361  |                 | 1      |        |        |        |        |        |    |
| Remove 10 ft (3.05m) Self-Assembly Section          | 2,422        | 1 099  |                 |        |        |        |        |        |        |    |
| Remove 20 ft (6.10m) Boom Base Section              | -4,479       | -2 032 |                 |        |        |        |        |        |        |    |
| Remove Main Hoist Rope                              | 1,943        | 881    |                 |        |        |        |        |        |        |    |
| Remove Rear Drum Auxiliary Wire Rope                | -1,700       | -771   |                 |        |        |        |        |        |        |    |
| Remove 50 gal (189L) of Fuel                        | -362         | -164   |                 |        |        |        |        |        |        |    |
| Approximate Total Shipping Weight                   | lb           | 83,332 | 43,549          | 41,759 | 40,590 | 28,452 | 42,292 | 29,780 | 43,488 |    |
|   | kg           | 37 799 | 19 753          | 18 942 | 18 411 | 12 905 | 19 183 | 13 507 | 19 726 |    |

Notes:  
 Estimated weights vary by +/- 2%. Numbers in the load columns (numbers 1 – 8) represent quantities.  
 Estimated transport loads assume the load out consist of 280 ft (85.35m) of boom and 100 ft (33.48m) of jib and full counterweight.  
 Support loads were targeted at 45,000 lb (20 412kg), 8.5 ft (2.59m) wide, and 48 ft (14.63m) long trailer. This may vary depending on state laws, empty truck/trailer weights, and style of trailer.

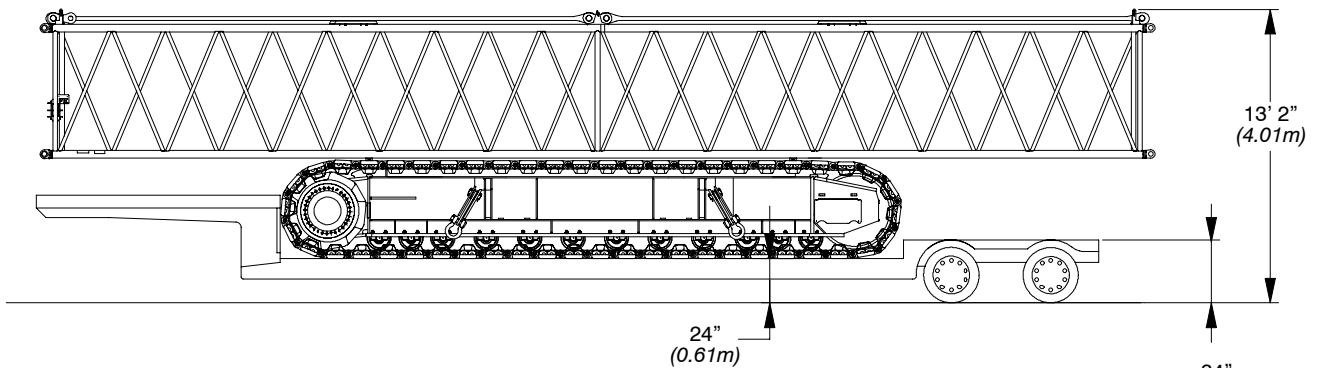
# Crane Transport Drawings



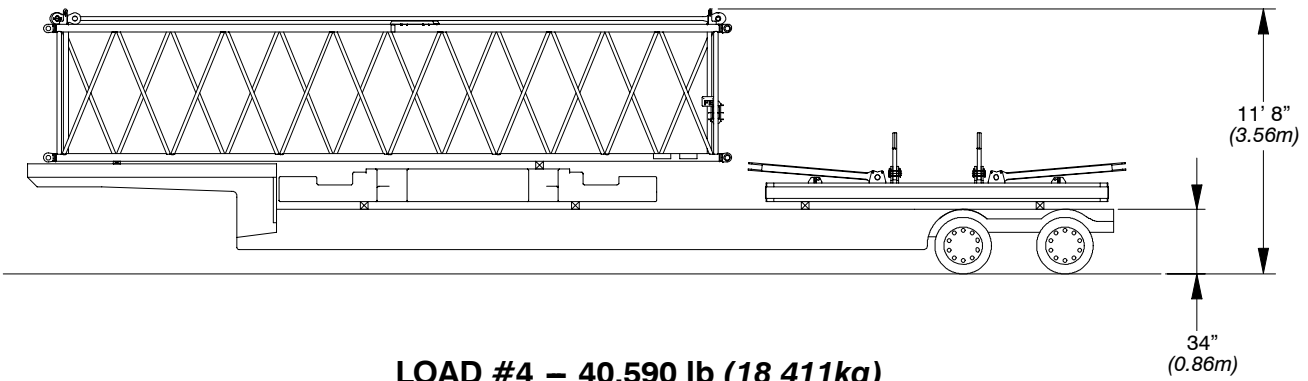
**LOAD #1 – 83,332 lb (37 799kg)**  
Base crane



**LOAD #2 – 43,549 lb (19 753kg)**  
Side frame with wedge pack, 50 ft (15.24m) boom extension with pins and pendants, and 175 Ton (158.8mt) hook block

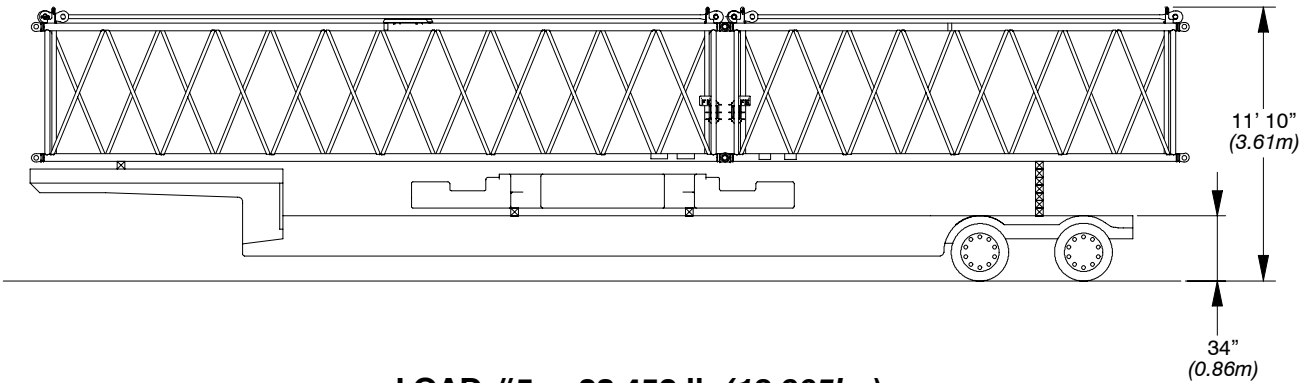


**LOAD #3 – 41,759 lb (18 942kg)**  
Side frame with wedge pack, 50 ft (15.24m) boom extension with pins and pendants, and 15 Ton (13.6mt) hook ball



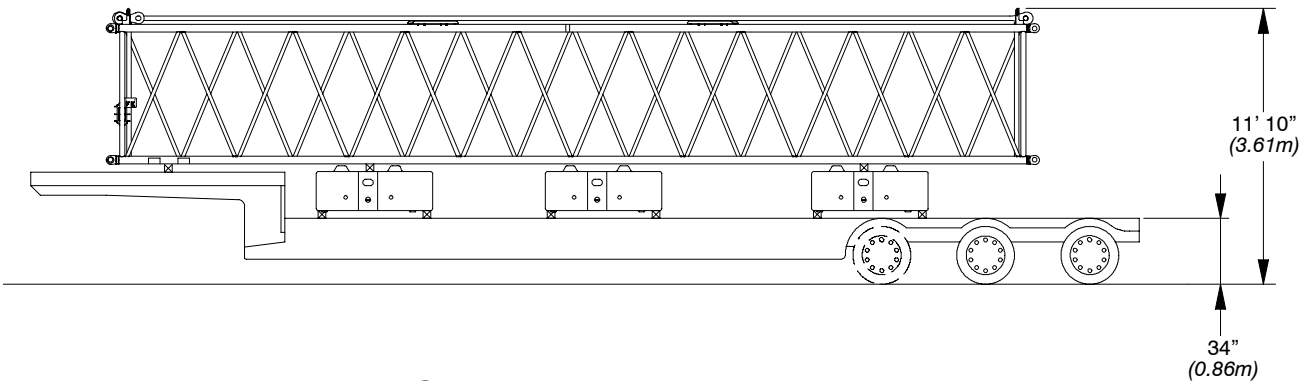
**LOAD #4 – 40,590 lb (18 411kg)**

“A” base counterweight, 1 of 2 lower counterweights, and 30 ft (9.14m) boom extension with pins and pendants



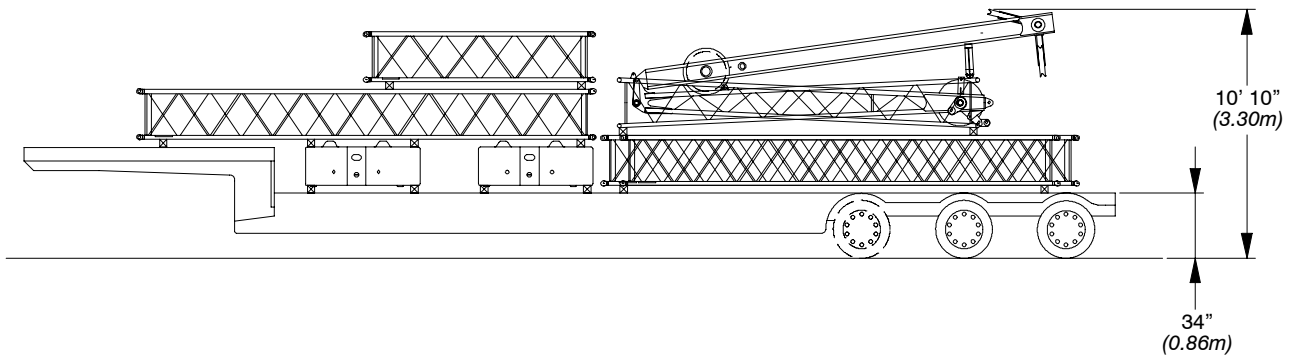
**LOAD #5 – 28,452 lb (12 905kg)**

1 of 2 lower counterweights, 20 ft (6.10m) boom extension with pins and pendants, and 30 ft (4.57m) boom extension with pins and pendants



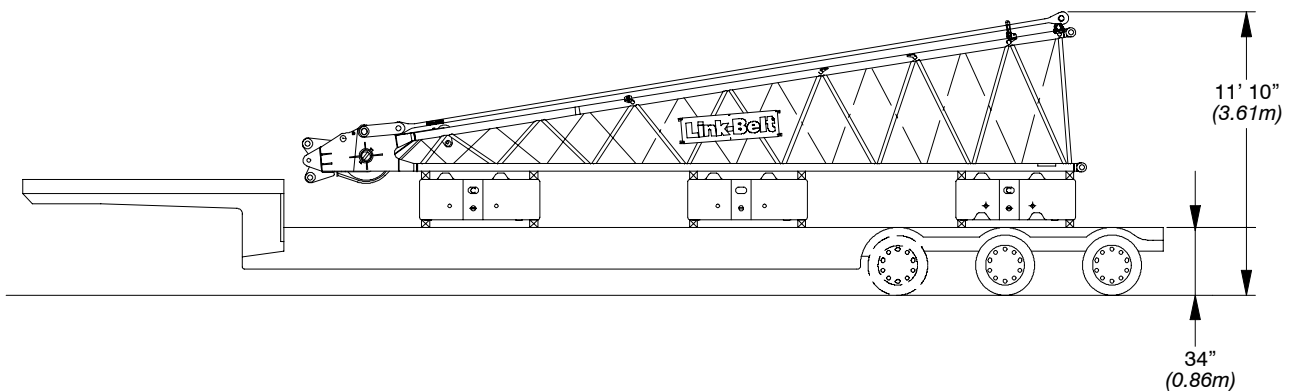
**LOAD #6 – 42,292 lb (19 183kg)**

“A” wing counterweight, “B” wing counterweight, “C” wing counterweight, and 40 ft (12.14m) boom extension with pins and pendants



### LOAD #7 – 29,780 lb (13 507kg)

Two "D" wing counterweights, three 20 ft (6.10m) jib extensions,  
30 ft (9.14m) basic jib, and 10 ft (3.05m) jib extension



### LOAD #8 – 43,488 lb (19 726kg)

"A" wing counterweight, "B" wing counterweight, "C" wing  
counterweight, and 30 ft (9.14m) top section with pins and pendants

# Load Hoist Performance

## Front Drum – 1 in (25.4mm) Wire Rope

| Rope Layer | Maximum Line Pull |        | No Load Line Speed |       | Full Load Line Speed |       | Pitch Diameter |     | Layer |      | Total |       |
|------------|-------------------|--------|--------------------|-------|----------------------|-------|----------------|-----|-------|------|-------|-------|
|            | lb                | kg     | ft/min             | m/min | ft/min               | m/min | in             | mm  | ft    | m    | ft    | m     |
| 1          | 49,578            | 22 489 | 233                | 71.0  | 128                  | 39.0  | 20             | 508 | 110   | 33.5 | 110   | 33.5  |
| 2          | 45,071            | 20 444 | 256                | 78.0  | 141                  | 43.0  | 22             | 559 | 120   | 36.6 | 230   | 70.1  |
| 3          | 41,315            | 18 740 | 279                | 85.0  | 153                  | 46.6  | 24             | 610 | 130   | 39.6 | 360   | 109.7 |
| 4          | 38,137            | 17 299 | 302                | 92.0  | 166                  | 50.6  | 26             | 660 | 140   | 42.7 | 500   | 152.4 |
| 5          | 35,413            | 16 063 | 326                | 99.4  | 179                  | 54.6  | 28             | 711 | 150   | 45.7 | 650   | 198.1 |
| 6          | 33,052            | 14 992 | 349                | 106.4 | 192                  | 58.5  | 30             | 762 | 160   | 48.8 | 810   | 246.9 |
| 7          | ---               | ---    | 372                | 113.4 | 204                  | 62.2  | 32             | 813 | 170   | 51.8 | 980   | 298.7 |
| 8          | ---               | ---    | ---                | ---   | ---                  | ---   | 34             | 864 | 180   | 54.9 | 1,160 | 353.6 |

## Rear Drum – 1 in (25.4mm) Wire Rope

| Rope Layer | Maximum Line Pull |        | No Load Line Speed |       | Full Load Line Speed |       | Pitch Diameter |     | Layer |      | Total |       |
|------------|-------------------|--------|--------------------|-------|----------------------|-------|----------------|-----|-------|------|-------|-------|
|            | lb                | kg     | ft/min             | m/min | ft/min               | m/min | in             | mm  | ft    | m    | ft    | m     |
| 1          | 29,937            | 13 579 | 385                | 117.3 | 153                  | 46.6  | 20             | 508 | 110   | 33.5 | 110   | 33.5  |
| 2          | 27,216            | 12 345 | 424                | 129.2 | 168                  | 51.2  | 22             | 559 | 120   | 36.6 | 230   | 70.1  |
| 3          | 24,948            | 11 316 | 462                | 140.8 | 183                  | 55.8  | 24             | 610 | 130   | 39.6 | 360   | 109.7 |
| 4          | 23,029            | 10 446 | 501                | 152.7 | 199                  | 60.7  | 26             | 660 | 140   | 42.7 | 500   | 152.4 |
| 5          | 21,384            | 9 700  | 539                | 164.3 | 214                  | 65.2  | 28             | 711 | 150   | 45.7 | 650   | 198.1 |
| 6          | 19,958            | 9 053  | 578                | 176.2 | 229                  | 69.8  | 30             | 762 | 160   | 48.8 | 810   | 246.9 |
| 7          | 18,711            | 8 487  | 616                | 187.8 | 245                  | 74.7  | 32             | 813 | 170   | 51.8 | 980   | 298.7 |
| 8          | ---               | ---    | ---                | ---   | ---                  | ---   | 34             | 864 | 180   | 54.9 | 1,160 | 353.6 |

## Boom Hoist Drum – 7/8 in (22.2mm) Wire Rope

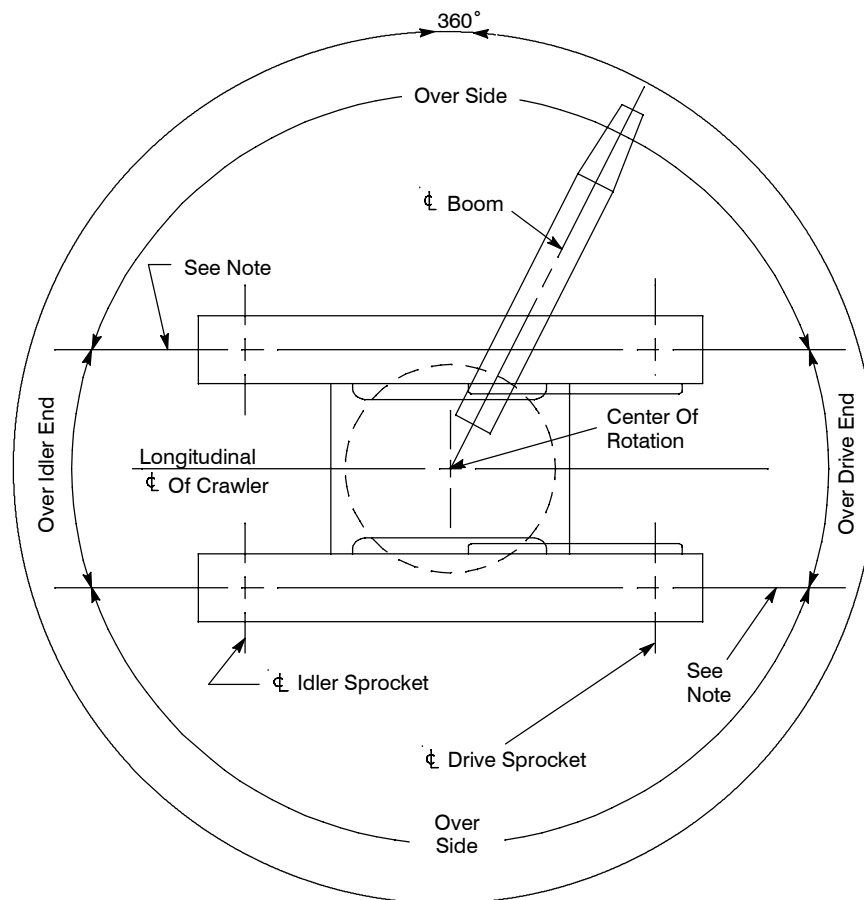
| Rope Layer | Maximum Line Pull |        | No Load Line Speed |       | Full Load Line Speed |       | Pitch Diameter |     | Layer |      | Total |       |
|------------|-------------------|--------|--------------------|-------|----------------------|-------|----------------|-----|-------|------|-------|-------|
|            | lb                | kg     | ft/min             | m/min | ft/min               | m/min | in             | mm  | ft    | m    | ft    | m     |
| 1          | 38,496            | 17 462 | 150                | 45.7  | 128                  | 39.0  | 15.9           | 404 | 50    | 15.2 | 50    | 15.2  |
| 2          | 34,647            | 15 716 | 166                | 50.6  | 143                  | 43.6  | 17.6           | 447 | 55    | 16.8 | 105   | 32.0  |
| 3          | 31,497            | 14 287 | 183                | 55.8  | 157                  | 47.9  | 19.4           | 493 | 60    | 18.3 | 165   | 50.3  |
| 4          | 28,872            | 13 096 | 200                | 61.0  | 171                  | 52.1  | 21.2           | 536 | 65    | 19.8 | 229   | 69.8  |
| 5          | 26,651            | 12 089 | 216                | 65.8  | 185                  | 56.4  | 22.9           | 582 | 70    | 21.3 | 299   | 91.1  |
| 6          | 24,748            | 11 226 | 233                | 71.0  | 200                  | 61.0  | 24.7           | 625 | 75    | 22.9 | 374   | 114.0 |
| 7          | 23,098            | 10 477 | 250                | 76.2  | 214                  | 65.2  | 26.5           | 671 | 80    | 24.4 | 454   | 138.4 |

## Third Drum – 1 in (25mm) Wire Rope

| Rope Layer | Maximum Line Pull |       | No Load Line Speed |       | Full Load Line Speed |       | Pitch Diameter |     | Layer |      | Total |       |
|------------|-------------------|-------|--------------------|-------|----------------------|-------|----------------|-----|-------|------|-------|-------|
|            | lb                | kg    | ft/min             | m/min | ft/min               | m/min | in             | mm  | ft    | m    | ft    | m     |
| 1          | 20,656            | 9 369 | 442                | 134.7 | 105                  | 32.0  | 19.7           | 500 | 150   | 45.8 | 150   | 45.8  |
| 2          | 18,752            | 8 506 | 486                | 148.1 | 116                  | 35.4  | 21.7           | 551 | 165   | 50.4 | 316   | 96.2  |
| 3          | 17,169            | 7 788 | 531                | 161.8 | 127                  | 38.7  | 23.7           | 602 | 181   | 55.1 | 496   | 151.3 |
| 4          | 15,833            | 7 182 | 576                | 175.6 | 138                  | 42.1  | 25.7           | 653 | 196   | 59.7 | 692   | 211.0 |
| 5          | 14,690            | 6 663 | 621                | 189.3 | 148                  | 45.1  | 27.7           | 704 | 211   | 64.4 | 903   | 275.3 |
| 6          | ---               | ---   | ---                | ---   | ---                  | ---   | 29.7           | 754 | 226   | 68.9 | 1,129 | 344.1 |

