

# SCA1000A

110 UST (100 mt)  
Crawler Crane

**SANY**



Max Boom Length: 210ft (64m)  
Max Fixed Jib Combination:  
170.6ft + 73.8ft (52m + 22.5m)

The parameters and diagrams in the brochure is only for reference, which is subject to further update in real machine.

SCA1000A



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Sany Crawler Crane

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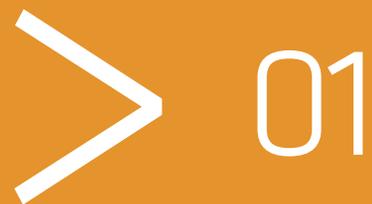
- H Configuration
- FJ Configuration
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**SCA1000A**  
**SANY CRAWLER CRANE**  
**110 UST (100 mt) LIFTING CAPACITY**  
MADE FOR AMERICA

## Main Characteristics

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## Product Specification



### Engine

- Model: Cummins QSL9-C325 Diesel engine;
- Type: 4-stroke, water-cooled, vertical in-line 6 cylinders, direct injection, turbo-charger, intercooler, complied with European Off-highway Stage V Emission Standard and US EPA Tier F4(f) Emission Standard;
- Displacement: 543 in<sup>3</sup> (8.9L);
- Max. Rated Power: 324 HP/1800rpm;
- Max. Torque: 1,126 ft-lb/1400rpm;
- Starter: 24V-8 HP;
- Radiator: fin type aluminum plate core;
- Air cleaner: Dry type system with main filter element, safety element and resistance indicator;
- Throttle: Electrically control hand and foot throttle;
- Fuel filter: Replaceable paper element;
- Batteries: Two 12V×165Ah capacity batteries, connected in series (24V system);
- Fuel tank capacity: 105.7Gal (400L).

### Hydraulic System

- Main pumps: Three variable displacement piston pumps provide power for the main machine functions;
- Gear Pumps: Two gear pumps provide power for radiator and control circuit;
- Control: Electrically controlled positive hydraulic flow control allows for safe and precise multifunction operation;
- Oil Cooler: Fan cooled heat exchanger provides multi stage hydraulic oil cooling;
- Peak flow, high efficiency filter with bypass valve and replacement filter indicator. Indicator will remind user when its time to replace filter;
- Max. pressure of system: 4641 psi;
- Main/aux. load hoist, boom hoist and travel system: 4641 psi;
- Swing system: 4641 psi;
- Control system: 725 psi;
- Hydraulic Tank Capacity: 121.5 Gal (460L).

### Electrical Control System

- Self-developed SYIC-II integrated control system is adopted with higher integration, precise operation and reliable quality;
- Control system consists of power system, engine system, main control system, LMI system, auxiliary system and safety monitoring system. CAN BUS is used for data communication between controller, monitor and the engine;
- Monitor: the working parameters and status are shown on the monitor, such as the engine speed, fuel level, engine oil pressure, servo pressure, engine working hours, lifting conditions and boom angle.



## Product Specification

### Main and Aux. Hoist Winch

- Main and aux. hoist winches are driven separately. Single axis control handles allow for power up/down and free fall winch operations. Fine inching control is standard and allows for precise operation;
- Winch drum laggings are grooved for multilayer spooling;
- Free fall for main/aux. hoist winch is offered as standard.

<b>Main Hoisting Winch</b>	Drum diameter	24.80" (630mm)
	Rope speed on the outermost work layer	0~397.0 ft/min (0~121m/min)
	Wire rope diameter	1.02" (26mm)
	Wire rope length of main hoist	787.4' (240m)
	Rated single line pull	26.5Klb (12t)
<b>Auxiliary Hoisting Winch</b>	Drum diameter	25.00" (630mm)
	Rope speed on the outermost work layer	0~397.0 ft/min (0~121m/min)
	Wire rope diameter	1.02" (26mm)
	Wire rope length of auxiliary hoist	590.5' (180m)
	Rated single line pull	26.5Klb (12t)

### Optional 3rd Winch

Optional 3rd winch is connected with boom base with pins and driven separately by variable speed hydraulic motor and gearbox. Dual axis control handle allow for power up/down operations. Fine inching control is standard and allows for precise operation.

- Winch drum laggings are grooved for multilayer spooling.

<b>Optional 3rd Winch</b>	Drum diameter	20.6" (522mm)
	Rope speed on the outermost work layer	436.4 ft/min (0~133m/min)
	Wire rope diameter	0.9" (22mm)
	Wire rope length	426.5' (130m)
	Rated single line pull	19.8Klb (9t)

### Boom Hoist Winch

- Boom hoist winch is driven separately by motor via gearbox. Single axis control handle allow for boom up/down operations;
- Spring loaded brake is hydraulic released;
- Winch drum laggings are grooved for multilayer spooling.