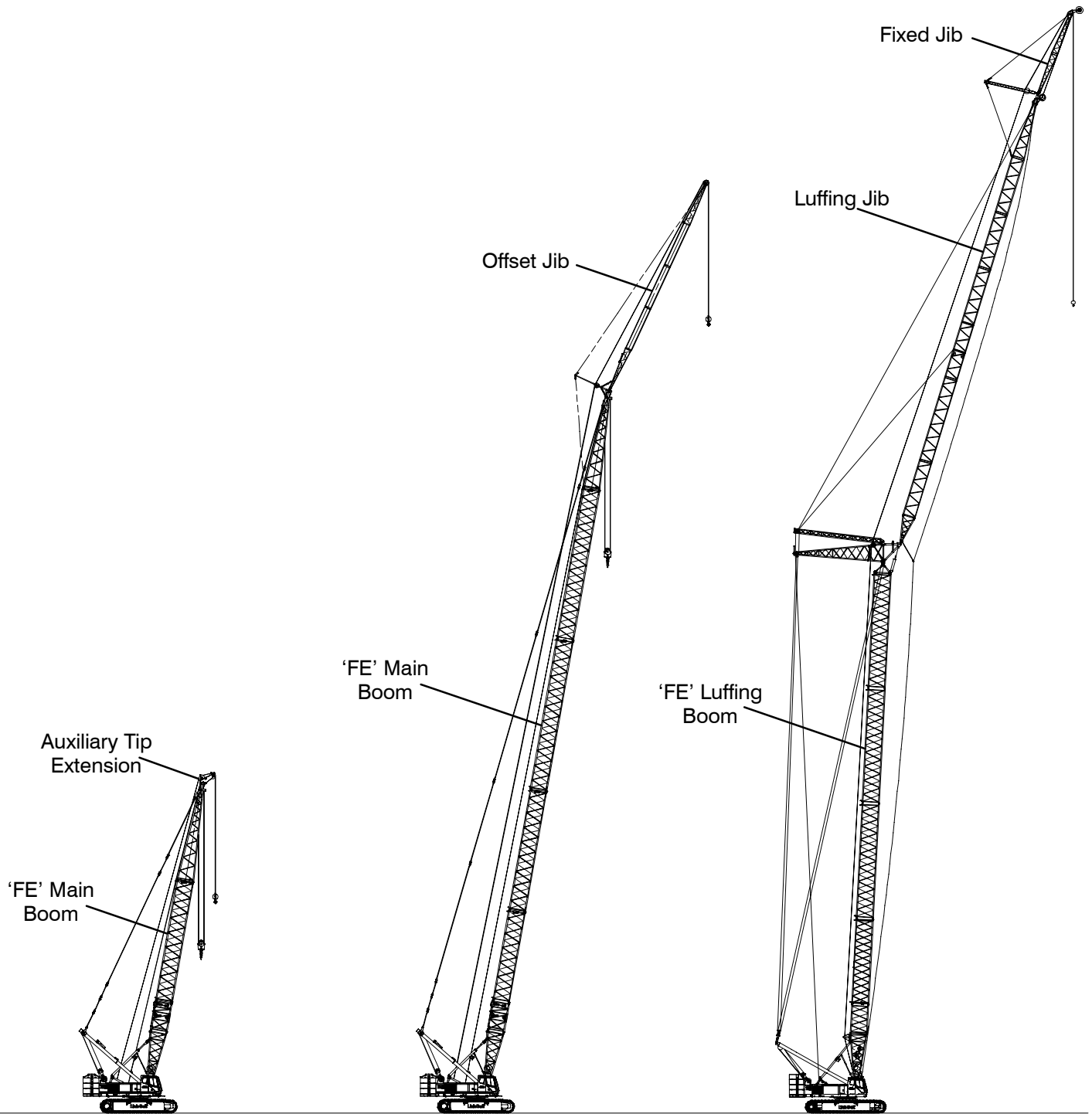
| Wire Rope Application | Diameter |      | Type | Max. Permissible Load |        | Wire Rope Descriptions   |
|-----------------------|----------|------|------|-----------------------|--------|--|
|                       | in       | mm   |      | lb                    | kg     |  |
| Boom Hoist            | 7/8      | 22.2 | LB   | 25,000                | 11 340 | 6 Strand, Compacted Strand, Swaged, Preformed, I.W.R.C., Right Lay, Regular Lay            |
| Front Drum            | 1        | 25.4 | LB   | 32,500                | 14 742 | 6 X 26 (6 X 19 Class), Warrington Seale, E.I.P.S., Preformed, Right Regular Lay, I.W.R.C.  |
| Third Drum (1–part)   | 1        | 25.4 | RB   | 22,760                | 10 324 | 19 X 19 Rotation Resistant Compacted Strand – High Strength – Preformed, Right Regular Lay |
| Third Drum (2–parts)  | 1        | 25.4 | RB   | 45,520                | 20 648 | 19 X 19 Rotation Resistant Compacted Strand – High Strength – Preformed, Right Regular Lay |
| Rear Drum             | 1        | 25.4 | RB   | 22,760                | 10 324 | 19 X 19 Rotation Resistant Compacted Strand – High Strength – Preformed, Right Regular Lay |

# Working Areas



**Note:** These Lines Determine The Limiting Position Of Any Load For Operation Within Working Areas Indicated.

# Attachments



**50–280 ft (15.24–83.34m)**  
**Main Boom With 5 ft (1.5m)**  
**Tip Extension**

**50–240 ft (15.24–73.15m)**  
**Main Boom With 30–100 ft**  
**(9.14–30.48m) Offset Jib**

**80–190 ft (24.38–57.91m) Luffing Boom**  
**+ 80–160 ft (24.38–48.77m) Luffing Jib**  
**With 30 ft (9.14m) Fixed Jib**

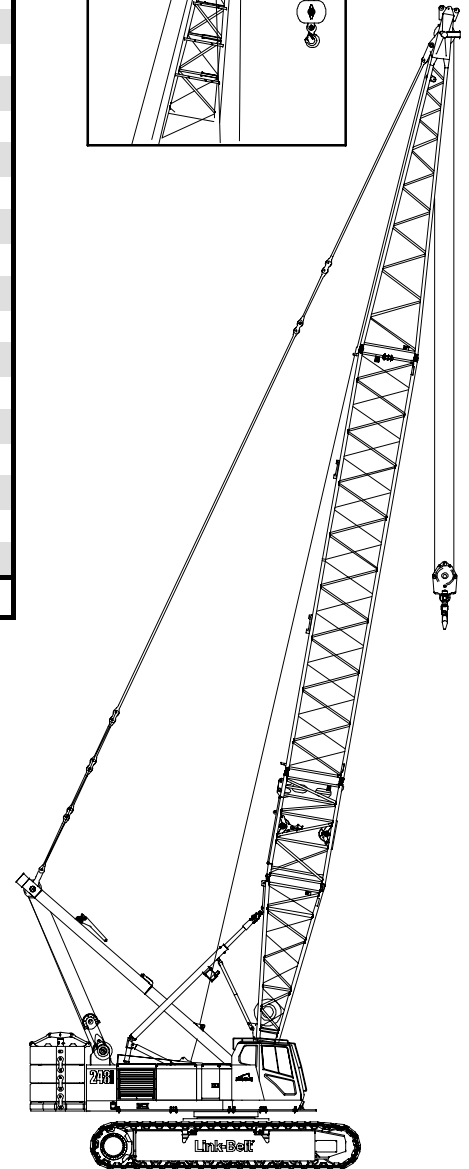
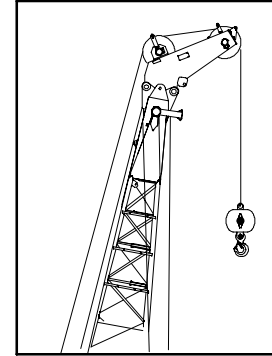


# Main Boom Make-up

| Boom Length<br>ft (m) | Base         | Boom Extensions ft (m) |              |              |              |               |               | Top          |
|-----------------------|--------------|------------------------|--------------|--------------|--------------|---------------|---------------|--------------|
|                       | 20<br>(6.14) | Self Assy<br>Section*  | 10<br>(3.05) | 20<br>(6.14) | 30<br>(9.10) | 40<br>(12.19) | 50<br>(15.24) | 30<br>(9.10) |
| 50 (15.24)            | 1            |                        |              |              |              |               |               | 1            |
| 60 (18.29)            | 1            | 1                      |              |              |              |               |               | 1            |
| 70 (21.34)            | 1            |                        |              | 1            |              |               |               | 1            |
| 80 (24.38)            | 1            | 1                      |              | 1            |              |               |               | 1            |
| 90 (27.43)            | 1            | 1                      |              |              | 1            |               |               | 1            |
| 100 (30.48)           | 1            | 1                      |              |              |              | 1             |               | 1            |
| 110 (33.53)           | 1            | 1                      |              |              |              |               | 1             | 1            |
| 120 (36.58)           | 1            | 1                      |              | 1            |              | 1             |               | 1            |
| 130 (39.62)           | 1            | 1                      |              | 1            |              |               | 1             | 1            |
| 140 (42.67)           | 1            | 1                      |              |              | 1            |               | 1             | 1            |
| 150 (45.72)           | 1            | 1                      |              |              |              | 1             | 1             | 1            |
| 160 (48.77)           | 1            | 1                      |              |              |              |               | 2             | 1            |
| 170 (51.82)           | 1            | 1                      |              | 1            |              | 1             | 1             | 1            |
| 180 (54.86)           | 1            | 1                      |              | 1            |              |               | 2             | 1            |
| 190 (57.91)           | 1            | 1                      |              |              | 1            |               | 2             | 1            |
| 200 (60.96)           | 1            | 1                      |              | 1            | 1            | 1             | 1             | 1            |
| 210 (64.01)           | 1            | 1                      |              | 1            | 1            |               | 2             | 1            |
| 220 (67.06)           | 1            | 1                      |              | 1            |              | 1             | 2             | 1            |
| 230 (70.10)           | 1            | 1                      |              | 1            | 2            | 1             | 1             | 1            |
| 240 (73.15)           | 1            | 1                      |              | 1            | 2            |               | 2             | 1            |
| 250 (76.20)           | 1            | 1                      |              | 1            | 1            | 1             | 2             | 1            |
| 260 (79.25)           | 1            | 1                      |              |              | 2            | 1             | 2             | 1            |
| 270 (82.30)           | 1            |                        |              | 1            | 2            | 1             | 2             | 1            |
| 280 (85.34)           | 1            | 1                      |              | 1            | 2            | 1             | 2             | 1            |

\* 10 ft (3.05m) self assembly section.

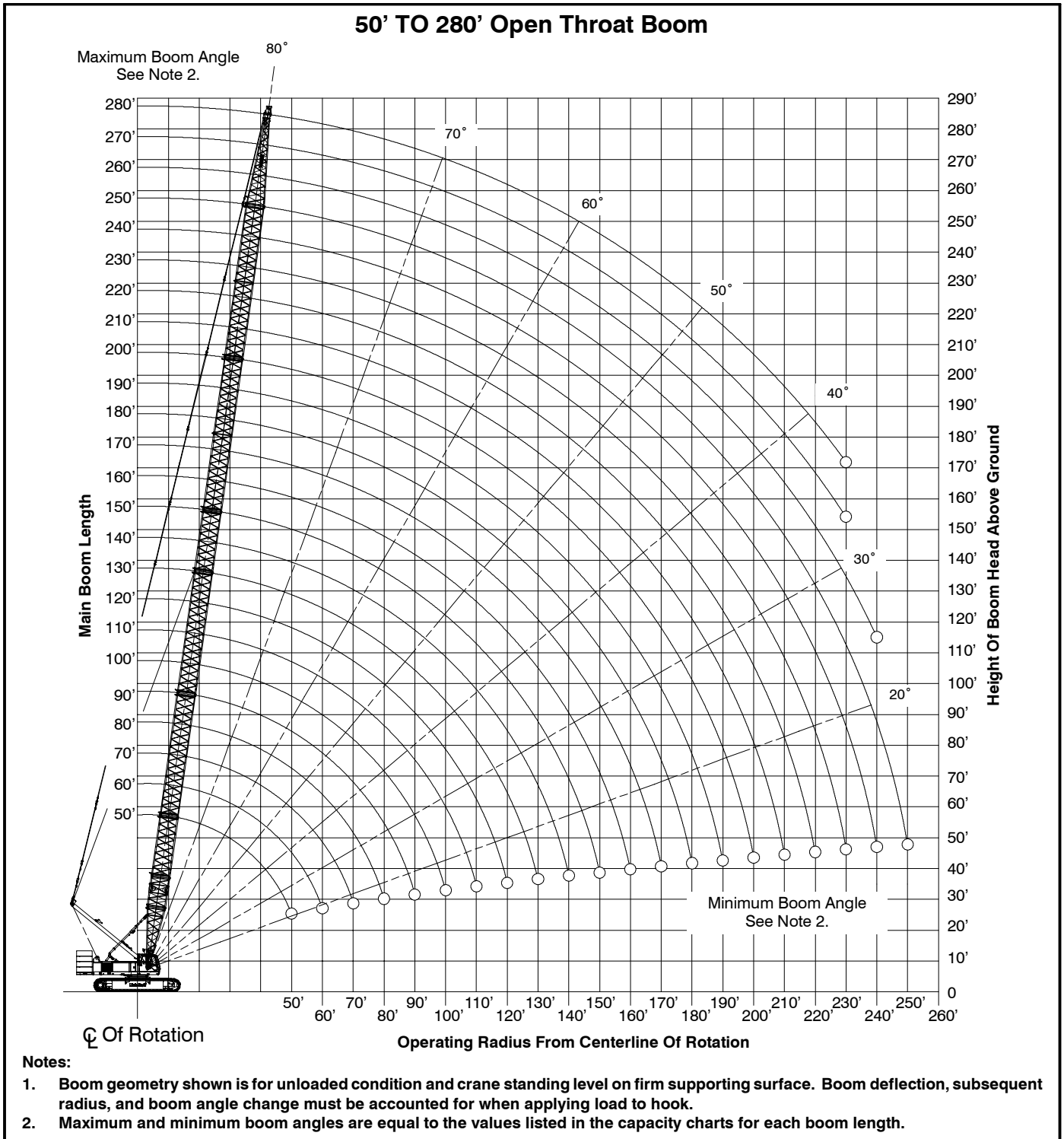
Optional 5 ft (1.5m)  
Auxiliary Tip Extension



## Notes:

- Capacities shown are in kips/metric tons (1 kip = 1,000 lb / 1 kip = 0.45 metric ton) and are not more than 75% of the tipping loads with the crane standing level on firm supporting surface. A deduction must be made from these capacities for weight of hook block, hook ball, sling, grapple, load weighing device, etc. When using main hook while jib or tip extension is attached, reduce capacities by values shown in Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
- The capacities in the shaded areas are based on structural strength. The capacities in the non-shaded areas are based on stability ratings.
- For recommended reeving, parts of line, wire rope type, and wire rope inspection, see Wire Rope Capacity Chart, Operator's Manual, and Parts Manual.
- Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account. Refer to the Crane Rating Manual for Wind Speed Restrictions.
- The 30 ft (9.14m) live mast must be used for all capacities listed.
- The least stable rated condition is over the side.
- Booms must be erected and lowered over the end for maximum stability.
- Main boom length must not exceed 280 ft (85.34m).
- Do not operate at radii and boom lengths where the Crane Rating Manual lists no capacity. Do not use longer booms or jibs than those listed in the Crane Rating Manual. Any of the above can cause a tipping condition, or boom and jib failure.
- These capacities are in compliance with ASME/ANSI B30.5 at date of manufacture.
- These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

# Main Boom Working Range Diagram



# Main Boom Load Charts

| Main Boom Lift Capacity Chart – 360° Rotation |                    |                  |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
|---|--------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|
| [All capacities are listed in kips (mt)]      |                    |                  |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
| Load Radius<br>ft (m)                         | Boom Length ft (m) |                  |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
|   | ABC+A Cwt          |                  | ABCD+A Cwt       |                 |                 |                 |                 |                 |                |                |                |                |                |
|   | 50<br>(15.2)       | 70<br>(21.3)     | 90<br>(27.4)     | 110<br>(33.5)   | 130<br>(39.6)   | 150<br>(45.7)   | 170<br>(51.8)   | 190<br>(57.9)   | 210<br>(64.0)  | 230<br>(67.1)  | 250<br>(76.2)  | 270<br>(82.3)  | 280<br>(85.3)  |
| 12.09<br>(3.7)                                | 350.0<br>(158.7)   |                  |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
| 13<br>(4.0)                                   | 350.0<br>(158.7)   |                  |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
| 14<br>(4.3)                                   | 338.7<br>(153.6)   | 278.9<br>(126.5) |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
| 15<br>(4.6)                                   | 317.7<br>(144.1)   | 274.5<br>(124.5) |                  |                 |                 |                 |                 |                 |                |                |                |                |                |
| 16<br>(4.9)                                   | 299.1<br>(135.6)   | 269.4<br>(122.2) | 237.3<br>(107.6) |                 |                 |                 |                 |                 |                |                |                |                |                |
| 17<br>(5.2)                                   | 282.6<br>(128.1)   | 264.3<br>(119.8) | 232.1<br>(105.2) |                 |                 |                 |                 |                 |                |                |                |                |                |
| 18<br>(5.5)                                   | 267.7<br>(121.4)   | 259.4<br>(117.6) | 228.5<br>(103.6) |                 |                 |                 |                 |                 |                |                |                |                |                |
| 19<br>(5.8)                                   | 254.3<br>(115.3)   | 253.7<br>(115.0) | 225.6<br>(102.3) | 198.6<br>(90.0) |                 |                 |                 |                 |                |                |                |                |                |
| 20<br>(6.1)                                   | 242.1<br>(109.8)   | 241.6<br>(109.5) | 222.1<br>(100.7) | 196.2<br>(89.0) |                 |                 |                 |                 |                |                |                |                |                |
| 25<br>(7.6)                                   | 194.4<br>(88.1)    | 194.8<br>(88.3)  | 199.0<br>(90.2)  | 183.9<br>(83.4) | 163.5<br>(74.1) | 144.1<br>(65.3) |                 |                 |                |                |                |                |                |
| 30<br>(9.1)                                   | 155.1<br>(70.3)    | 162.8<br>(73.8)  | 160.0<br>(72.5)  | 157.2<br>(71.3) | 154.8<br>(70.2) | 137.3<br>(62.2) | 122.3<br>(55.4) | 107.1<br>(48.5) |                |                |                |                |                |
| 35<br>(10.7)                                  | 128.2<br>(58.1)    | 131.1<br>(59.4)  | 133.6<br>(60.6)  | 131.2<br>(59.5) | 129.1<br>(58.5) | 127.3<br>(57.7) | 115.8<br>(52.5) | 102.8<br>(46.6) | 83.9<br>(38.0) |                |                |                |                |
| 40<br>(12.2)                                  | 107.5<br>(48.7)    | 108.4<br>(49.1)  | 114.8<br>(52.0)  | 112.7<br>(51.1) | 110.9<br>(50.3) | 109.2<br>(49.5) | 107.7<br>(48.8) | 98.9<br>(44.8)  | 82.8<br>(37.5) | 66.6<br>(30.2) | 53.5<br>(24.2) |                |                |
| 50<br>(15.2)                                  | 69.8<br>(31.6)     | 79.9<br>(36.2)   | 88.4<br>(40.1)   | 86.9<br>(39.4)  | 85.5<br>(38.7)  | 84.0<br>(38.1)  | 82.7<br>(37.5)  | 81.4<br>(36.9)  | 80.2<br>(36.3) | 65.4<br>(29.6) | 52.2<br>(23.6) | 43.0<br>(19.5) | 39.3<br>(17.8) |
| 60<br>(18.3)                                  |                    | 62.7<br>(28.4)   | 70.4<br>(31.9)   | 69.2<br>(31.3)  | 68.0<br>(30.8)  | 66.7<br>(30.2)  | 65.5<br>(29.7)  | 64.4<br>(29.2)  | 63.2<br>(28.6) | 58.8<br>(26.6) | 47.6<br>(21.6) | 39.5<br>(17.9) | 35.9<br>(16.2) |
| 70<br>(21.3)                                  |                    | 51.1<br>(23.1)   | 58.7<br>(26.6)   | 58.1<br>(26.3)  | 57.1<br>(25.9)  | 56.0<br>(25.4)  | 54.9<br>(24.9)  | 53.8<br>(24.4)  | 52.7<br>(23.9) | 51.7<br>(23.4) | 43.5<br>(19.7) | 35.6<br>(16.1) | 32.3<br>(14.6) |

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.

### Main Boom Lift Capacity Chart (Continued) – 360° Rotation

[All capacities are listed in kips (mT)]

| Load Radius ft (m) | Boom Length ft (m) |                |                |                |                |                |                |                |                |                |                |
|--------------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                    | ABCD+A Cwt         |                |                |                |                |                |                |                |                |                |                |
|                    | 90<br>(27.4)       | 110<br>(33.5)  | 130<br>(39.6)  | 150<br>(45.7)  | 170<br>(51.8)  | 190<br>(57.9)  | 210<br>(64.0)  | 230<br>(67.1)  | 250<br>(76.2)  | 270<br>(82.3)  | 280<br>(85.3)  |
| 80<br>(24.4)       | 48.9<br>(22.1)     | 48.7<br>(22.0) | 47.9<br>(21.7) | 46.9<br>(21.2) | 45.9<br>(20.8) | 44.9<br>(20.3) | 43.8<br>(19.8) | 42.9<br>(19.4) | 39.1<br>(17.7) | 32.0<br>(14.5) | 27.8<br>(12.6) |
| 90<br>(27.4)       |                    | 41.5<br>(18.8) | 40.9<br>(18.5) | 40.0<br>(18.1) | 39.1<br>(17.7) | 38.1<br>(17.2) | 37.2<br>(16.8) | 36.1<br>(16.3) | 35.2<br>(15.9) | 27.6<br>(12.5) | 25.1<br>(11.3) |
| 100<br>(30.5)      |                    | 35.6<br>(16.1) | 35.4<br>(16.0) | 34.6<br>(15.7) | 33.7<br>(15.2) | 32.8<br>(14.8) | 31.9<br>(14.4) | 30.9<br>(14.0) | 30.0<br>(13.6) | 24.3<br>(11.0) | 22.2<br>(10.0) |
| 110<br>(33.5)      |                    | 30.5<br>(13.8) | 30.8<br>(13.9) | 30.2<br>(13.7) | 29.4<br>(13.3) | 29.4<br>(13.3) | 28.7<br>(13.0) | 27.7<br>(12.5) | 25.5<br>(11.5) | 21.1<br>(9.5)  | 19.3<br>(8.7)  |
| 120<br>(36.6)      |                    |                | 27.4<br>(12.4) | 27.2<br>(12.3) | 26.6<br>(12.0) | 25.8<br>(11.7) | 24.9<br>(11.3) | 24.0<br>(10.8) | 22.4<br>(10.1) | 18.3<br>(8.3)  | 16.7<br>(7.5)  |
| 130<br>(39.6)      |                    |                | 23.6<br>(10.7) | 23.9<br>(10.8) | 23.4<br>(10.6) | 22.6<br>(10.2) | 21.8<br>(9.8)  | 20.9<br>(9.4)  | 19.6<br>(8.9)  | 15.9<br>(7.2)  | 14.4<br>(6.5)  |
| 140<br>(42.7)      |                    |                |                | 20.9<br>(9.4)  | 20.6<br>(9.3)  | 19.9<br>(9.0)  | 19.1<br>(8.6)  | 18.3<br>(8.3)  | 17.2<br>(7.8)  | 13.8<br>(6.2)  | 12.5<br>(5.6)  |
| 150<br>(45.7)      |                    |                |                | 18.2<br>(8.2)  | 18.2<br>(8.2)  | 17.6<br>(7.9)  | 16.8<br>(7.6)  | 16.0<br>(7.2)  | 15.1<br>(6.8)  | 11.9<br>(5.4)  | 10.8<br>(4.9)  |
| 160<br>(48.8)      |                    |                |                |                | 16.0<br>(7.2)  | 15.5<br>(7.0)  | 14.8<br>(6.7)  | 14.0<br>(6.3)  | 13.2<br>(5.9)  | 10.2<br>(4.6)  | 9.2<br>(4.1)   |
| 170<br>(51.8)      |                    |                |                |                | 13.9<br>(6.3)  | 13.7<br>(6.2)  | 13.1<br>(5.9)  | 12.3<br>(5.5)  | 11.5<br>(5.2)  | 8.7<br>(3.9)   | 7.9<br>(3.5)   |
| 180<br>(54.9)      |                    |                |                |                |                | 12.0<br>(5.4)  | 11.5<br>(5.2)  | 10.8<br>(4.9)  | 10.0<br>(4.5)  | 7.4<br>(3.3)   | 6.5<br>(2.9)   |
| 190<br>(57.9)      |                    |                |                |                |                | 10.4<br>(4.7)  | 10.1<br>(4.5)  | 9.4<br>(4.2)   | 8.6<br>(3.9)   | 6.2<br>(2.8)   | 5.0<br>(2.2)   |
| 200<br>(61.0)      |                    |                |                |                |                |                | 8.7<br>(3.9)   | 8.2<br>(3.7)   | 7.3<br>(3.3)   | 5.1<br>(2.3)   | 3.6<br>(1.6)   |
| 210<br>(64.0)      |                    |                |                |                |                |                | 7.4<br>(3.3)   | 7.0<br>(3.1)   | 6.2<br>(2.8)   | 4.1<br>(1.8)   | 3.4<br>(1.5)   |
| 220<br>(67.1)      |                    |                |                |                |                |                |                | 5.9<br>(2.6)   | 5.2<br>(2.3)   | 3.2<br>(1.4)   | 2.7<br>(1.2)   |
| 230<br>(70.1)      |                    |                |                |                |                |                |                | 4.8<br>(2.1)   | 4.2<br>(1.9)   | 2.4<br>(1.0)   | 2.0<br>(0.9)   |
| 240<br>(73.2)      |                    |                |                |                |                |                |                |                | 3.4<br>(1.5)   |                |                |
| 250<br>(76.2)      |                    |                |                |                |                |                |                |                | 2.5<br>(1.1)   |                |                |

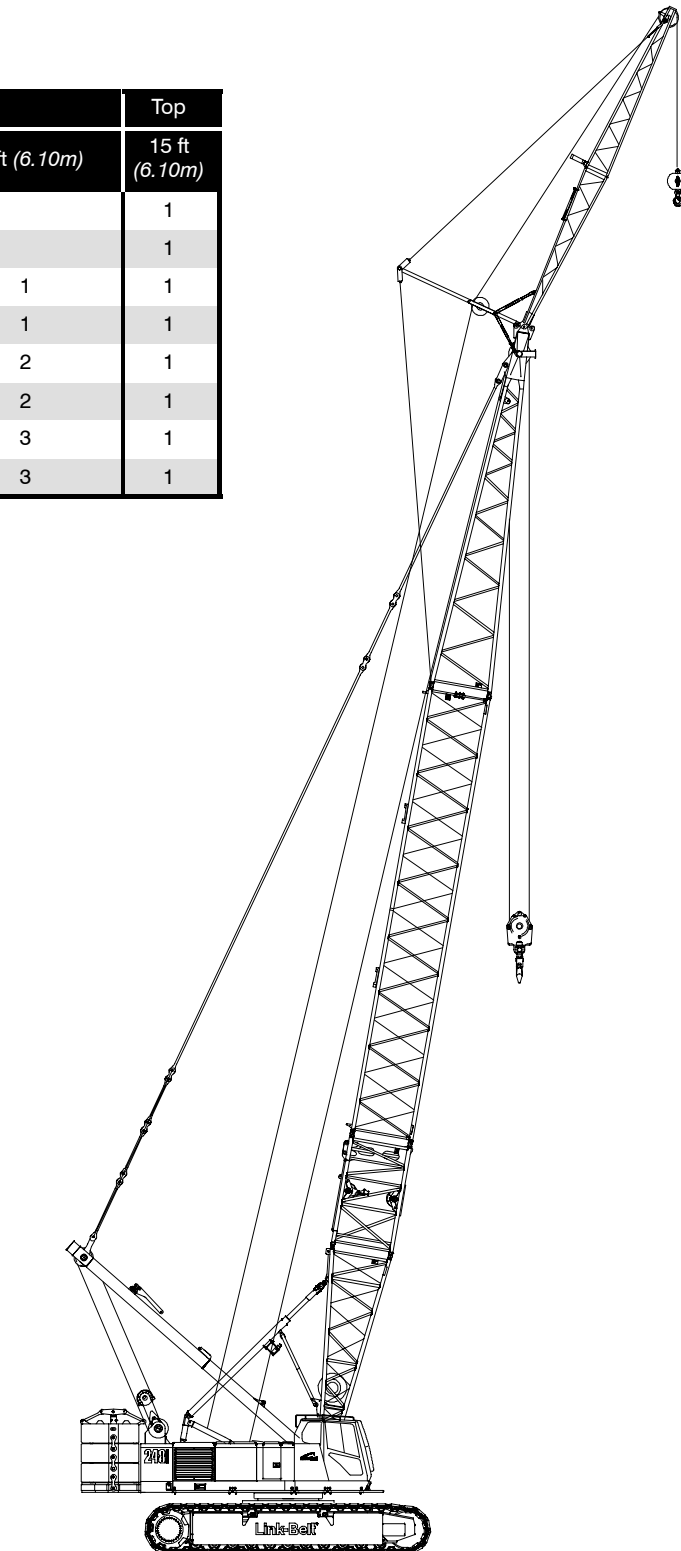
This material is supplied for reference use only. Operator must refer to in-cab Crane Rating Manual and Operator's Manual to determine allowable crane lifting capacities and assembly and operating procedures.

# Jib Attachment Make-up

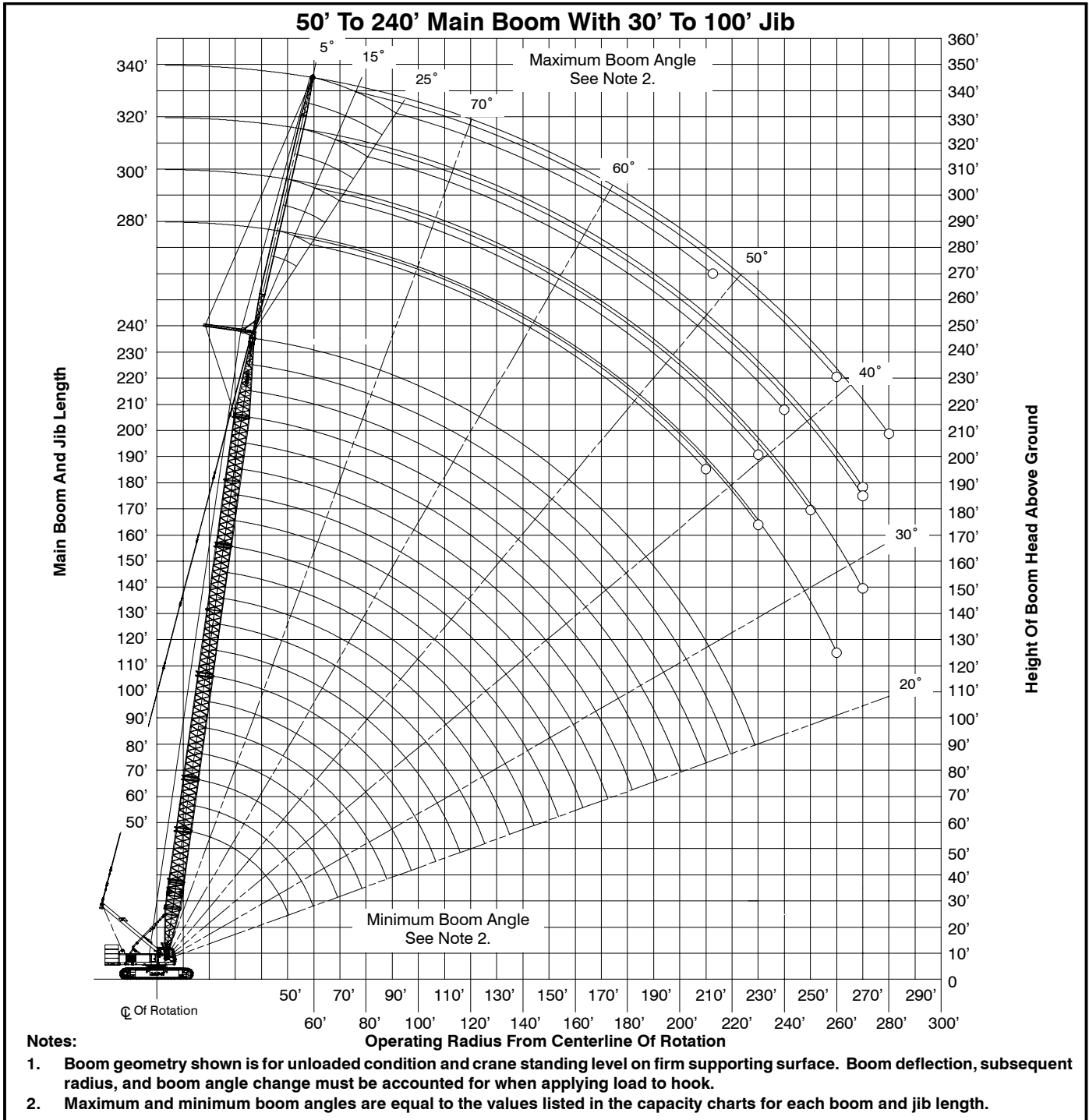
| Jib Length<br>ft (m) | Base             | Jib Extensions |               | Top              |
|----------------------|------------------|----------------|---------------|------------------|
|                      | 15 ft<br>(6.10m) | 10 ft (3.05m)  | 20 ft (6.10m) | 15 ft<br>(6.10m) |
| 30 (9.15)            | 1                |                |               | 1                |
| 40 (12.19)           | 1                | 1              |               | 1                |
| 50 (15.24)           | 1                |                | 1             | 1                |
| 60 (18.29)           | 1                | 1              | 1             | 1                |
| 70 (21.34)           | 1                |                | 2             | 1                |
| 80 (24.38)           | 1                | 1              | 2             | 1                |
| 90 (27.43)           | 1                |                | 3             | 1                |
| 100 (30.48)          | 1                | 1              | 3             | 1                |

## Notes:

- Capacities shown are in kips/metric tons (1 kip = 1,000 lb / 1 kip = 0.45 metric ton) and are not more than 75% of the tipping loads with the crane standing level on a firm supporting surface.
- A deduction must be made from these capacities for the weight of the main boom hook block or hook ball, jib hook block or hook ball, slings, grapples, load weighing devices, etc. When using main hook while jib is attached, reduce capacities by values shown in Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
- The capacities in the shaded areas are based on structural strength. The capacities in the non-shaded areas are based on stability ratings.
- Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account. Refer to the Crane Rating Manual for Wind Speed Restrictions.
- These capacities are for ABC+A and ABCD+A.
- These capacities are for 360° working areas.
- These capacities are for 30–100 ft (9.15–30.48m) jib lengths only.
- The jib cannot be used on boom lengths over 240 ft (73.15m).
- The least stable rated condition is over the side.
- These capacities are in compliance with ASME/ANSI B30.5 at date of manufacture.
- These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.



# Jib Attachment Working Range Diagram



# Jib Attachment Load Charts

| 30 ft (9.14m) Offset Jib Length – 360° Rotation<br>[All capacities are listed in kips (mt)] |                         |             |             |             |             |                    |                         |             |             |             |             |                    |                         |             |             |             |             |
|---|-------------------------|-------------|-------------|-------------|-------------|--------------------|-------------------------|-------------|-------------|-------------|-------------|--------------------|-------------------------|-------------|-------------|-------------|-------------|
| 5° Offset   |                         |             |             |             |             | 15° Offset         |                         |             |             |             |             | 25° Offset         |                         |             |             |             |             |
| Load Radius ft (m)  | Main Boom Length ft (m) |             |             |             |             | Load Radius ft (m) | Main Boom Length ft (m) |             |             |             |             | Load Radius ft (m) | Main Boom Length ft (m) |             |             |             |             |
|   | ABC+ A Cwt              | ABCD+A Cwt  |             |             |             |                    | ABC+ A Cwt              | ABCD+A Cwt  |             |             |             |                    | ABC+ A Cwt              | ABCD+A Cwt  |             |             |             |
|   | 50 (15.2)               | 100 (30.5)  | 150 (45.7)  | 200 (61.0)  | 240 (73.2)  |                    | 50 (15.2)               | 100 (30.5)  | 150 (45.7)  | 200 (61.0)  | 240 (73.2)  |                    | 50 (15.2)               | 100 (30.5)  | 150 (45.7)  | 200 (61.0)  | 240 (73.2)  |
| 19 (5.8)  | 60.0 (27.2)             |             |             |             |             | 19 (5.8)           |                         |             |             |             |             | 19 (5.8)           |                         |             |             |             |             |
| 20 (6.1)  | 60.0 (27.2)             |             |             |             |             | 20 (6.1)           |                         |             |             |             |             | 20 (6.1)           |                         |             |             |             |             |
| 30 (9.1)  | 56.8 (25.7)             | 58.1 (26.3) |             |             |             | 30 (9.1)           | 54.3 (24.6)             | 54.7 (24.8) |             |             |             | 30 (9.1)           | 48.2 (21.8)             |             |             |             |             |
| 40 (12.2)   | 54.0 (24.5)             | 56.1 (25.4) | 54.7 (24.8) | 50.5 (22.9) |             | 40 (12.2)          | 50.4 (22.8)             | 53.1 (24.0) | 51.8 (23.5) |             |             | 40 (12.2)          | 40.0 (18.1)             | 47.3 (21.4) |             |             |             |
| 50 (15.2)   | 48.5 (22.0)             | 54.3 (24.6) | 53.5 (24.2) | 49.6 (22.5) | 40.6 (18.4) | 50 (15.2)          | 41.6 (18.8)             | 51.8 (23.5) | 50.8 (23.0) | 47.5 (21.5) | 39.7 (18.0) | 50 (15.2)          | 34.5 (15.6)             | 42.1 (19.1) | 46.8 (21.2) | 45.9 (20.8) |             |
| 60 (18.3)   | 39.8 (18.0)             | 52.8 (23.9) | 52.4 (23.7) | 48.7 (22.0) | 39.5 (17.9) | 60 (18.3)          | 35.7 (16.2)             | 49.0 (22.2) | 50.0 (22.6) | 46.7 (21.1) | 38.5 (17.4) | 60 (18.3)          | 32.3 (14.6)             | 38.1 (17.2) | 43.0 (19.5) | 45.2 (20.5) | 36.2 (16.4) |
| 70 (21.3)   | 33.9 (15.3)             | 51.5 (23.3) | 51.4 (23.3) | 47.9 (21.7) | 38.5 (17.4) | 70 (21.3)          | 32.4 (14.7)             | 43.5 (19.7) | 49.2 (22.3) | 46.0 (20.8) | 37.3 (16.9) | 70 (21.3)          |                         | 34.9 (15.8) | 39.8 (18.0) | 43.4 (19.6) | 35.1 (15.9) |
| 80 (24.4)   |                         | 46.5 (21.1) | 47.0 (21.3) | 43.9 (19.9) | 37.5 (17.0) | 80 (24.4)          |                         | 39.2 (17.7) | 47.5 (21.5) | 44.6 (20.2) | 36.3 (16.4) | 80 (24.4)          |                         | 32.3 (14.6) | 37.2 (16.8) | 40.8 (18.5) | 34.0 (15.4) |
| 90 (27.4)   |                         | 41.1 (18.6) | 39.9 (18.1) | 37.0 (16.7) | 34.7 (15.7) | 90 (27.4)          |                         | 35.8 (16.2) | 40.4 (18.3) | 37.6 (17.0) | 35.3 (16.0) | 90 (27.4)          |                         | 32.3 (14.6) | 34.9 (15.8) | 38.1 (17.2) | 33.1 (15.0) |
| 100 (30.5)  |                         | 37.0 (16.7) | 34.4 (15.6) | 32.0 (14.5) | 31.5 (14.2) | 100 (30.5)         |                         | 33.1 (15.0) | 34.8 (15.7) | 32.0 (14.5) | 31.9 (14.4) | 100 (30.5)         |                         | 31.8 (14.4) | 33.0 (14.9) | 32.5 (14.7) | 30.4 (13.7) |
| 120 (36.6)  |                         | 29.3 (13.3) | 27.5 (12.4) | 25.0 (11.3) | 22.9 (10.3) | 120 (36.6)         |                         |             | 27.9 (12.6) | 25.4 (11.5) | 23.4 (10.6) | 120 (36.6)         |                         |             | 28.2 (12.8) | 25.8 (11.7) | 23.9 (10.8) |
| 140 (42.7)  |                         |             | 21.3 (9.6)  | 19.0 (8.6)  | 17.0 (7.7)  | 140 (42.7)         |                         |             | 21.6 (9.8)  | 19.3 (8.7)  | 17.4 (7.9)  | 140 (42.7)         |                         |             |             | 19.6 (8.9)  | 17.7 (8.0)  |
| 160 (48.8)  |                         |             | 16.7 (7.5)  | 14.6 (6.6)  | 12.6 (5.7)  | 160 (48.8)         |                         |             |             | 14.9 (6.7)  | 13.0 (5.9)  | 160 (48.8)         |                         |             |             | 15.1 (6.8)  | 13.3 (6.0)  |
| 180 (54.9)  |                         |             |             | 11.2 (5.0)  | 9.3 (4.2)   | 180 (54.9)         |                         |             |             | 11.4 (5.1)  | 9.6 (4.3)   | 180 (54.9)         |                         |             |             |             | 9.8 (4.4)   |
| 200 (61.0)  |                         |             |             | 8.5 (3.8)   | 6.7 (3.0)   | 200 (61.0)         |                         |             |             |             | 6.9 (3.1)   | 200 (61.0)         |                         |             |             |             | 7.1 (3.2)   |
| 220 (67.1)  |                         |             |             | 4.6 (2.0)   |             | 220 (67.1)         |                         |             |             |             | 4.8 (2.1)   | 220 (67.1)         |                         |             |             |             |             |
| 240 (73.2)  |                         |             |             | 2.8 (1.2)   |             | 240 (73.2)         |                         |             |             |             |             | 240 (73.2)         |                         |             |             |             |             |

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| <b>60 ft (18.3m) Offset Jib Length – 360° Rotation</b><br>[All capacities are listed in kips (mt)] |                         |                |                |                |                |                       |                         |                |                |                |                |                       |                         |                |                |                |               |
|--|-------------------------|----------------|----------------|----------------|----------------|-----------------------|-------------------------|----------------|----------------|----------------|----------------|-----------------------|-------------------------|----------------|----------------|----------------|---------------|
| 5° Offset  |                         |                |                |                |                | 15° Offset            |                         |                |                |                |                | 25° Offset            |                         |                |                |                |               |
| Load Radius<br>ft (m)  | Main Boom Length ft (m) |                |                |                |                | Load Radius<br>ft (m) | Main Boom Length ft (m) |                |                |                |                | Load Radius<br>ft (m) | Main Boom Length ft (m) |                |                |                |               |
|  | ABC+A Cwt               | ABCD+A Cwt     |                |                |                |                       | ABC+A Cwt               | ABCD+A Cwt     |                |                |                |                       | ABC+A Cwt               | ABCD+A Cwt     |                |                |               |
|  | 50<br>(15.2)            | 100<br>(30.5)  | 150<br>(45.7)  | 200<br>(61.0)  | 240<br>(73.2)  |                       | 50<br>(15.2)            | 100<br>(30.5)  | 150<br>(45.7)  | 200<br>(61.0)  | 240<br>(73.2)  |                       | 50<br>(15.2)            | 100<br>(30.5)  | 150<br>(45.7)  | 200<br>(61.0)  | 240<br>(73.2) |
| 30<br>(9.1)  | 34.7<br>(15.7)          |                |                |                |                | 30<br>(9.1)           |                         |                |                |                |                | 30<br>(9.1)           |                         |                |                |                |               |
| 40<br>(12.2)   | 30.9<br>(14.0)          | 31.5<br>(14.2) | 30.8<br>(13.9) |                |                | 40<br>(12.2)          | 29.6<br>(13.4)          |                |                |                |                | 40<br>(12.2)          |                         |                |                |                |               |
| 50<br>(15.2)   | 29.5<br>(13.3)          | 30.5<br>(13.8) | 30.1<br>(13.6) | 28.6<br>(12.9) |                | 50<br>(15.2)          | 28.4<br>(12.8)          | 28.9<br>(13.1) | 28.5<br>(12.9) |                |                | 50<br>(15.2)          | 22.2<br>(10.0)          |                |                |                |               |
| 60<br>(18.3)   | 28.3<br>(12.8)          | 29.6<br>(13.4) | 29.5<br>(13.3) | 28.1<br>(12.7) | 26.3<br>(11.2) | 60<br>(18.3)          | 24.2<br>(10.9)          | 28.1<br>(12.7) | 27.9<br>(12.6) | 26.8<br>(12.1) |                | 60<br>(18.3)          | 19.3<br>(8.7)           | 22.1<br>(10.0) | 24.0<br>(10.8) |                |               |
| 70<br>(21.3)   | 25.4<br>(11.5)          | 28.7<br>(13.0) | 28.8<br>(13.0) | 27.7<br>(12.5) | 25.8<br>(11.7) | 70<br>(21.3)          | 21.0<br>(9.5)           | 26.7<br>(12.1) | 27.4<br>(12.4) | 26.3<br>(11.9) | 24.8<br>(11.2) | 70<br>(21.3)          | 17.1<br>(7.7)           | 20.1<br>(9.1)  | 22.1<br>(10.0) | 23.5<br>(10.6) | 21.9<br>(9.9) |
| 80<br>(24.4)   | 22.0<br>(9.9)           | 28.0<br>(12.7) | 28.2<br>(12.8) | 27.2<br>(12.3) | 25.4<br>(11.5) | 80<br>(24.4)          | 18.5<br>(8.4)           | 23.9<br>(10.8) | 26.9<br>(12.2) | 25.9<br>(11.7) | 24.4<br>(11.0) | 80<br>(24.4)          | 15.4<br>(6.9)           | 18.4<br>(8.3)  | 20.5<br>(9.3)  | 22.0<br>(9.9)  | 21.5<br>(9.7) |
| 90<br>(27.4)   | 19.3<br>(8.7)           | 27.3<br>(12.3) | 27.7<br>(12.5) | 26.8<br>(12.1) | 25.0<br>(11.3) | 90<br>(27.4)          | 16.6<br>(7.5)           | 21.7<br>(9.8)  | 25.7<br>(11.6) | 25.6<br>(11.6) | 24.0<br>(10.8) | 90<br>(27.4)          | 14.0<br>(6.3)           | 17.0<br>(7.7)  | 19.1<br>(8.6)  | 20.7<br>(9.3)  | 21.1<br>(9.5) |
| 100<br>(30.5)  | 17.3<br>(7.8)           | 24.8<br>(11.2) | 27.2<br>(12.3) | 26.4<br>(11.9) | 24.6<br>(11.1) | 100<br>(30.5)         | 15.2<br>(6.9)           | 19.8<br>(8.9)  | 23.7<br>(10.7) | 25.2<br>(11.4) | 23.6<br>(10.7) | 100<br>(30.5)         |                         | 15.8<br>(7.1)  | 17.9<br>(8.1)  | 19.5<br>(8.8)  | 20.5<br>(9.3) |
| 120<br>(36.6)  |                         | 20.5<br>(9.3)  | 26.2<br>(11.8) | 25.6<br>(11.6) | 23.8<br>(10.8) | 120<br>(36.6)         |                         | 17.0<br>(7.7)  | 20.5<br>(9.3)  | 23.5<br>(10.6) | 23.0<br>(10.4) | 120<br>(36.6)         |                         | 14.0<br>(6.3)  | 16.0<br>(7.2)  | 17.6<br>(7.9)  | 18.7<br>(8.4) |
| 140<br>(42.7)  |                         | 17.5<br>(7.9)  | 22.5<br>(10.2) | 19.9<br>(9.0)  | 17.9<br>(8.1)  | 140<br>(42.7)         |                         | 15.0<br>(6.8)  | 18.1<br>(8.2)  | 20.6<br>(9.3)  | 18.7<br>(8.4)  | 140<br>(42.7)         |                         |                | 14.6<br>(6.6)  | 16.1<br>(7.3)  | 17.1<br>(7.7) |
| 160<br>(48.8)  |                         |                | 18.0<br>(8.1)  | 15.5<br>(7.0)  | 13.5<br>(6.1)  | 160<br>(48.8)         |                         |                | 16.3<br>(7.4)  | 16.1<br>(7.3)  | 14.2<br>(6.4)  | 160<br>(48.8)         |                         |                | 13.5<br>(6.1)  | 14.9<br>(6.7)  | 14.8<br>(6.7) |
| 180<br>(54.9)  |                         |                | 14.4<br>(6.5)  | 12.2<br>(5.5)  | 10.2<br>(4.6)  | 180<br>(54.9)         |                         |                | 14.7<br>(6.6)  | 12.6<br>(5.7)  | 10.8<br>(4.9)  | 180<br>(54.9)         |                         |                |                | 13.0<br>(5.9)  | 11.3<br>(5.1) |
| 200<br>(61.0)  |                         |                |                | 9.5<br>(4.3)   | 7.6<br>(3.4)   | 200<br>(61.0)         |                         |                |                | 9.9<br>(4.5)   | 8.1<br>(3.6)   | 200<br>(61.0)         |                         |                |                | 10.2<br>(4.6)  | 8.5<br>(3.8)  |
| 220<br>(67.1)  |                         |                |                | 7.3<br>(3.3)   | 5.5<br>(2.5)   | 220<br>(67.1)         |                         |                |                | 7.6<br>(3.4)   | 5.9<br>(2.6)   | 220<br>(67.1)         |                         |                |                |                | 6.2<br>(2.8)  |
| 240<br>(73.2)  |                         |                |                | 5.5<br>(2.5)   | 3.7<br>(1.6)   | 240<br>(73.2)         |                         |                |                |                | 4.0<br>(1.8)   | 240<br>(73.2)         |                         |                |                |                |               |
| 260<br>(79.2)  |                         |                |                |                | 2.2<br>(1.0)   | 260<br>(79.2)         |                         |                |                |                |                | 260<br>(79.2)         |                         |                |                |                |               |

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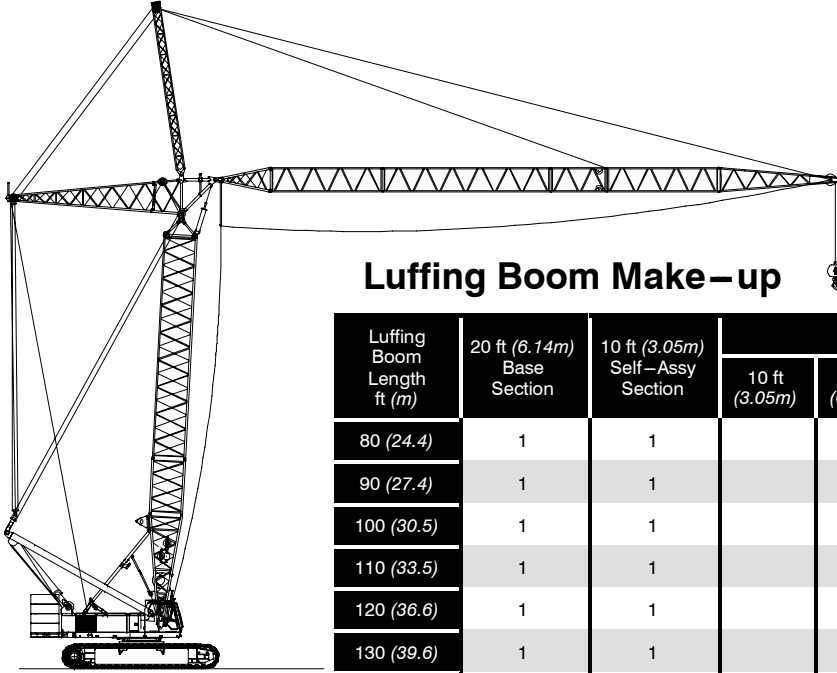
| <b>80 ft (24.4m) Offset Jib Length – 360° Rotation</b><br>[All capacities are listed in kips (mt)] |                         |             |             |            |            |                    |                         |            |            |            |            |                    |                         |            |            |            |            |
|--|-------------------------|-------------|-------------|------------|------------|--------------------|-------------------------|------------|------------|------------|------------|--------------------|-------------------------|------------|------------|------------|------------|
| 5° Offset  |                         |             |             |            |            | 15° Offset         |                         |            |            |            |            | 25° Offset         |                         |            |            |            |            |
| Load Radius ft (m)   | Main Boom Length ft (m) |             |             |            |            | Load Radius ft (m) | Main Boom Length ft (m) |            |            |            |            | Load Radius ft (m) | Main Boom Length ft (m) |            |            |            |            |
|  | ABC+ A Cwt              | ABCD+A Cwt  |             |            |            |                    | ABC+ A Cwt              | ABCD+A Cwt |            |            |            |                    | ABC+ A Cwt              | ABCD+A Cwt |            |            |            |
|  | 50 (15.2)               | 100 (30.5)  | 150 (45.7)  | 200 (61.0) | 240 (73.2) |                    | 50 (15.2)               | 100 (30.5) | 150 (45.7) | 200 (61.0) | 240 (73.2) |                    | 50 (15.2)               | 100 (30.5) | 150 (45.7) | 200 (61.0) | 240 (73.2) |
| 30 (9.1)   | 24.6 (11.1)             |             |             |            |            | 30 (9.1)           |                         |            |            |            |            | 30 (9.1)           |                         |            |            |            |            |
| 40 (12.2)  | 23.6 (10.7)             | 23.6 (10.7) |             |            |            | 40 (12.2)          |                         |            |            |            |            | 40 (12.2)          |                         |            |            |            |            |
| 50 (15.2)  | 22.6 (10.2)             | 23.0 (10.4) | 22.5 (10.2) | 21.1 (9.5) |            | 50 (15.2)          | 21.8 (9.8)              | 21.9 (9.9) |            |            |            | 50 (15.2)          |                         |            |            |            |            |
| 60 (18.3)  | 21.7 (9.8)              | 22.4 (10.1) | 22.2 (10.0) | 21.0 (9.5) | 19.5 (8.8) | 60 (18.3)          | 19.5 (8.8)              | 21.4 (9.7) | 21.1 (9.5) |            |            | 60 (18.3)          | 15.3 (6.9)              |            |            |            |            |
| 70 (21.3)  | 20.6 (9.3)              | 21.8 (9.8)  | 21.8 (9.8)  | 20.9 (9.4) | 19.4 (8.8) | 70 (21.3)          | 16.9 (7.6)              | 20.4 (9.2) | 20.7 (9.3) | 20.1 (9.1) | 18.9 (8.5) | 70 (21.3)          | 13.4 (6.0)              | 15.1 (6.8) | 16.1 (7.3) |            |            |
| 80 (24.4)  | 17.9 (8.1)              | 21.2 (9.6)  | 21.4 (9.7)  | 20.7 (9.3) | 19.2 (8.7) | 80 (24.4)          | 14.8 (6.7)              | 18.2 (8.2) | 20.3 (9.2) | 19.8 (8.9) | 18.6 (8.4) | 80 (24.4)          | 12.0 (5.4)              | 13.8 (6.2) | 14.9 (6.7) | 15.7 (7.1) |            |
| 90 (27.4)  | 15.8 (7.1)              | 20.5 (9.3)  | 21.0 (9.5)  | 20.4 (9.2) | 19.1 (8.6) | 90 (27.4)          | 13.2 (5.9)              | 16.5 (7.4) | 19.0 (8.6) | 19.5 (8.8) | 18.4 (8.3) | 90 (27.4)          | 10.8 (4.9)              | 12.6 (5.7) | 13.9 (6.3) | 14.8 (6.7) | 15.3 (6.9) |
| 100 (30.5)   | 14.0 (6.3)              | 19.1 (8.6)  | 20.6 (9.3)  | 20.1 (9.1) | 19.0 (8.6) | 100 (30.5)         | 11.9 (5.4)              | 15.0 (6.8) | 17.5 (7.9) | 19.2 (8.7) | 18.1 (8.2) | 100 (30.5)         | 9.9 (4.5)               | 11.7 (5.3) | 13.0 (5.9) | 13.9 (6.3) | 14.5 (6.5) |
| 120 (36.6)   | 11.5 (5.2)              | 15.8 (7.1)  | 19.6 (8.9)  | 19.5 (8.8) | 18.6 (8.4) | 120 (36.6)         | 10.1 (4.5)              | 12.8 (5.8) | 15.1 (6.8) | 17.0 (7.7) | 17.7 (8.0) | 120 (36.6)         |                         | 10.3 (4.6) | 11.5 (5.2) | 12.5 (5.6) | 13.1 (5.9) |
| 140 (42.7)   |                         | 13.4 (6.0)  | 16.9 (7.6)  | 19.0 (8.6) | 18.1 (8.2) | 140 (42.7)         |                         | 11.2 (5.0) | 13.3 (6.0) | 15.1 (6.8) | 16.4 (7.4) | 140 (42.7)         |                         | 9.2 (4.1)  | 10.4 (4.7) | 11.4 (5.1) | 12.0 (5.4) |
| 160 (48.8)   |                         | 11.7 (5.3)  | 14.7 (6.6)  | 16.0 (7.2) | 14.0 (6.3) | 160 (48.8)         |                         | 10.0 (4.5) | 11.9 (5.4) | 13.6 (6.1) | 14.8 (6.7) | 160 (48.8)         |                         |            | 9.5 (4.3)  | 10.5 (4.7) | 11.1 (5.0) |
| 180 (54.9)   |                         |             | 13.0 (5.9)  | 12.6 (5.7) | 10.6 (4.8) | 180 (54.9)         |                         |            | 10.8 (4.9) | 12.4 (5.6) | 11.4 (5.1) | 180 (54.9)         |                         |            | 8.9 (4.0)  | 9.7 (4.4)  | 10.3 (4.6) |
| 200 (61.0)   |                         |             | 11.7 (5.3)  | 10.0 (4.5) | 8.0 (3.6)  | 200 (61.0)         |                         |            | 10.0 (4.5) | 10.5 (4.7) | 8.7 (3.9)  | 200 (61.0)         |                         |            |            | 9.1 (4.1)  | 9.2 (4.1)  |
| 220 (67.1)   |                         |             |             | 7.8 (3.5)  | 5.9 (2.6)  | 220 (67.1)         |                         |            |            | 8.2 (3.7)  | 6.4 (2.9)  | 220 (67.1)         |                         |            |            | 8.5 (3.8)  | 6.9 (3.1)  |
| 240 (73.2)   |                         |             |             | 6.0 (2.7)  | 4.2 (1.9)  | 240 (73.2)         |                         |            |            | 6.3 (2.8)  | 4.6 (2.0)  | 240 (73.2)         |                         |            |            |            | 5.0 (2.2)  |
| 260 (79.2)   |                         |             |             | 4.5 (2.0)  | 2.7 (1.2)  | 260 (79.2)         |                         |            |            |            | 3.0 (1.3)  | 260 (79.2)         |                         |            |            |            |            |

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| 100 ft (30.5m) Offset Jib Length – 360° Rotation<br>[All capacities are listed in kips (mt)] |                         |               |               |               |               |                       |                         |               |               |               |               |                       |                         |               |               |               |               |
|--|-------------------------|---------------|---------------|---------------|---------------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|-----------------------|-------------------------|---------------|---------------|---------------|---------------|
| 5° Offset  |                         |               |               |               |               | 15° Offset            |                         |               |               |               |               | 25° Offset            |                         |               |               |               |               |
| Load Radius<br>ft (m)  | Main Boom Length ft (m) |               |               |               |               | Load Radius<br>ft (m) | Main Boom Length ft (m) |               |               |               |               | Load Radius<br>ft (m) | Main Boom Length ft (m) |               |               |               |               |
|  | ABC+A Cwt               | ABCD+A Cwt    |               |               |               |                       | ABC+A Cwt               | ABCD+A Cwt    |               |               |               |                       | ABC+A Cwt               | ABCD+A Cwt    |               |               |               |
|  | 50<br>(15.2)            | 100<br>(30.5) | 150<br>(45.7) | 200<br>(61.0) | 240<br>(73.2) |                       | 50<br>(15.2)            | 100<br>(30.5) | 150<br>(45.7) | 200<br>(61.0) | 240<br>(73.2) |                       | 50<br>(15.2)            | 100<br>(30.5) | 150<br>(45.7) | 200<br>(61.0) | 240<br>(73.2) |
| 40<br>(12.2)   | 11.5<br>(5.2)           |               |               |               |               | 40<br>(12.2)          |                         |               |               |               |               | 40<br>(12.2)          |                         |               |               |               |               |
| 50<br>(15.2)   | 10.5<br>(4.7)           | 11.3<br>(5.1) | 11.6<br>(5.2) |               |               | 50<br>(15.2)          | 9.6<br>(4.3)            |               |               |               |               | 50<br>(15.2)          |                         |               |               |               |               |
| 60<br>(18.3)   | 9.5<br>(4.3)            | 10.5<br>(4.7) | 11.0<br>(4.9) | 11.1<br>(5.0) | 11.1<br>(5.0) | 60<br>(18.3)          | 8.7<br>(3.9)            | 9.2<br>(4.1)  |               |               |               | 60<br>(18.3)          |                         |               |               |               |               |
| 70<br>(21.3)   | 8.6<br>(3.9)            | 9.7<br>(4.4)  | 10.4<br>(4.7) | 10.6<br>(4.8) | 10.6<br>(4.8) | 70<br>(21.3)          | 7.9<br>(3.5)            | 8.6<br>(3.9)  | 8.9<br>(4.0)  |               |               | 70<br>(21.3)          | 7.3<br>(3.3)            |               |               |               |               |
| 80<br>(24.4)   | 7.8<br>(3.5)            | 9.1<br>(4.1)  | 9.8<br>(4.4)  | 10.2<br>(4.6) | 10.2<br>(4.6) | 80<br>(24.4)          | 7.2<br>(3.2)            | 8.0<br>(3.6)  | 8.5<br>(3.8)  | 8.7<br>(3.9)  | 8.7<br>(3.9)  | 80<br>(24.4)          | 6.7<br>(3.0)            | 7.1<br>(3.2)  | 7.3<br>(3.3)  |               |               |
| 90<br>(27.4)   | 7.1<br>(3.2)            | 8.4<br>(3.8)  | 9.2<br>(4.1)  | 9.7<br>(4.4)  | 9.8<br>(4.4)  | 90<br>(27.4)          | 6.6<br>(3.0)            | 7.5<br>(3.4)  | 8.0<br>(3.6)  | 8.3<br>(3.7)  | 8.3<br>(3.7)  | 90<br>(27.4)          | 6.1<br>(2.7)            | 6.7<br>(3.0)  | 7.0<br>(3.1)  | 7.1<br>(3.2)  |               |
| 100<br>(30.5)  | 6.5<br>(2.9)            | 7.9<br>(3.5)  | 8.7<br>(3.9)  | 9.3<br>(4.2)  | 9.4<br>(4.2)  | 100<br>(30.5)         | 6.1<br>(2.7)            | 7.0<br>(3.1)  | 7.6<br>(3.4)  | 7.9<br>(3.5)  | 8.0<br>(3.6)  | 100<br>(30.5)         | 5.7<br>(2.5)            | 6.3<br>(2.8)  | 6.6<br>(3.0)  | 6.8<br>(3.0)  |               |
| 120<br>(36.6)  | 5.5<br>(2.5)            | 6.8<br>(3.0)  | 7.8<br>(3.5)  | 8.4<br>(3.8)  | 8.7<br>(3.9)  | 120<br>(36.6)         | 5.2<br>(2.3)            | 6.2<br>(2.8)  | 6.8<br>(3.0)  | 7.2<br>(3.2)  | 7.4<br>(3.3)  | 120<br>(36.6)         | 4.9<br>(2.2)            | 5.6<br>(2.5)  | 6.0<br>(2.7)  | 6.2<br>(2.8)  |               |
| 140<br>(42.7)  | 4.7<br>(2.1)            | 6.0<br>(2.7)  | 7.0<br>(3.1)  | 7.7<br>(3.5)  | 8.0<br>(3.6)  | 140<br>(42.7)         | 4.5<br>(2.0)            | 5.4<br>(2.4)  | 6.1<br>(2.7)  | 6.6<br>(3.0)  | 6.8<br>(3.0)  | 140<br>(42.7)         |                         | 5.0<br>(2.2)  | 5.5<br>(2.5)  | 5.7<br>(2.5)  |               |
| 160<br>(48.8)  |                         | 5.3<br>(2.4)  | 6.3<br>(2.8)  | 7.0<br>(3.1)  | 7.4<br>(3.3)  | 160<br>(48.8)         |                         | 4.9<br>(2.2)  | 5.6<br>(2.5)  | 6.1<br>(2.7)  | 6.3<br>(2.8)  | 160<br>(48.8)         |                         | 4.6<br>(2.0)  | 5.0<br>(2.2)  | 5.3<br>(2.4)  |               |
| 180<br>(54.9)  |                         | 4.7<br>(2.1)  | 5.6<br>(2.5)  | 6.4<br>(2.9)  | 6.8<br>(3.0)  | 180<br>(54.9)         |                         | 4.4<br>(2.0)  | 5.1<br>(2.3)  | 5.6<br>(2.5)  | 5.9<br>(2.6)  | 180<br>(54.9)         |                         |               | 4.6<br>(2.0)  | 5.0<br>(2.2)  |               |
| 200<br>(61.0)  |                         |               | 5.1<br>(2.3)  | 5.9<br>(2.6)  | 6.3<br>(2.8)  | 200<br>(61.0)         |                         |               | 4.7<br>(2.1)  | 5.2<br>(2.3)  | 5.5<br>(2.5)  | 200<br>(61.0)         |                         |               | 4.4<br>(2.0)  | 4.7<br>(2.1)  |               |
| 220<br>(67.1)  |                         |               | 4.7<br>(2.1)  | 5.4<br>(2.4)  | 5.9<br>(2.6)  | 220<br>(67.1)         |                         |               | 4.4<br>(2.0)  | 4.8<br>(2.1)  | 5.1<br>(2.3)  | 220<br>(67.1)         |                         |               |               | 4.4<br>(2.0)  |               |
| 240<br>(73.2)  |                         |               |               | 5.0<br>(2.2)  | 4.5<br>(2.0)  | 240<br>(73.2)         |                         |               |               | 4.5<br>(2.0)  | 4.8<br>(2.1)  | 240<br>(73.2)         |                         |               |               | 4.2<br>(1.9)  |               |
| 260<br>(79.2)  |                         |               |               | 4.6<br>(2.0)  | 3.0<br>(1.3)  | 260<br>(79.2)         |                         |               |               | 4.3<br>(1.9)  | 3.5<br>(1.5)  | 260<br>(79.2)         |                         |               |               |               |               |
| 280<br>(85.3)  |                         |               |               | 3.5<br>(1.5)  |               | 280<br>(85.3)         |                         |               |               |               |               | 280<br>(85.3)         |                         |               |               |               |               |

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# Luffing Attachment Make-up



## Luffing Boom Make-up

| Luffing Boom Length<br>ft (m) | 20 ft (6.14m)<br>Base Section | 10 ft (3.05m)<br>Self-Assy Section | Luffing Boom Extensions |               |               |                |                |
|-------------------------------|-------------------------------|------------------------------------|-------------------------|---------------|---------------|----------------|----------------|
|                               |                               |                                    | 10 ft (3.05m)           | 20 ft (6.14m) | 30 ft (9.10m) | 40 ft (12.19m) | 50 ft (15.24m) |
| 80 (24.4)                     | 1                             | 1                                  |                         |               |               |                | 1              |
| 90 (27.4)                     | 1                             | 1                                  |                         | 1             |               | 1              |                |
| 100 (30.5)                    | 1                             | 1                                  |                         | 1             |               |                | 1              |
| 110 (33.5)                    | 1                             | 1                                  |                         |               | 1             |                | 1              |
| 120 (36.6)                    | 1                             | 1                                  |                         |               |               | 1              | 1              |
| 130 (39.6)                    | 1                             | 1                                  |                         |               |               |                | 2              |
| 140 (42.7)                    | 1                             | 1                                  |                         | 1             |               | 1              | 1              |
| 150 (45.7)                    | 1                             | 1                                  |                         | 1             |               |                | 2              |
| 160 (48.8)                    | 1                             | 1                                  |                         |               | 1             |                | 2              |
| 170 (51.82)                   | 1                             | 1                                  |                         | 1             | 1             | 1              | 1              |
| 180 (54.86)                   | 1                             | 1                                  |                         | 1             | 1             |                | 2              |
| 190 (57.91)                   | 1                             | 1                                  |                         | 1             |               | 1              | 2              |

### Notes:

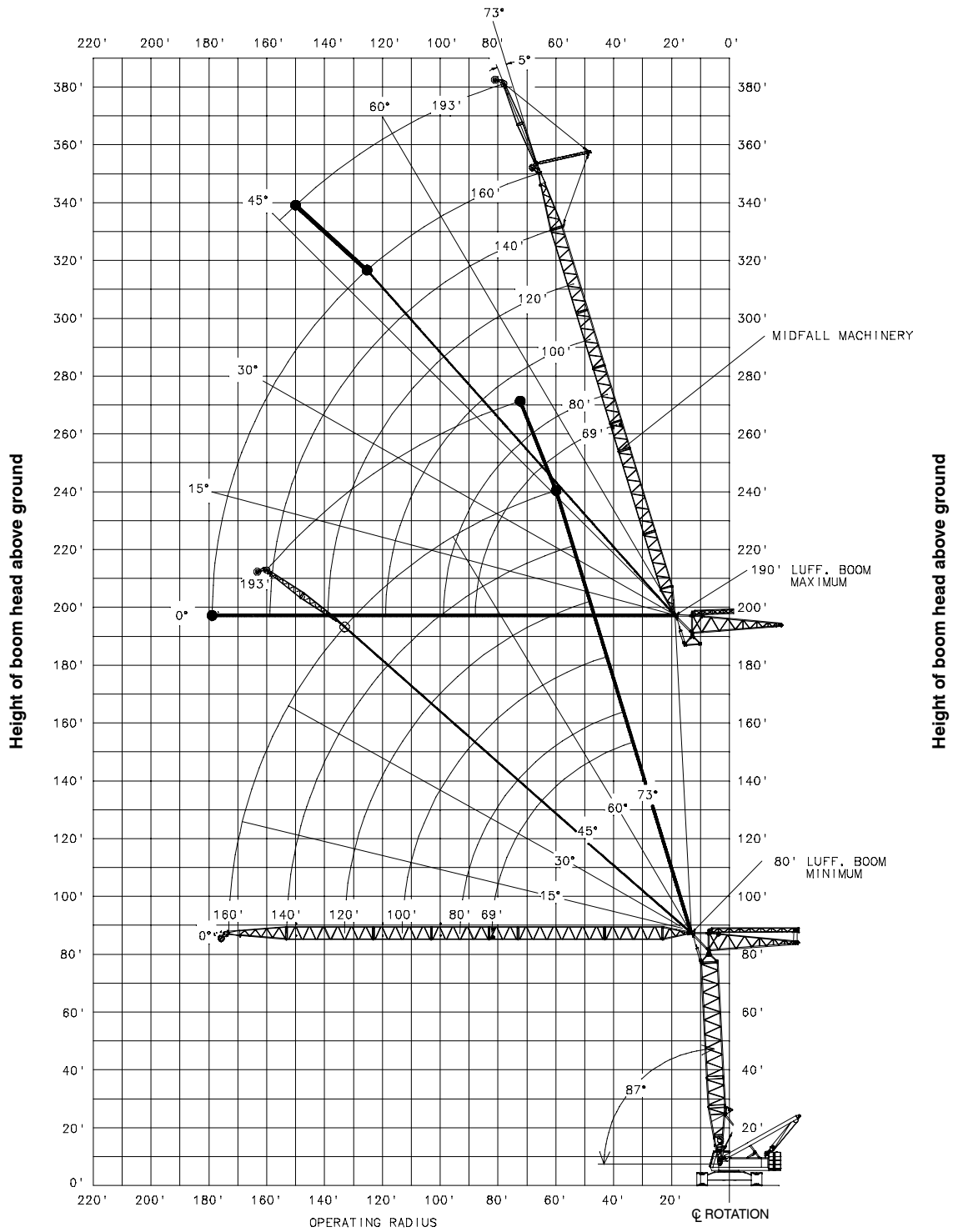
- Capacities shown are in kips/metric tons (1 kip = 1,000 lb / 1 kip = 0.45 metric ton) and are not more than 75% of the tipping loads with the crane standing level on a firm supporting surface. A deduction must be made from these capacities for the weight of the hook block, hook ball, sling, grapple, load weighing devices, etc. When lifting from the luffing jib with the fixed jib installed, reduce capacities by values shown in the Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
- The capacities in the shaded areas are based on structural strength. The capacities in the non-shaded areas are based on stability ratings.
- All luffing attachment combinations require the maximum counterweight combination "ABCD+A".
- Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind on load, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account. Refer to the Crane Rating Manual for Wind Speed Restrictions.
- Refer to the Crane Rating Manual for allowable attachment liftoff lengths and allowable working lengths at the various luffing boom angles.
- The fixed jib has only one length [30 ft (9.14m)] and only one offset with respect to the luffing jib (5°).
- These capacities are in compliance with ASME/ANSI B30.5 at date of manufacture.
- These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

## Luffing Jib Make-up

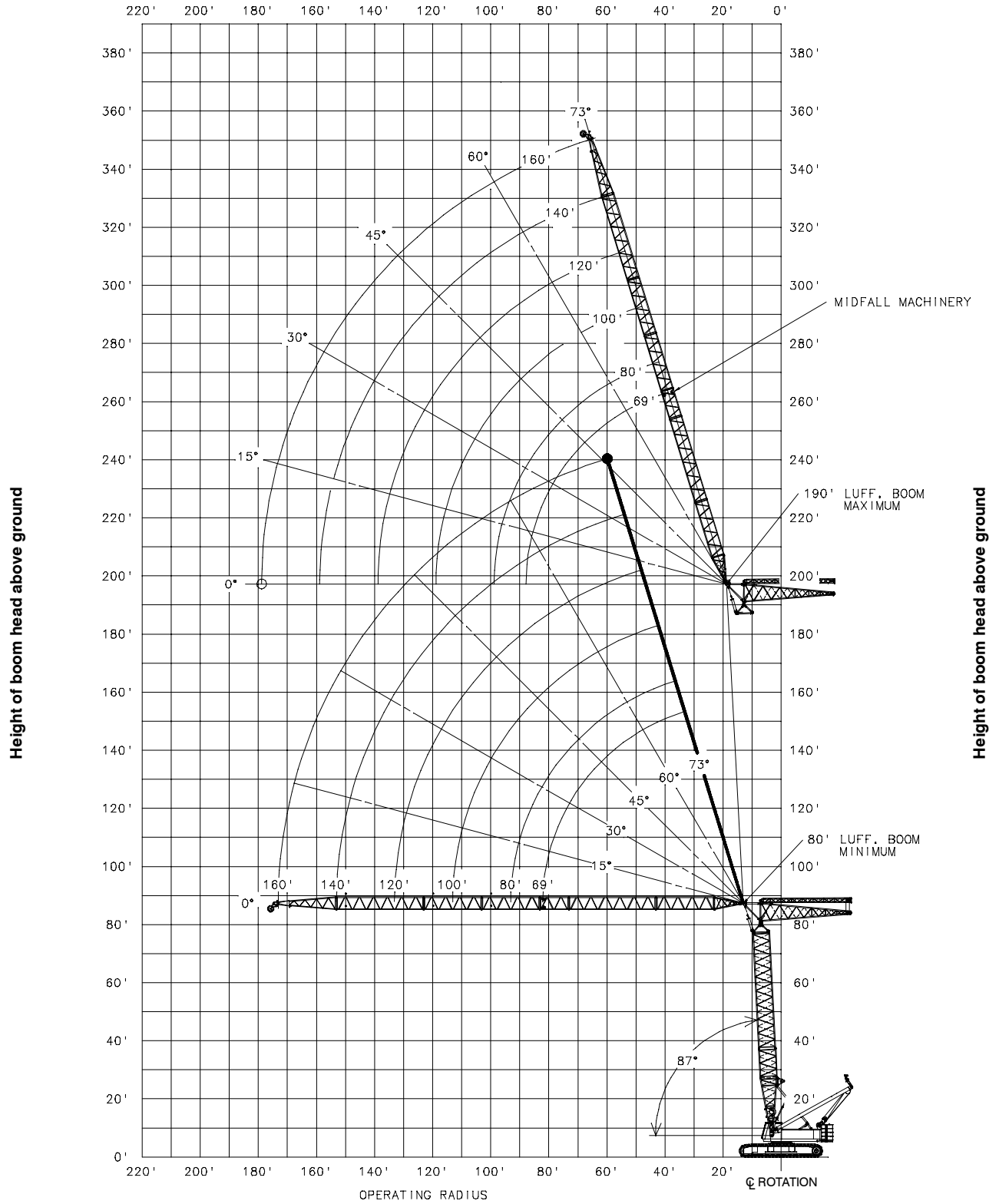
| Luffing Jib Length<br>ft (m) | 10 ft (3.05m)<br>Base Section | Luffing Jib Extensions |               |               |               |               |                | 20 ft (6.14m)<br>Top Section |
|------------------------------|-------------------------------|------------------------|---------------|---------------|---------------|---------------|----------------|------------------------------|
|                              |                               | "H" Extension          |               | Mid-Fall      | "F" Extension |               |                |                              |
|                              |                               | 20 ft (6.14m)          | 30 ft (9.10m) | 10 ft (3.05m) | 20 ft (6.14m) | 30 ft (9.10m) | 40 ft (12.19m) |                              |
| 80 (24.4)                    | 1                             | 1                      | 1             |               |               |               |                | 1                            |
| 90 (27.4)                    | 1                             | 1                      | 1             | 1             |               |               |                | 1                            |
| 100 (30.5)                   | 1                             | 1                      | 1             |               | 1             |               |                | 1                            |
| 110 (33.5)                   | 1                             | 1                      | 1             | 1             | 1             |               |                | 1                            |
| 120 (36.6)                   | 1                             | 1                      | 1             | 1             |               | 1             |                | 1                            |
| 130 (39.6)                   | 1                             | 1                      | 1             | 1             |               |               | 1              | 1                            |
| 140 (42.7)                   | 1                             | 1                      | 1             | 1             | 1             | 1             |                | 1                            |
| 150 (45.7)                   | 1                             | 1                      | 1             | 1             | 1             |               | 1              | 1                            |
| 160 (48.8)                   | 1                             | 1                      | 1             | 1             |               | 1             | 1              | 1                            |

# Luffing Attachment Working Range Diagrams

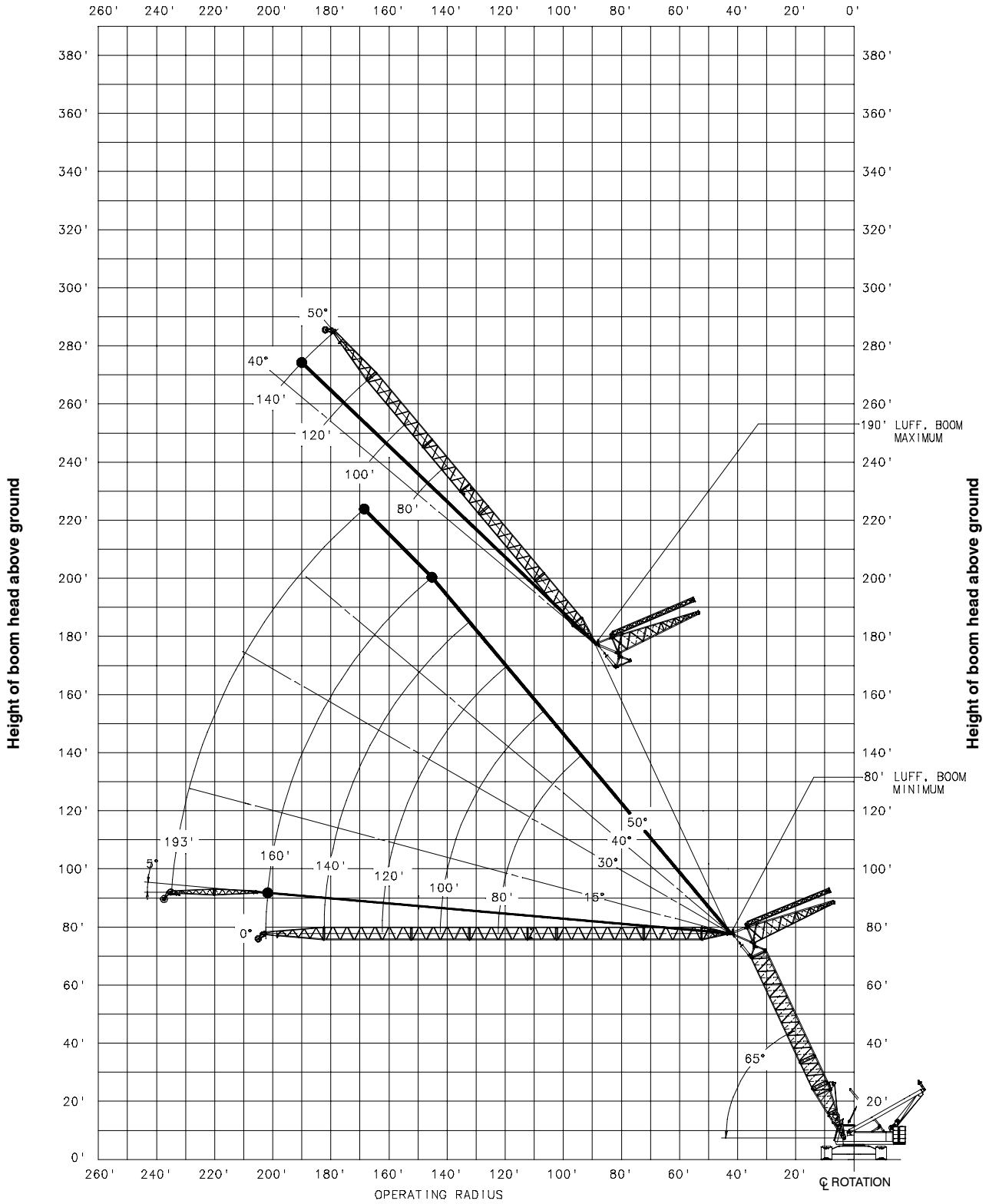
## 87° Luffing Boom Angle – 360°



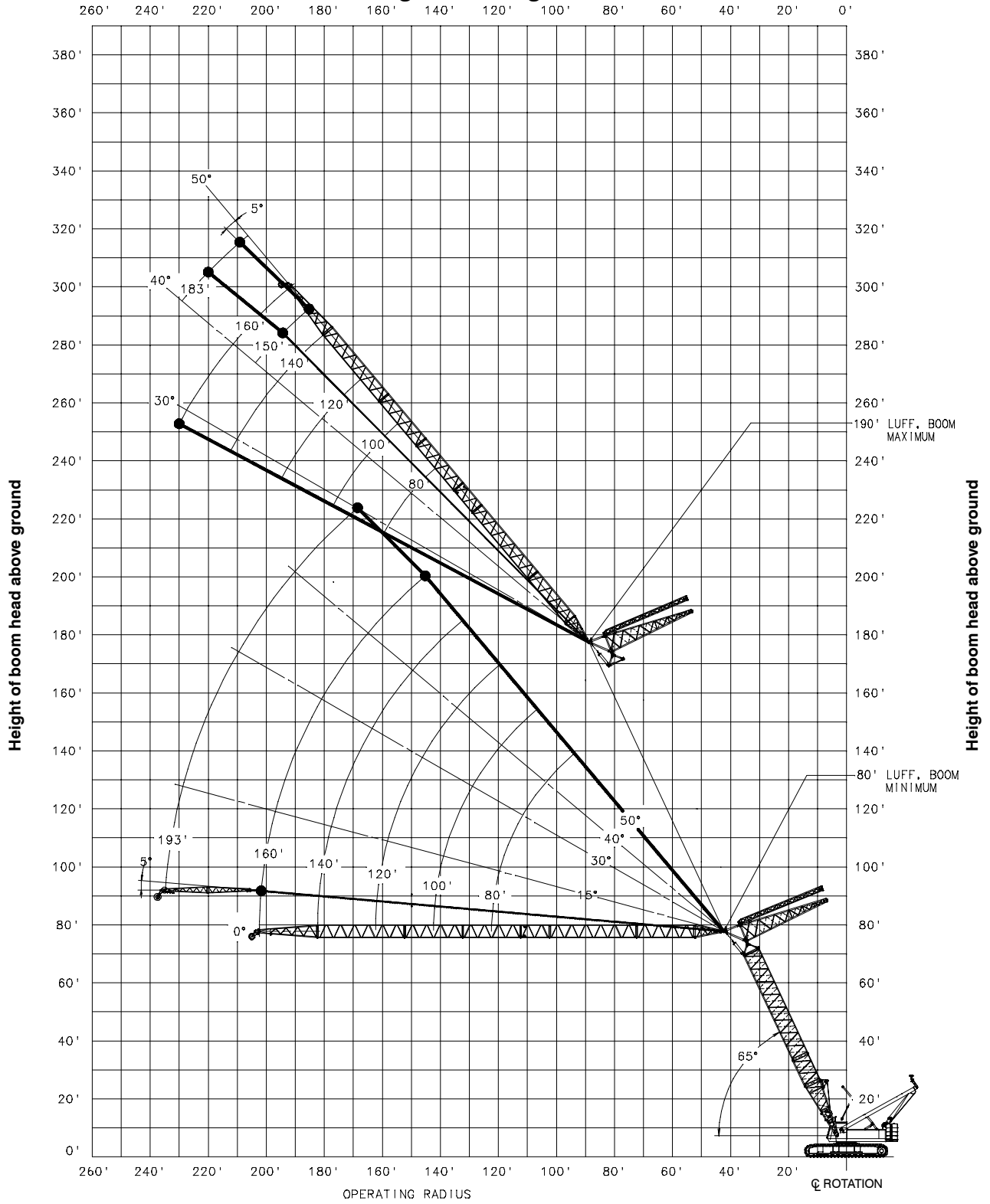
### 87° Luffing Boom Angle – Over End



### 65° Luffing Boom Angle – 360°



### 65° Luffing Boom Angle – Over End



# Luffing Attachment Load Charts

| 80 ft (24.4m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |                |                |                |                                   |                    |                |                |                |                |               |
|--|--------------------|----------------|----------------|----------------|----------------|----------------|-----------------------------------|--------------------|----------------|----------------|----------------|----------------|---------------|
| 80 ft (24.4m) Luffing Jib Length   |                    |                |                |                |                |                | 100 ft (30.5m) Luffing Jib Length |                    |                |                |                |                |               |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |                |                |                | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |                |                |               |
|  | 87°                | 85°            | 80°            | 75°            | 70°            | 65°            |                                   | 87°                | 85°            | 80°            | 75°            | 70°            | 65°           |
| 38<br>(11.6)   | 85.0<br>(38.5)     |                |                |                |                |                | 43<br>(13.1)                      | 68.3<br>(30.9)     |                |                |                |                |               |
| 60<br>(18.3)   | 60.5<br>(27.4)     | 59.9<br>(27.1) | 58.2<br>(26.4) |                |                |                | 60<br>(18.3)                      | 60.0<br>(27.2)     | 59.3<br>(26.9) |                |                |                |               |
| 80<br>(24.4)   | 42.2<br>(19.1)     | 41.7<br>(18.9) | 40.5<br>(18.3) | 39.4<br>(17.8) |                |                | 80<br>(24.4)                      | 41.7<br>(18.9)     | 41.2<br>(18.6) | 40.0<br>(18.1) | 38.8<br>(17.6) |                |               |
| 100<br>(30.5)  |                    |                | 30.5<br>(13.8) | 29.6<br>(13.4) | 28.1<br>(12.7) | 27.3<br>(12.3) | 100<br>(30.5)                     | 31.4<br>(14.2)     | 31.0<br>(14.0) | 30.1<br>(13.6) | 29.1<br>(13.2) | 27.5<br>(12.4) |               |
| 120<br>(36.6)  |                    |                |                |                |                | 21.6<br>(9.8)  | 120<br>(36.6)                     |                    |                | 23.7<br>(10.7) | 22.9<br>(10.3) | 21.7<br>(9.8)  | 21.2<br>(9.6) |
| 123<br>(37.5)  |                    |                |                |                |                | 21.0<br>(9.5)  | 140<br>(42.7)                     |                    |                |                |                |                | 17.2<br>(7.8) |
|  |                    |                |                |                |                |                | 143<br>(43.6)                     |                    |                |                |                |                | 16.7<br>(7.5) |

| 80 ft (24.4m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |                |               |               |                                   |                    |                |                |               |               |               |
|--|--------------------|----------------|----------------|----------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|---------------|---------------|---------------|
| 120 ft (36.6m) Luffing Jib Length  |                    |                |                |                |               |               | 140 ft (42.7m) Luffing Jib Length |                    |                |                |               |               |               |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |                |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |               |               |               |
|  | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |
| 50<br>(15.2)   | 54.1<br>(24.5)     |                |                |                |               |               | 58<br>(17.7)                      | 43.6<br>(19.7)     |                |                |               |               |               |
| 80<br>(24.4)   | 41.2<br>(18.6)     | 40.7<br>(18.4) | 39.4<br>(17.8) |                |               |               | 80<br>(24.4)                      | 40.4<br>(18.3)     | 40.0<br>(18.1) |                |               |               |               |
| 100<br>(30.5)  | 30.9<br>(14.0)     | 30.5<br>(13.8) | 29.5<br>(13.3) | 28.5<br>(12.9) |               |               | 100<br>(30.5)                     | 30.4<br>(13.7)     | 30.0<br>(13.6) | 28.9<br>(13.1) |               |               |               |
| 120<br>(36.6)  | 24.4<br>(11.0)     | 24.0<br>(10.8) | 23.2<br>(10.5) | 22.4<br>(10.1) | 21.3<br>(9.6) | 20.5<br>(9.3) | 120<br>(36.6)                     | 23.9<br>(10.8)     | 23.5<br>(10.6) | 22.7<br>(10.3) | 21.8<br>(9.8) | 20.7<br>(9.3) |               |
| 140<br>(42.7)  |                    |                | 19.0<br>(8.6)  | 18.3<br>(8.3)  | 17.3<br>(7.8) | 16.7<br>(7.5) | 140<br>(42.7)                     | 17.0<br>(7.7)      | 18.9<br>(8.5)  | 18.5<br>(8.4)  | 17.8<br>(8.0) | 16.7<br>(7.5) | 16.0<br>(7.2) |
| 160<br>(48.8)  |                    |                |                |                |               | 13.8<br>(6.2) | 160<br>(48.8)                     |                    |                | 15.3<br>(6.9)  | 14.7<br>(6.6) | 13.8<br>(6.2) | 13.2<br>(5.9) |
| 163<br>(49.7)  |                    |                |                |                |               | 13.4<br>(6.0) | 180<br>(54.9)                     |                    |                |                |               |               | 11.0<br>(4.9) |
|  |                    |                |                |                |               |               | 183<br>(55.8)                     |                    |                |                |               |               | 10.8<br>(4.9) |

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| <b>80 ft (24.4m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |               |  |                    |               |               |               |               |              |
|---|--------------------|----------------|----------------|---------------|---------------|---------------|--|--------------------|---------------|---------------|---------------|---------------|--------------|
| 160 ft (48.8m) Luffing Jib Length   |                    |                |                |               |               |               | 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length |                    |               |               |               |               |              |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |               |               |               | Load Radius<br>ft (m)                                      | Luffing Boom Angle |               |               |               |               |              |
|   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |  | 87°                | 85°           | 80°           | 75°           | 70°           | 65°          |
| 67<br>(20.4)  | 34.7<br>(15.7)     |                |                |               |               |               | 80<br>(24.4)   | 18.0<br>(8.1)      |               |               |               |               |              |
| 80<br>(24.4)  | 33.1<br>(15.0)     | 33.1<br>(15.0) |                |               |               |               | 100<br>(30.5)  | 18.0<br>(8.1)      | 18.0<br>(8.1) |               |               |               |              |
| 100<br>(30.5)   | 29.9<br>(13.5)     | 29.4<br>(13.3) | 28.4<br>(12.8) |               |               |               | 120<br>(36.6)  | 17.8<br>(8.0)      | 18.0<br>(8.1) | 18.0<br>(8.1) |               |               |              |
| 120<br>(36.6)   | 23.3<br>(10.5)     | 23.0<br>(10.4) | 22.1<br>(10.0) | 21.2<br>(9.6) |               |               | 140<br>(42.7)  | 12.4<br>(5.6)      | 15.4<br>(6.9) | 16.2<br>(7.3) | 16.4<br>(7.4) |               |              |
| 140<br>(42.7)   | 14.8<br>(6.7)      | 17.7<br>(8.0)  | 18.0<br>(8.1)  | 17.3<br>(7.8) | 16.1<br>(7.3) |               | 160<br>(48.8)  | 6.7<br>(3.0)       | 9.2<br>(4.1)  | 13.7<br>(6.2) | 13.4<br>(6.0) | 12.3<br>(5.5) |              |
| 160<br>(48.8)   | 9.6<br>(4.3)       | 11.5<br>(5.2)  | 14.8<br>(6.7)  | 14.2<br>(6.4) | 13.2<br>(5.9) | 12.6<br>(5.7) | 180<br>(54.9)  |                    |               | 9.2<br>(4.1)  | 11.0<br>(4.9) | 10.1<br>(4.5) | 9.6<br>(4.3) |
| 180<br>(54.9)   |                    |                | 10.2<br>(4.6)  | 11.8<br>(5.3) | 11.0<br>(4.9) | 10.5<br>(4.7) | 200<br>(61.0)  |                    |               |               | 9.1<br>(4.1)  | 8.4<br>(3.8)  | 7.9<br>(3.5) |
| 200<br>(61.0)   |                    |                |                |               |               | 8.8<br>(4.0)  | 220<br>(67.1)  |                    |               |               |               | 7.0<br>(3.1)  | 6.5<br>(2.9) |
| 203<br>(61.9)   |                    |                |                |               |               | 8.5<br>(3.8)  | 233<br>(71.0)  |                    |               |               |               |               | 5.8<br>(2.6) |

| <b>100 ft (30.5m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |                |                |               |                                   |                    |                |                |                |                |               |
|--|--------------------|----------------|----------------|----------------|----------------|---------------|-----------------------------------|--------------------|----------------|----------------|----------------|----------------|---------------|
| 80 ft (24.4m) Luffing Jib Length   |                    |                |                |                |                |               | 100 ft (30.5m) Luffing Jib Length |                    |                |                |                |                |               |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |                |                |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |                |                |               |
|  | 87°                | 85°            | 80°            | 75°            | 70°            | 65°           |                                   | 87°                | 85°            | 80°            | 75°            | 70°            | 65°           |
| 39<br>(11.9)   | 79.7<br>(36.1)     |                |                |                |                |               | 44<br>(13.4)                      | 64.6<br>(29.3)     |                |                |                |                |               |
| 60<br>(18.3)   | 60.6<br>(27.4)     | 59.7<br>(27.0) | 57.6<br>(26.1) |                |                |               | 60<br>(18.3)                      | 60.0<br>(27.2)     | 59.1<br>(26.8) |                |                |                |               |
| 80<br>(24.4)   | 42.2<br>(19.1)     | 41.6<br>(18.8) | 40.1<br>(18.1) | 38.6<br>(17.5) |                |               | 80<br>(24.4)                      | 41.7<br>(18.9)     | 41.1<br>(18.6) | 29.5<br>(13.3) |                |                |               |
| 100<br>(30.5)  |                    |                | 30.1<br>(13.6) | 29.0<br>(13.1) | 27.1<br>(12.3) |               | 100<br>(30.5)                     | 31.4<br>(14.2)     | 30.9<br>(14.0) | 29.6<br>(13.4) | 28.4<br>(12.8) | 26.4<br>(11.9) |               |
| 120<br>(36.6)  |                    |                |                |                | 21.5<br>(9.7)  | 20.8<br>(9.4) | 120<br>(36.6)                     |                    |                | 23.4<br>(10.6) | 22.4<br>(10.1) | 21.1<br>(9.5)  | 20.1<br>(9.1) |
| 131<br>(39.9)  |                    |                |                |                |                | 18.4<br>(8.3) | 140<br>(42.7)                     |                    |                |                |                | 17.1<br>(7.7)  | 16.4<br>(7.4) |
|  |                    |                |                |                |                |               | 151<br>(46.0)                     |                    |                |                |                |                | 14.7<br>(6.6) |

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| 100 ft (30.5m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |                |               |               |                                   |                    |                |                |               |               |               |
|---|--------------------|----------------|----------------|----------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|---------------|---------------|---------------|
| 120 ft (36.6m) Luffing Jib Length   |                    |                |                |                |               |               | 140 ft (42.7m) Luffing Jib Length |                    |                |                |               |               |               |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |                |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |               |               |               |
|   | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |
| 50<br>(15.2)  | 51.4<br>(23.3)     |                |                |                |               |               | 55<br>(16.8)                      | 41.8<br>(18.9)     |                |                |               |               |               |
| 80<br>(24.4)  | 41.2<br>(18.6)     | 40.6<br>(18.4) | 38.9<br>(17.6) |                |               |               | 80<br>(24.4)                      | 38.5<br>(17.4)     | 38.1<br>(17.2) |                |               |               |               |
| 100<br>(30.5)   | 30.9<br>(14.0)     | 30.4<br>(13.7) | 29.1<br>(13.2) | 27.8<br>(12.6) |               |               | 100<br>(30.5)                     | 30.4<br>(13.7)     | 29.8<br>(13.5) | 28.5<br>(12.9) |               |               |               |
| 120<br>(36.6)   | 24.3<br>(11.0)     | 23.9<br>(10.8) | 22.8<br>(10.3) | 21.8<br>(9.8)  | 20.4<br>(9.2) |               | 120<br>(36.6)                     | 23.8<br>(10.8)     | 23.4<br>(10.6) | 22.3<br>(10.1) | 21.2<br>(9.6) |               |               |
| 140<br>(42.7)   |                    |                | 18.7<br>(8.4)  | 17.8<br>(8.0)  | 16.6<br>(7.5) | 15.8<br>(7.1) | 140<br>(42.7)                     | 16.8<br>(7.6)      | 19.2<br>(8.7)  | 18.2<br>(8.2)  | 17.3<br>(7.8) | 16.0<br>(7.2) | 15.1<br>(6.8) |
| 160<br>(48.8)   |                    |                |                |                | 13.7<br>(6.2) | 13.0<br>(5.9) | 160<br>(48.8)                     |                    |                | 15.0<br>(6.8)  | 14.2<br>(6.4) | 13.1<br>(5.9) | 12.4<br>(5.6) |
| 171<br>(52.1)   |                    |                |                |                |               | 11.7<br>(5.3) | 180<br>(54.9)                     |                    |                |                |               | 11.0<br>(4.9) | 10.3<br>(4.6) |
|   |                    |                |                |                |               |               | 191<br>(58.2)                     |                    |                |                |               |               | 9.3<br>(4.2)  |

| 100 ft (30.5m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |               |  |                    |               |               |               |               |              |
|---|--------------------|----------------|----------------|---------------|---------------|---------------|--|--------------------|---------------|---------------|---------------|---------------|--------------|
| 160 ft (48.8m) Luffing Jib Length   |                    |                |                |               |               |               | 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length |                    |               |               |               |               |              |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |               |               |               | Load Radius<br>ft (m)                                      | Luffing Boom Angle |               |               |               |               |              |
|   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |  | 87°                | 85°           | 80°           | 75°           | 70°           | 65°          |
| 61<br>(18.6)  | 33.4<br>(15.1)     |                |                |               |               |               | 73<br>(22.3)   | 18.0<br>(8.1)      |               |               |               |               |              |
| 80<br>(24.4)  | 31.4<br>(14.2)     | 31.5<br>(14.2) |                |               |               |               | 100<br>(30.5)  | 18.0<br>(8.1)      | 18.0<br>(8.1) |               |               |               |              |
| 100<br>(30.5)   | 29.8<br>(13.5)     | 29.3<br>(13.3) | 27.9<br>(12.6) |               |               |               | 120<br>(36.6)  | 17.3<br>(7.8)      | 17.9<br>(8.1) | 18.0<br>(8.1) |               |               |              |
| 120<br>(36.6)   | 23.2<br>(10.5)     | 22.8<br>(10.3) | 21.7<br>(9.8)  | 20.9<br>(9.4) |               |               | 140<br>(42.7)  | 12.5<br>(5.6)      | 15.1<br>(6.8) | 16.2<br>(7.3) | 15.9<br>(7.2) |               |              |
| 140<br>(42.7)   | 14.8<br>(6.7)      | 18.1<br>(8.2)  | 17.7<br>(8.0)  | 16.8<br>(7.6) | 15.3<br>(6.9) |               | 160<br>(48.8)  | 7.0<br>(3.1)       | 9.8<br>(4.4)  | 13.7<br>(6.2) | 12.9<br>(5.8) | 11.6<br>(5.2) |              |
| 160<br>(48.8)   | 9.8<br>(4.4)       | 11.9<br>(5.4)  | 14.5<br>(6.5)  | 13.7<br>(6.2) | 12.5<br>(5.6) | 11.8<br>(5.3) | 180<br>(54.9)  |                    |               | 11.2<br>(5.0) | 10.6<br>(4.8) | 9.5<br>(4.3)  | 8.8<br>(4.0) |
| 180<br>(54.9)   |                    |                | 11.7<br>(5.3)  | 11.4<br>(5.1) | 10.4<br>(4.7) | 9.7<br>(4.4)  | 200<br>(61.0)  |                    |               | 5.5<br>(2.5)  | 8.8<br>(4.0)  | 7.8<br>(3.5)  | 7.2<br>(3.2) |
| 200<br>(61.0)   |                    |                |                |               | 8.7<br>(3.9)  | 8.1<br>(3.6)  | 220<br>(67.1)  |                    |               |               | 5.1<br>(2.3)  | 6.5<br>(2.9)  | 5.9<br>(2.6) |
| 211<br>(64.3)   |                    |                |                |               |               | 7.3<br>(3.3)  |  |                    |               |               |               |               |              |

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| <b>120 ft (36.6m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |                |                |               |                                   |                    |                |                |                |               |               |
|--|--------------------|----------------|----------------|----------------|----------------|---------------|-----------------------------------|--------------------|----------------|----------------|----------------|---------------|---------------|
| 80 ft (24.4m) Luffing Jib Length   |                    |                |                |                |                |               | 100 ft (30.5m) Luffing Jib Length |                    |                |                |                |               |               |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |                |                |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |                |               |               |
|  | 87°                | 85°            | 80°            | 75°            | 70°            | 65°           |                                   | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |
| 40<br>(12.2)   | 74.3<br>(33.7)     |                |                |                |                |               | 45<br>(13.7)                      | 60.0<br>(27.2)     |                |                |                |               |               |
| 60<br>(18.3)   | 60.5<br>(27.4)     | 59.4<br>(26.9) |                |                |                |               | 60<br>(18.3)                      | 56.1<br>(25.4)     | 56.3<br>(25.5) |                |                |               |               |
| 80<br>(24.4)   | 42.2<br>(19.1)     | 41.4<br>(18.7) | 39.5<br>(17.9) | 37.6<br>(17.0) |                |               | 80<br>(24.4)                      | 41.7<br>(18.9)     | 40.9<br>(18.5) | 38.9<br>(17.6) |                |               |               |
| 100<br>(30.5)  |                    | 31.2<br>(14.1) | 29.7<br>(13.4) | 28.2<br>(12.8) | 26.0<br>(11.8) |               | 100<br>(30.5)                     | 31.3<br>(14.2)     | 30.7<br>(13.9) | 29.2<br>(13.2) | 27.6<br>(12.5) |               |               |
| 120<br>(36.6)  |                    |                |                | 22.2<br>(10.0) | 20.8<br>(9.4)  | 19.7<br>(8.9) | 120<br>(36.6)                     |                    | 24.3<br>(11.0) | 23.0<br>(10.4) | 21.7<br>(9.8)  | 20.1<br>(9.1) |               |
| 139<br>(42.4)  |                    |                |                |                |                | 16.0<br>(7.2) | 140<br>(42.7)                     |                    |                |                | 17.7<br>(8.0)  | 16.4<br>(7.4) | 15.4<br>(6.9) |
|  |                    |                |                |                |                |               | 159<br>(48.5)                     |                    |                |                |                |               | 12.7<br>(5.7) |

| <b>120 ft (36.6m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |                |               |               |                                   |                    |                |                |               |               |               |
|--|--------------------|----------------|----------------|----------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|---------------|---------------|---------------|
| 120 ft (36.6m) Luffing Jib Length  |                    |                |                |                |               |               | 140 ft (42.7m) Luffing Jib Length |                    |                |                |               |               |               |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |                |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |               |               |               |
|  | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |
| 51<br>(15.5)   | 47.1<br>(21.3)     |                |                |                |               |               | 56<br>(17.1)                      | 37.8<br>(17.1)     |                |                |               |               |               |
| 60<br>(18.3)   | 46.2<br>(20.9)     | 46.7<br>(21.1) |                |                |               |               | 80<br>(24.4)                      | 35.3<br>(16.0)     | 36.2<br>(16.4) |                |               |               |               |
| 80<br>(24.4)   | 41.2<br>(18.6)     | 40.3<br>(18.2) | 38.3<br>(17.3) |                |               |               | 100<br>(30.5)                     | 30.3<br>(13.7)     | 29.6<br>(13.4) | 28.0<br>(12.7) |               |               |               |
| 100<br>(30.5)  | 30.9<br>(14.0)     | 30.2<br>(13.7) | 28.6<br>(12.9) | 27.0<br>(12.2) |               |               | 120<br>(36.6)                     | 22.9<br>(10.3)     | 23.2<br>(10.5) | 21.8<br>(9.8)  | 20.8<br>(9.4) |               |               |
| 120<br>(36.6)  | 24.2<br>(10.9)     | 23.7<br>(10.7) | 22.4<br>(10.1) | 21.2<br>(9.6)  | 19.5<br>(8.8) |               | 140<br>(42.7)                     | 15.8<br>(7.1)      | 18.7<br>(8.4)  | 17.9<br>(8.1)  | 16.7<br>(7.5) | 15.1<br>(6.8) |               |
| 140<br>(42.7)  |                    | 19.5<br>(8.8)  | 18.4<br>(8.3)  | 17.3<br>(7.8)  | 15.8<br>(7.1) | 14.7<br>(6.6) | 160<br>(48.8)                     |                    | 12.7<br>(5.7)  | 14.7<br>(6.6)  | 13.7<br>(6.2) | 12.4<br>(5.6) | 11.5<br>(5.2) |
| 160<br>(48.8)  |                    |                |                | 14.2<br>(6.4)  | 13.0<br>(5.9) | 12.1<br>(5.4) | 180<br>(54.9)                     |                    |                |                | 11.4<br>(5.1) | 10.3<br>(4.6) | 9.5<br>(4.3)  |
| 179<br>(54.6)  |                    |                |                |                |               | 10.1<br>(4.5) | 199<br>(60.7)                     |                    |                |                |               |               | 7.9<br>(3.5)  |

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| <b>120 ft (36.6m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |               |  |                    |               |               |               |               |              |
|--|--------------------|----------------|----------------|---------------|---------------|---------------|--|--------------------|---------------|---------------|---------------|---------------|--------------|
| 160 ft (48.8m) Luffing Jib Length  |                    |                |                |               |               |               | 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length |                    |               |               |               |               |              |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |               |               |               | Load Radius<br>ft (m)                                      | Luffing Boom Angle |               |               |               |               |              |
|  | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |  | 87°                | 85°           | 80°           | 75°           | 70°           | 65°          |
| 62<br>(18.9)   | 30.1<br>(13.6)     |                |                |               |               |               | 71<br>(21.6)   | 18.0<br>(8.1)      |               |               |               |               |              |
| 80<br>(24.4)   | 29.3<br>(13.3)     | 29.7<br>(13.4) |                |               |               |               | 100<br>(30.5)  | 18.0<br>(8.1)      | 18.0<br>(8.1) |               |               |               |              |
| 100<br>(30.5)  | 27.6<br>(12.5)     | 27.7<br>(12.5) | 27.3<br>(12.3) |               |               |               | 120<br>(36.6)  | 16.9<br>(7.6)      | 17.5<br>(7.9) | 18.0<br>(8.1) |               |               |              |
| 120<br>(36.6)  | 21.1<br>(9.5)      | 22.7<br>(10.3) | 21.2<br>(9.6)  | 20.2<br>(9.1) |               |               | 140<br>(42.7)  | 12.2<br>(5.5)      | 14.8<br>(6.7) | 16.2<br>(7.3) | 15.3<br>(6.9) |               |              |
| 140<br>(42.7)  | 14.2<br>(6.4)      | 17.5<br>(7.9)  | 17.3<br>(7.8)  | 16.2<br>(7.3) | 14.5<br>(6.5) |               | 160<br>(48.8)  | 7.0<br>(3.1)       | 9.6<br>(4.3)  | 13.4<br>(6.0) | 12.3<br>(5.5) | 10.8<br>(4.9) |              |
| 160<br>(48.8)  | 9.5<br>(4.3)       | 11.5<br>(5.2)  | 14.2<br>(6.4)  | 13.2<br>(5.9) | 11.8<br>(5.3) | 10.8<br>(4.9) | 180<br>(54.9)  |                    |               | 11.0<br>(4.9) | 10.1<br>(4.5) | 8.8<br>(4.0)  |              |
| 180<br>(54.9)  |                    | 7.2<br>(3.2)   | 11.8<br>(5.3)  | 10.9<br>(4.9) | 9.7<br>(4.4)  | 8.9<br>(4.0)  | 200<br>(61.0)  |                    |               | 6.1<br>(2.7)  | 8.3<br>(3.7)  | 7.2<br>(3.2)  | 7.9<br>(3.5) |
| 200<br>(61.0)  |                    |                |                | 9.1<br>(4.1)  | 8.1<br>(3.6)  | 7.3<br>(3.3)  | 220<br>(67.1)  |                    |               |               | 6.8<br>(3.0)  | 8.4<br>(3.8)  | 6.4<br>(2.9) |
| 219<br>(66.8)  |                    |                |                |               |               | 6.1<br>(2.7)  |  |                    |               |               |               |               | 7.7<br>(2.5) |

| <b>140 ft (42.7m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |                |               |               |                                   |                    |                |                |                |               |               |
|--|--------------------|----------------|----------------|----------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|----------------|---------------|---------------|
| 80 ft (24.4m) Luffing Jib Length   |                    |                |                |                |               |               | 100 ft (30.5m) Luffing Jib Length |                    |                |                |                |               |               |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |                |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |                |               |               |
|  | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |
| 41<br>(12.5)   | 64.9<br>(29.4)     |                |                |                |               |               | 46<br>(14.0)                      | 50.9<br>(23.0)     |                |                |                |               |               |
| 60<br>(18.3)   | 56.6<br>(25.6)     | 59.1<br>(26.8) |                |                |               |               | 60<br>(18.3)                      | 48.0<br>(21.7)     | 51.3<br>(23.2) |                |                |               |               |
| 80<br>(24.4)   | 42.1<br>(19.1)     | 41.1<br>(18.6) | 38.8<br>(17.6) |                |               |               | 80<br>(24.4)                      | 41.6<br>(18.8)     | 40.6<br>(18.4) | 38.2<br>(17.3) |                |               |               |
| 100<br>(30.5)  |                    | 30.9<br>(14.0) | 29.2<br>(13.2) | 27.4<br>(12.4) |               |               | 100<br>(30.5)                     | 31.3<br>(14.2)     | 30.5<br>(13.8) | 28.6<br>(12.9) | 26.8<br>(12.1) |               |               |
| 120<br>(36.6)  |                    |                |                | 21.5<br>(9.7)  | 19.8<br>(8.9) | 18.4<br>(8.3) | 120<br>(36.6)                     |                    | 24.0<br>(10.8) | 22.5<br>(10.2) | 21.3<br>(9.6)  | 19.1<br>(8.6) |               |
| 140<br>(42.7)  |                    |                |                |                |               | 14.9<br>(6.7) | 140<br>(42.7)                     |                    |                |                | 17.2<br>(7.8)  | 15.5<br>(7.0) | 14.3<br>(6.4) |
| 148<br>(45.1)  |                    |                |                |                |               | 13.7<br>(6.2) | 160<br>(48.8)                     |                    |                |                |                |               | 11.8<br>(5.3) |
|  |                    |                |                |                |               |               | 168<br>(51.2)                     |                    |                |                |                |               | 10.9<br>(4.9) |

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| 140 ft (42.7m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |               |                                   |                    |                |                |               |               |               |
|---|--------------------|----------------|----------------|---------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|---------------|---------------|---------------|
| 120 ft (36.6m) Luffing Jib Length   |                    |                |                |               |               |               | 140 ft (42.7m) Luffing Jib Length |                    |                |                |               |               |               |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |               |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |               |               |               |
|   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |
| 52<br>(15.8)  | 41.2<br>(18.6)     |                |                |               |               |               | 57<br>(17.4)                      | 33.1<br>(15.0)     |                |                |               |               |               |
| 60<br>(18.3)  | 40.1<br>(18.1)     | 41.7<br>(18.9) |                |               |               |               | 80<br>(24.4)                      | 30.9<br>(14.0)     | 33.1<br>(15.0) |                |               |               |               |
| 80<br>(24.4)  | 36.3<br>(16.4)     | 39.4<br>(17.8) |                |               |               |               | 100<br>(30.5)                     | 27.8<br>(12.6)     | 29.4<br>(13.3) | 27.4<br>(12.4) |               |               |               |
| 100<br>(30.5)   | 30.8<br>(13.9)     | 30.0<br>(13.6) | 28.0<br>(12.7) |               |               |               | 120<br>(36.6)                     | 21.0<br>(9.5)      | 23.0<br>(10.4) | 21.3<br>(9.6)  | 20.1<br>(9.1) |               |               |
| 120<br>(36.6)   | 22.9<br>(10.3)     | 23.5<br>(10.6) | 21.9<br>(9.9)  | 20.7<br>(9.3) |               |               | 140<br>(42.7)                     | 14.7<br>(6.6)      | 17.7<br>(8.0)  | 17.5<br>(7.9)  | 16.1<br>(7.3) | 14.2<br>(6.4) |               |
| 140<br>(42.7)   |                    | 18.9<br>(8.5)  | 18.0<br>(8.1)  | 16.7<br>(7.5) | 14.9<br>(6.7) |               | 160<br>(48.8)                     |                    | 12.3<br>(5.5)  | 14.4<br>(6.5)  | 13.2<br>(5.9) | 11.6<br>(5.2) | 10.5<br>(4.7) |
| 160<br>(48.8)   |                    |                |                | 13.7<br>(6.2) | 12.2<br>(5.5) | 11.1<br>(5.0) | 180<br>(54.9)                     |                    |                |                | 10.9<br>(4.9) | 9.6<br>(4.3)  | 8.6<br>(3.9)  |
| 180<br>(54.9)   |                    |                |                |               |               | 9.2<br>(4.1)  | 200<br>(61.0)                     |                    |                |                |               |               | 7.1<br>(3.2)  |
| 188<br>(57.3)   |                    |                |                |               |               | 8.6<br>(3.9)  | 208<br>(63.4)                     |                    |                |                |               |               | 6.6<br>(3.0)  |

| 140 ft (42.7m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |              |  |                    |               |               |               |              |     |
|---|--------------------|----------------|----------------|---------------|---------------|--------------|--|--------------------|---------------|---------------|---------------|--------------|-----|
| 160 ft (48.8m) Luffing Jib Length   |                    |                |                |               |               |              | 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length |                    |               |               |               |              |     |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |               |               |              | Load Radius<br>ft (m)                                      | Luffing Boom Angle |               |               |               |              |     |
|   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°          |  | 87°                | 85°           | 80°           | 75°           | 70°          | 65° |
| 63<br>(19.2)  | 26.5<br>(12.0)     |                |                |               |               |              | 72<br>(21.9)   | 18.0<br>(8.1)      |               |               |               |              |     |
| 80<br>(24.4)  | 25.5<br>(11.5)     | 26.9<br>(12.2) |                |               |               |              | 100<br>(30.5)  | 18.0<br>(8.1)      | 18.0<br>(8.1) |               |               |              |     |
| 100<br>(30.5)   | 24.1<br>(10.9)     | 25.8<br>(11.7) | 25.7<br>(11.6) |               |               |              | 120<br>(36.6)  | 16.1<br>(7.3)      | 16.9<br>(7.6) | 18.0<br>(8.1) |               |              |     |
| 120<br>(36.6)   | 19.1<br>(8.6)      | 22.4<br>(10.1) | 21.1<br>(9.5)  |               |               |              | 140<br>(42.7)  | 10.8<br>(4.9)      | 14.4<br>(6.5) | 15.8<br>(7.1) | 14.6<br>(6.6) |              |     |
| 140<br>(42.7)   | 13.2<br>(5.9)      | 16.7<br>(7.5)  | 16.9<br>(7.6)  | 15.5<br>(7.0) |               |              | 160<br>(48.8)  | 6.4<br>(2.9)       | 9.0<br>(4.0)  | 13.0<br>(5.9) | 11.7<br>(5.3) |              |     |
| 160<br>(48.8)   | 8.8<br>(4.0)       | 10.9<br>(4.9)  | 13.9<br>(6.3)  | 12.6<br>(5.7) | 11.0<br>(4.9) |              | 180<br>(54.9)  |                    |               | 10.7<br>(4.8) | 9.5<br>(4.3)  | 8.0<br>(3.6) |     |
| 180<br>(54.9)   |                    | 7.0<br>(3.1)   | 11.5<br>(5.2)  | 10.4<br>(4.7) | 9.0<br>(4.0)  | 8.0<br>(3.6) | 200<br>(61.0)  |                    |               | 6.5<br>(2.9)  | 7.8<br>(3.5)  | 6.5<br>(2.9) |     |
| 200<br>(61.0)   |                    |                |                | 8.7<br>(3.9)  | 7.4<br>(3.3)  | 6.5<br>(2.9) | 220<br>(67.1)  |                    |               |               | 6.4<br>(2.9)  | 5.3<br>(2.4) |     |
| 220<br>(67.1)   |                    |                |                |               |               | 5.3<br>(2.4) |  |                    |               |               |               |              |     |

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| 160 ft (48.8m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |                |               |               |                                   |                    |                |                |                |               |               |  |
|---|--------------------|----------------|----------------|----------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|----------------|---------------|---------------|--|
| 80 ft (24.4m) Luffing Jib Length  |                    |                |                |                |               |               | 100 ft (30.5m) Luffing Jib Length |                    |                |                |                |               |               |  |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |                |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |                |               |               |  |
|   | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°            | 70°           | 65°           |  |
| 42<br>(12.8)  | 53.9<br>(24.4)     |                |                |                |               |               | 47<br>(14.3)                      | 43.4<br>(19.6)     |                |                |                |               |               |  |
| 60<br>(18.3)  | 47.4<br>(21.5)     | 51.7<br>(23.4) |                |                |               |               | 60<br>(18.3)                      | 40.9<br>(18.5)     | 43.1<br>(19.5) |                |                |               |               |  |
| 80<br>(24.4)  | 39.7<br>(18.0)     | 40.9<br>(18.5) | 38.1<br>(17.2) |                |               |               | 80<br>(24.4)                      | 35.7<br>(16.2)     | 39.1<br>(17.7) | 37.4<br>(16.9) |                |               |               |  |
| 100<br>(30.5)   |                    | 30.7<br>(13.9) | 28.6<br>(12.9) | 26.4<br>(11.9) |               |               | 100<br>(30.5)                     | 30.1<br>(13.6)     | 30.3<br>(13.7) | 28.0<br>(12.7) | 25.8<br>(11.7) |               |               |  |
| 120<br>(36.6)   |                    |                |                | 21.0<br>(9.5)  | 18.7<br>(8.4) |               | 120<br>(36.6)                     |                    | 23.8<br>(10.8) | 22.0<br>(9.9)  | 20.5<br>(9.3)  | 18.0<br>(8.1) |               |  |
| 140<br>(42.7)   |                    |                |                |                | 15.1<br>(6.8) | 13.8<br>(6.2) | 140<br>(42.7)                     |                    |                |                | 16.5<br>(7.4)  | 14.6<br>(6.6) | 13.1<br>(5.9) |  |
| 156<br>(47.5)   |                    |                |                |                |               | 11.7<br>(5.3) | 160<br>(48.8)                     |                    |                |                |                | 12.0<br>(5.4) | 10.8<br>(4.9) |  |
|   |                    |                |                |                |               |               | 176<br>(53.6)                     |                    |                |                |                |               | 9.2<br>(4.1)  |  |

| 160 ft (48.8m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |               |                                   |                    |                |                |               |               |              |  |
|---|--------------------|----------------|----------------|---------------|---------------|---------------|-----------------------------------|--------------------|----------------|----------------|---------------|---------------|--------------|--|
| 120 ft (36.6m) Luffing Jib Length   |                    |                |                |               |               |               | 140 ft (42.7m) Luffing Jib Length |                    |                |                |               |               |              |  |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |               |               |               | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |               |               |              |  |
|   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°           |                                   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°          |  |
| 52<br>(15.8)  | 35.5<br>(16.1)     |                |                |               |               |               | 58<br>(17.7)                      | 28.4<br>(12.8)     |                |                |               |               |              |  |
| 60<br>(18.3)  | 34.5<br>(15.6)     |                |                |               |               |               | 80<br>(24.4)                      | 26.4<br>(11.9)     | 28.4<br>(12.8) |                |               |               |              |  |
| 80<br>(24.4)  | 31.1<br>(14.1)     | 33.8<br>(15.3) |                |               |               |               | 100<br>(30.5)                     | 24.1<br>(10.9)     | 26.2<br>(11.8) | 26.7<br>(12.1) |               |               |              |  |
| 100<br>(30.5)   | 27.1<br>(12.3)     | 29.7<br>(13.4) | 27.4<br>(12.4) |               |               |               | 120<br>(36.6)                     | 19.2<br>(8.7)      | 22.7<br>(10.3) | 21.2<br>(9.6)  | 19.2<br>(8.7) |               |              |  |
| 120<br>(36.6)   | 20.9<br>(9.4)      | 23.3<br>(10.5) | 21.4<br>(9.7)  | 19.9<br>(9.0) |               |               | 140<br>(42.7)                     | 13.6<br>(6.1)      | 16.6<br>(7.5)  | 17.0<br>(7.7)  | 15.4<br>(6.9) |               |              |  |
| 140<br>(42.7)   |                    | 17.8<br>(8.0)  | 17.6<br>(7.9)  | 16.0<br>(7.2) | 13.9<br>(6.3) |               | 160<br>(48.8)                     |                    | 11.5<br>(5.2)  | 14.0<br>(6.3)  | 12.6<br>(5.7) | 10.7<br>(4.8) |              |  |
| 160<br>(48.8)   |                    |                |                | 13.1<br>(5.9) | 11.4<br>(5.1) | 10.1<br>(4.5) | 180<br>(54.9)                     |                    |                |                | 10.4<br>(4.7) | 8.8<br>(4.0)  | 7.7<br>(3.5) |  |
| 180<br>(54.9)   |                    |                |                |               | 9.4<br>(4.2)  | 8.3<br>(3.7)  | 200<br>(61.0)                     |                    |                |                |               | 7.3<br>(3.3)  | 6.3<br>(2.8) |  |
|   |                    |                |                |               |               | 7.1<br>(3.2)  | 216<br>(65.8)                     |                    |                |                |               |               | 5.3<br>(2.4) |  |

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| <b>160 ft (48.8m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |               |               |               |              |  |                    |               |               |               |              |     |
|--|--------------------|----------------|---------------|---------------|---------------|--------------|--|--------------------|---------------|---------------|---------------|--------------|-----|
| 160 ft (48.8m) Luffing Jib Length  |                    |                |               |               |               |              | 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length |                    |               |               |               |              |     |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |               |               |               |              | Load Radius<br>ft (m)                                      | Luffing Boom Angle |               |               |               |              |     |
|  | 87°                | 85°            | 80°           | 75°           | 70°           | 65°          |  | 87°                | 85°           | 80°           | 75°           | 70°          | 65° |
| 64<br>(19.5)   | 23.2<br>(10.5)     |                |               |               |               |              | 73<br>(22.3)   | 17.4<br>(7.9)      |               |               |               |              |     |
| 80<br>(24.4)   | 22.7<br>(10.3)     | 23.6<br>(10.7) |               |               |               |              | 100<br>(30.5)  | 16.4<br>(7.4)      | 17.5<br>(7.9) |               |               |              |     |
| 100<br>(30.5)  | 20.8<br>(9.4)      | 22.4<br>(10.1) |               |               |               |              | 120<br>(36.6)  | 14.6<br>(6.6)      | 16.1<br>(7.3) | 16.7<br>(7.5) |               |              |     |
| 120<br>(36.6)  | 17.2<br>(7.8)      | 21.0<br>(9.5)  | 20.6<br>(9.3) |               |               |              | 140<br>(42.7)  | 9.7<br>(4.4)       | 13.0<br>(5.9) | 15.3<br>(6.9) |               |              |     |
| 140<br>(42.7)  | 12.2<br>(5.5)      | 15.1<br>(6.8)  | 16.5<br>(7.4) | 14.8<br>(6.7) |               |              | 160<br>(48.8)  | 5.8<br>(2.6)       | 8.3<br>(3.7)  | 12.6<br>(5.7) | 11.1<br>(5.0) |              |     |
| 160<br>(48.8)  | 8.1<br>(3.6)       | 10.3<br>(4.6)  | 13.5<br>(6.1) | 12.0<br>(5.4) | 10.1<br>(4.5) |              | 180<br>(54.9)  |                    |               | 10.3<br>(4.6) | 9.0<br>(4.0)  | 7.2<br>(3.2) |     |
| 180<br>(54.9)  |                    | 6.5<br>(2.9)   | 11.1<br>(5.0) | 9.8<br>(4.4)  | 8.2<br>(3.7)  | 7.0<br>(3.1) | 200<br>(61.0)  |                    |               | 6.6<br>(3.0)  | 7.3<br>(3.3)  | 5.8<br>(2.6) |     |
| 200<br>(61.0)  |                    |                |               | 8.2<br>(3.7)  | 6.7<br>(3.0)  | 5.6<br>(2.5) | 220<br>(67.1)  |                    |               |               | 6.0<br>(2.7)  |              |     |
| 220<br>(67.1)  |                    |                |               |               | 5.5<br>(2.5)  |              | 240<br>(73.2)  |                    |               |               |               |              |     |
| 236<br>(71.9)  |                    |                |               |               |               |              | 250<br>(76.2)  |                    |               |               |               |              |     |

| <b>180 ft (54.9m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |               |               |              |                                   |                    |                |                |               |               |              |
|--|--------------------|----------------|----------------|---------------|---------------|--------------|-----------------------------------|--------------------|----------------|----------------|---------------|---------------|--------------|
| 100 ft (30.5m) Luffing Jib Length  |                    |                |                |               |               |              | 120 ft (36.6m) Luffing Jib Length |                    |                |                |               |               |              |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |               |               |              | Load Radius<br>ft (m)             | Luffing Boom Angle |                |                |               |               |              |
|  | 87°                | 85°            | 80°            | 75°           | 70°           | 65°          |                                   | 87°                | 85°            | 80°            | 75°           | 70°           | 65°          |
| 48<br>(14.6)   | 36.8<br>(16.7)     |                |                |               |               |              | 53<br>(16.2)                      | 30.2<br>(13.7)     |                |                |               |               |              |
| 60<br>(18.3)   | 34.8<br>(15.7)     | 36.6<br>(16.6) |                |               |               |              | 60<br>(18.3)                      | 29.7<br>(13.4)     |                |                |               |               |              |
| 80<br>(24.4)   | 30.1<br>(13.6)     | 33.4<br>(15.1) |                |               |               |              | 80<br>(24.4)                      | 26.1<br>(11.8)     | 29.0<br>(13.1) |                |               |               |              |
| 100<br>(30.5)  | 25.6<br>(11.6)     | 28.5<br>(12.9) | 27.3<br>(12.3) |               |               |              | 100<br>(30.5)                     | 23.0<br>(10.4)     | 25.5<br>(11.5) | 26.7<br>(12.1) |               |               |              |
| 120<br>(36.6)  |                    | 23.5<br>(10.6) | 21.4<br>(9.7)  | 19.6<br>(8.9) |               |              | 120<br>(36.6)                     | 18.9<br>(8.5)      | 22.0<br>(9.9)  | 21.2<br>(9.6)  | 19.0<br>(8.6) |               |              |
| 140<br>(42.7)  |                    |                | 17.6<br>(7.9)  | 15.8<br>(7.1) | 13.5<br>(6.1) |              | 140<br>(42.7)                     |                    | 16.4<br>(7.4)  | 17.1<br>(7.7)  | 15.2<br>(6.9) | 12.8<br>(5.8) |              |
| 160<br>(48.8)  |                    |                |                |               | 11.1<br>(5.0) | 9.7<br>(4.4) | 160<br>(48.8)                     |                    |                | 14.1<br>(6.4)  | 12.5<br>(5.6) | 10.5<br>(4.7) | 9.0<br>(4.0) |
| 180<br>(54.9)  |                    |                |                |               |               | 7.9<br>(3.5) | 180<br>(54.9)                     |                    |                |                |               | 8.6<br>(3.9)  | 7.3<br>(3.3) |
| 185<br>(53.4)  |                    |                |                |               |               | 7.5<br>(3.4) | 200<br>(61.0)                     |                    |                |                |               |               | 6.0<br>(2.7) |
|  |                    |                |                |               |               |              | 205<br>(62.5)                     |                    |                |                |               |               | 5.7<br>(2.5) |

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| <b>180 ft (54.9m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |                |                |               |              |              |                                   |                    |               |               |               |              |  |
|--|--------------------|----------------|----------------|---------------|--------------|--------------|-----------------------------------|--------------------|---------------|---------------|---------------|--------------|--|
| 140 ft (42.7m) Luffing Jib Length  |                    |                |                |               |              |              | 160 ft (48.8m) Luffing Jib Length |                    |               |               |               |              |  |
| Load Radius<br>ft (m)  | Luffing Boom Angle |                |                |               |              |              | Load Radius<br>ft (m)             | Luffing Boom Angle |               |               |               |              |  |
|  | 87°                | 85°            | 80°            | 75°           | 70°          | 65°          |                                   | 87°                | 85°           | 80°           | 75°           | 70°          |  |
| 59<br>(18.0)   | 24.4<br>(11.0)     |                |                |               |              |              | 65<br>(19.8)                      | 20.2<br>(9.1)      |               |               |               |              |  |
| 80<br>(24.4)   | 22.8<br>(10.3)     | 24.5<br>(11.1) |                |               |              |              | 80<br>(24.4)                      | 19.5<br>(8.8)      | 20.5<br>(9.3) |               |               |              |  |
| 100<br>(30.5)  | 20.5<br>(9.3)      | 22.4<br>(10.1) | 25.0<br>(11.3) |               |              |              | 100<br>(30.5)                     | 17.9<br>(8.1)      | 19.6<br>(8.9) |               |               |              |  |
| 120<br>(36.6)  | 17.0<br>(7.7)      | 20.2<br>(9.1)  | 20.6<br>(9.3)  |               |              |              | 120<br>(36.6)                     | 15.3<br>(6.9)      | 17.9<br>(8.1) | 19.3<br>(8.7) |               |              |  |
| 140<br>(42.7)  | 12.5<br>(5.6)      | 14.8<br>(6.7)  | 16.5<br>(7.4)  | 14.6<br>(6.6) |              |              | 140<br>(42.7)                     | 10.8<br>(4.9)      | 13.6<br>(6.1) | 16.0<br>(7.2) | 14.0<br>(6.3) |              |  |
| 160<br>(48.8)  |                    | 10.6<br>(4.8)  | 13.6<br>(6.1)  | 11.9<br>(5.4) | 9.8<br>(4.4) |              | 160<br>(48.8)                     | 7.1<br>(3.2)       | 9.4<br>(4.2)  | 13.0<br>(5.9) | 11.3<br>(5.1) | 9.1<br>(4.1) |  |
| 180<br>(54.9)  |                    |                | 11.3<br>(5.1)  | 9.8<br>(4.4)  | 8.0<br>(3.6) | 6.6<br>(3.0) | 180<br>(54.9)                     |                    | 5.9<br>(2.6)  | 10.8<br>(4.9) | 9.2<br>(4.1)  | 7.3<br>(3.3) |  |
| 200<br>(61.0)  |                    |                |                |               | 6.6<br>(3.0) | 5.3<br>(2.4) | 200<br>(61.0)                     |                    |               | 7.0<br>(3.1)  | 7.6<br>(3.4)  | 5.9<br>(2.6) |  |

| <b>180 ft (54.9m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                    |               |               |               |  |  |  |  |  |  |  |  |  |
|--|--------------------|---------------|---------------|---------------|--|--|--|--|--|--|--|--|--|
| 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length   |                    |               |               |               |  |  |  |  |  |  |  |  |  |
| Load Radius<br>ft (m)  | Luffing Boom Angle |               |               |               |  |  |  |  |  |  |  |  |  |
|  | 87°                | 85°           | 80°           | 75°           |  |  |  |  |  |  |  |  |  |
| 74<br>(22.6)   | 15.1<br>(6.8)      |               |               |               |  |  |  |  |  |  |  |  |  |
| 100<br>(30.5)  | 14.4<br>(6.5)      | 15.4<br>(6.9) |               |               |  |  |  |  |  |  |  |  |  |
| 120<br>(36.6)  | 12.7<br>(5.7)      | 14.0<br>(6.3) | 14.8<br>(6.7) |               |  |  |  |  |  |  |  |  |  |
| 140<br>(42.7)  | 8.5<br>(3.8)       | 11.5<br>(5.2) | 13.2<br>(5.9) |               |  |  |  |  |  |  |  |  |  |
| 160<br>(48.8)  | 5.0<br>(2.2)       | 7.4<br>(3.3)  | 11.7<br>(5.3) | 10.3<br>(4.6) |  |  |  |  |  |  |  |  |  |
| 180<br>(54.9)  |                    |               | 9.9<br>(4.5)  | 8.3<br>(3.7)  |  |  |  |  |  |  |  |  |  |
| 200<br>(61.0)  |                    |               | 6.1<br>(2.7)  | 6.7<br>(3.0)  |  |  |  |  |  |  |  |  |  |
| 220<br>(67.1)  |                    |               |               | 5.4<br>(2.4)  |  |  |  |  |  |  |  |  |  |

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| 190 ft (57.9m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |                |                |               |              |              |                                   |                    |               |               |               |              |     |
|---|--------------------|----------------|----------------|---------------|--------------|--------------|-----------------------------------|--------------------|---------------|---------------|---------------|--------------|-----|
| 140 ft (42.7m) Luffing Jib Length   |                    |                |                |               |              |              | 160 ft (48.8m) Luffing Jib Length |                    |               |               |               |              |     |
| Load Radius<br>ft (m)   | Luffing Boom Angle |                |                |               |              |              | Load Radius<br>ft (m)             | Luffing Boom Angle |               |               |               |              |     |
|   | 87°                | 85°            | 80°            | 75°           | 70°          | 65°          |                                   | 87°                | 85°           | 80°           | 75°           | 70°          | 65° |
| 60<br>(18.3)  | 22.6<br>(10.2)     |                |                |               |              |              | 65<br>(19.8)                      | 18.8<br>(8.5)      |               |               |               |              |     |
| 80<br>(24.4)  | 21.2<br>(9.6)      | 22.7<br>(10.3) |                |               |              |              | 80<br>(24.4)                      | 18.1<br>(8.2)      | 19.1<br>(8.6) |               |               |              |     |
| 100<br>(30.5)   | 19.0<br>(8.6)      | 20.9<br>(9.4)  | 22.9<br>(10.3) |               |              |              | 100<br>(30.5)                     | 16.7<br>(7.5)      | 18.2<br>(8.2) |               |               |              |     |
| 120<br>(36.6)   | 16.1<br>(7.3)      | 19.0<br>(8.6)  | 20.3<br>(9.2)  |               |              |              | 120<br>(36.6)                     | 14.4<br>(6.5)      | 16.5<br>(7.4) | 17.6<br>(7.9) |               |              |     |
| 140<br>(42.7)   | 11.7<br>(5.3)      | 14.0<br>(6.3)  | 16.3<br>(7.4)  | 14.2<br>(6.4) |              |              | 140<br>(42.7)                     | 10.1<br>(4.5)      | 12.8<br>(5.8) | 15.6<br>(7.0) | 13.6<br>(6.1) |              |     |
| 160<br>(48.8)   |                    | 10.1<br>(4.5)  | 13.3<br>(6.0)  | 11.5<br>(5.2) | 9.3<br>(4.2) |              | 160<br>(48.8)                     | 6.7<br>(3.0)       | 8.8<br>(4.0)  | 12.8<br>(5.8) | 10.9<br>(4.9) |              |     |
| 180<br>(54.9)   |                    |                | 11.1<br>(5.0)  | 9.5<br>(4.3)  | 7.6<br>(3.4) | 6.1<br>(2.7) | 180<br>(54.9)                     |                    | 5.6<br>(2.5)  | 10.5<br>(4.7) | 8.9<br>(4.0)  | 6.9<br>(3.1) |     |
| 200<br>(61.0)   |                    |                |                |               | 6.2<br>(2.8) |              | 200<br>(61.0)                     |                    |               | 6.9<br>(3.1)  | 7.3<br>(3.3)  | 5.5<br>(2.5) |     |

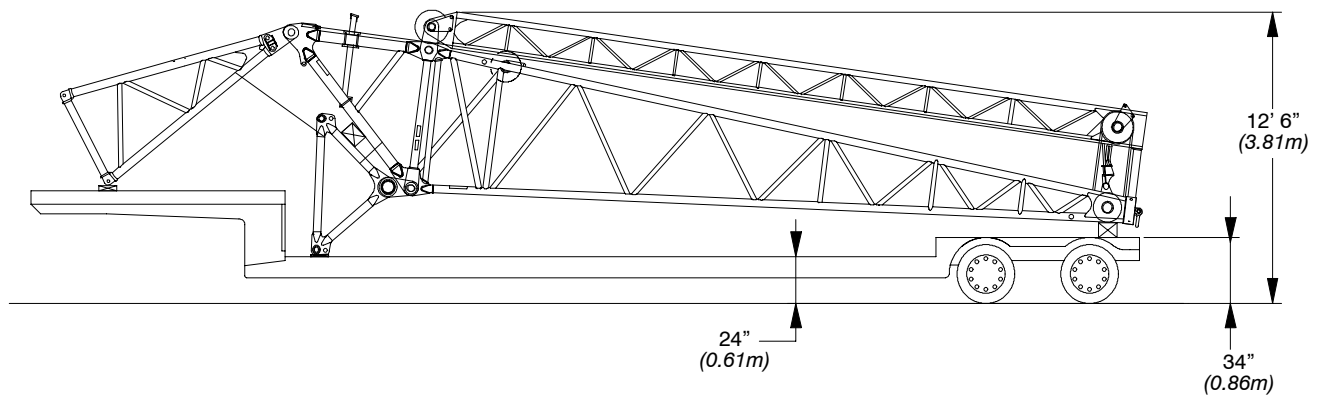
| 190 ft (57.9m) Luffing Boom Length – 360° Rotation – ABCD + A Counterweight<br>[All capacities are listed in kips (mt)] |                    |               |               |               |     |     |  |  |  |  |  |  |  |
|---|--------------------|---------------|---------------|---------------|-----|-----|--|--|--|--|--|--|--|
| 160 ft (48.8m) Luffing Jib + 30 ft (9.1m) Fixed Jib Length  |                    |               |               |               |     |     |  |  |  |  |  |  |  |
| Load Radius<br>ft (m)   | Luffing Boom Angle |               |               |               |     |     |  |  |  |  |  |  |  |
|   | 87°                | 85°           | 80°           | 75°           | 70° | 65° |  |  |  |  |  |  |  |
| 74<br>(22.6)  | 14.1<br>(6.4)      |               |               |               |     |     |  |  |  |  |  |  |  |
| 80<br>(24.4)  | 14.1<br>(6.4)      |               |               |               |     |     |  |  |  |  |  |  |  |
| 100<br>(30.5)   | 13.3<br>(6.0)      | 14.3<br>(6.4) |               |               |     |     |  |  |  |  |  |  |  |
| 120<br>(36.6)   | 11.6<br>(5.2)      | 12.8<br>(5.8) | 13.4<br>(6.0) |               |     |     |  |  |  |  |  |  |  |
| 140<br>(42.7)   | 7.8<br>(3.5)       | 10.5<br>(4.7) | 12.0<br>(5.4) |               |     |     |  |  |  |  |  |  |  |
| 160<br>(48.8)   |                    | 6.9<br>(3.1)  | 10.5<br>(4.7) | 10.0<br>(4.5) |     |     |  |  |  |  |  |  |  |
| 180<br>(54.9)   |                    |               | 9.2<br>(4.1)  | 8.0<br>(3.6)  |     |     |  |  |  |  |  |  |  |
| 200<br>(61.0)   |                    |               | 5.9<br>(2.6)  | 6.4<br>(2.9)  |     |     |  |  |  |  |  |  |  |
| 220<br>(67.1)   |                    |               |               | 5.2<br>(2.3)  |     |     |  |  |  |  |  |  |  |

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| <b>Midfall Capacities – 360° Rotation – ABCD + A Counterweight</b><br>[All capacities are listed in kips (mt)] |                              |                      |   |                       |   |
|--|------------------------------|----------------------|---|-----------------------|---|
| Luffing Boom Length<br>ft (m)  | Luffing Jib Length<br>ft (m) | Radii<br>ft (m)      | Capacities with 87°<br>Luffing Boom Angle | Radii<br>ft (m)       | Capacities with 80°<br>Luffing Boom Angle |
| 80<br>(24.4)   | 110–160<br>(33.5–48.8)       | 36–50<br>(11.0–15.2) | 15.0<br>(6.8)                             | 53–60<br>(16.2–18.3)  | 15.0<br>(6.8)                             |
|  |                              | 50–65<br>(15.2–19.8) | 10.0<br>(4.5)                             | 60–75<br>(18.3–22.9)  | 10.0<br>(4.5)                             |
|  |                              | 65–83<br>(19.8–25.3) | 7.5<br>(3.4)                              | 75–92<br>(22.9–28.0)  | 7.5<br>(3.4)                              |
| 100<br>(30.5)  | 110–160<br>(33.5–48.8)       | 37–50<br>(11.3–15.2) | 15.0<br>(6.8)                             | 56–60<br>(17.1–18.3)  | 15.0<br>(6.8)                             |
|  |                              | 50–65<br>(15.2–19.8) | 10.0<br>(4.5)                             | 60–75<br>(18.3–22.9)  | 10.0<br>(4.5)                             |
|  |                              | 65–84<br>(19.8–25.6) | 7.5<br>(3.4)                              | 75–95<br>(22.9–29.0)  | 7.5<br>(3.4)                              |
| 120<br>(36.6)  | 110–160<br>(33.5–48.8)       | 37–50<br>(11.3–15.2) | 15.0<br>(6.8)                             | 60–65<br>(18.3–19.8)  | 15.0<br>(6.8)                             |
|  |                              | 50–65<br>(15.2–19.8) | 10.0<br>(4.5)                             | 65–80<br>(19.8–24.4)  | 10.0<br>(4.5)                             |
|  |                              | 65–85<br>(19.8–25.9) | 7.5<br>(3.4)                              | 80–99<br>(24.4–30.2)  | 7.5<br>(3.4)                              |
| 140<br>(42.7)  | 110–160<br>(33.5–48.8)       | 38–50<br>(11.6–15.2) | 15.0<br>(6.8)                             | 63–70<br>(19.2–21.3)  | 15.0<br>(6.8)                             |
|  |                              | 50–65<br>(15.2–19.8) | 10.0<br>(4.5)                             | 70–80<br>(21.3–24.4)  | 10.0<br>(4.5)                             |
|  |                              | 65–86<br>(19.8–26.2) | 7.5<br>(3.4)                              | 80–102<br>(24.4–31.1) | 7.5<br>(3.4)                              |
| 160<br>(48.8)  | 110–160<br>(33.5–48.8)       | 39–55<br>(11.9–16.8) | 15.0<br>(6.8)                             | 67–70<br>(20.4–21.3)  | 15.0<br>(6.8)                             |
|  |                              | 55–70<br>(16.8–21.3) | 10.0<br>(4.5)                             | 70–90<br>(21.3–27.4)  | 10.0<br>(4.5)                             |
|  |                              | 70–87<br>(21.3–26.5) | 7.5<br>(3.4)                              | 90–106<br>(27.4–32.3) | 7.5<br>(3.4)                              |
| 180<br>(54.9)  | 110–160<br>(33.5–48.8)       | 40–55<br>(12.2–16.8) | 15.0<br>(6.8)                             | 70–75<br>(21.3–22.9)  | 15.0<br>(6.8)                             |
|  |                              | 55–70<br>(16.8–21.3) | 10.0<br>(4.5)                             | 75–90<br>(22.9–27.4)  | 10.0<br>(4.5)                             |
|  |                              | 70–88<br>(21.3–26.8) | 7.5<br>(3.4)                              | 90–109<br>(27.4–33.2) | 7.5<br>(3.4)                              |
| 190<br>(57.9)  | 110–160<br>(33.5–48.8)       | 45–55<br>(13.7–16.8) | 15.0<br>(6.8)                             | 72–80<br>(21.9–24.4)  | 15.0<br>(6.8)                             |
|  |                              | 55–70<br>(16.8–21.3) | 10.0<br>(4.5)                             | 80–90<br>(24.4–27.4)  | 10.0<br>(4.5)                             |
|  |                              | 70–88<br>(21.3–26.8) | 7.5<br>(3.4)                              | 90–111<br>(27.4–33.8) | 7.5<br>(3.4)                              |

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# Luffing Attachment Transport Drawing



## Luffing Attachment Shipping Module #1 – 8,500 lb (3 856kg)

Luffing boom cap with links, balance arm, luffing jib live mast, and luffing jib base section

**Link-Belt Construction Equipment Company** Lexington, Kentucky    [www.linkbelt.com](http://www.linkbelt.com)

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