<b>Boom Hoist Winch</b>	Drum diameter	15.7" (400mm)
	Rope speed on the outermost work layer	0~194 ft/min (0~59m/min)
	Wire rope diameter	0.79" (20mm)
	Wire rope length of boom hoist	459.3' (140m)
	Rated single line pull	15.4Klb (7t)

### Swing Mechanism

- Swing Brake: Spring applied wet brake that is normally closed providing controlled smooth braking;
- Swing system has three work modes to accommodate different needs: auto brake mode, free swinging mode, and fine inching mode;
- Swing drive: internal engaged swing drive with 360° swing range, max. swing speed is 3.5 rpm;
- Swing bearing: single row ball bearing.

### Cab and Control

- Operator's cab has a hinged lockable door and large windows providing excellent line of sight. The cab tilts up 20° providing the operator a panorama view and reducing fatigue. The cab and control layout allow for ergonomic operation keeping the operator comfortable;
- Monitor: 10.4" touch screen with simple user friendly interface;
- Armrest Console: Control handles electrical switches, emergency stop, and ignition switch are located on the left and right. Arm console can be adjusted independent of the seat;
- Seat: Multi-way adjustable floating seat;
- HVAC: Powerful air conditioner and heater with optimized vent locations;
- Cameras: Multiple cameras can be displayed on the monitor at the same time. This provides the operator with a real time view of winches, right side of machine, rear of machine, and view from boom tip.
- Single axis controls for travel, main, aux, and boom hoist winches. Dual axis controls for swing and 3rd drum operation.

### Counterweight

- Counterweight tray and blocks nest together for easier assembly and transport;
- Rear counterweight can be self-assembled, total 68.8Klb (31.2mt);
- Self-assembled counterweight: tray 21.8Klb (9.9mt)×1, left counterweight block 7.6Klb (3.45mt)×3, and right counterweight block 7.6Klb (3.45mt) × 3, cylinder bracket 1.3Klb (0.6mt)×1;
- Carbody counterweight: 12.1Klb (5.5mt)×2 at the front and rear of carbody.

### Upperworks

- High-strength steel welded frame. Design allows for easy maintenance and service.

## Product Specification



### Lowerworks

- Each side frame is equipped with an independent travel driving motor. The variable speed travel system is configured with speed options to meet various requirements: low speed provides max tractive effort, while high speed provides fast job site transfer.

### Crawler Extension and Retraction

- The crawlers can extend and retract via cylinders. During Work Mode, the crawlers must be extended, and can be retracted for transportation.

### Crawler Tensioning

- Crawler tensioning can be adjustable with hydraulic jack and shimming the guide wheel.

### Track Pad

- Manufactured by advance casting techniques and materials providing high strength and excellent wear resistance. 33.5" (850mm) wide and each side frame has 52 track pads.

### Jack Cylinder

- Standard jack cylinders make jobsite transport easier.

### Self-assembly Cylinder

- Self-assembly cylinder is standard and allows the counterweight and side frames to be self-assembled.

### Operating Equipment

- All chords are high-strength steel tubes, and the boom/jib top sheaves are made of high-strength anti-wearing Nylon material protecting wire rope. The hook blocks have grooved steel sheaves. Pendant cables with quick hitch connector that are easy to assemble.

### Boom

- Lattice structure with high-strength steel chords. Each section is pinned together with pins;
- The length of the boom ranges from that (42.7ft/13m) of the basic boom to the maximum length (210ft/64m) and it can be incrementally changed by 9.8ft (3m).

### Fixed Jib

- Lattice structure with high-strength steel chords. Each section is pinned together with pins;
- The length of the fixed jib ranges from that (29.5ft/9m) of the basic jib to the maximum length (73.8ft/22.5m) and it can be incrementally changed by 14.8ft(4.5m);
- Longest boom + fixed jib: 170.6ft (52m) boom +73.8ft (22.5m) jib.

### Auxiliary Tip Extension

- Is a welded structure with one sheave that is connected to the main boom with with pins. It is used for aux. hook operations;
- Length of auxiliary tip extension is 3.9ft (1.2m).

### Hook Block

- 110 UST hook block, 5 sheaves;
- 55 UST hook block;
- 28 UST hook block;
- 15 UST ball hook.

## Safety Device



### Assembly Mode/Work Mode Switch

- In Assembly Mode, some safety devices are disabled for crane assembly;
- In Work Mode, all safety devices are active.

### Emergency Stop

- When this button is pressed down to cut off the power supply of whole machine and all actions stop.

### Load Moment Indicator (LMI)

- The proprietary load moment indicator is independently developed by Sany, which is a specially designed over-load protective system for SCA series crawler crane, with performance structural parameters of all series of crawler cranes directly stored inside, such as bearing curve, boom and jib weight, center of gravity, and other geometrical parameters. This system maximizes the utilization efficiency of the crane while guaranteeing the lifting safety;
- LMI consists of a 10.1" large colorful display, computer, angle sensors, load sensors and pressure sensors.

### Over-hoist Protection of the Main/Auxiliary Hooks (Anti Two Block)

- It is used to prevent the over-hoist of the hook. When the lifting hook is raised to a certain height, the limit switch will be activated, and hook hoisting will be automatically cut off by the control system. Warning will be displayed in monitor and alarm will sound. At this moment, only hook lowering is allowed to prevent over-hoist action.

### Over-release Protection Device of the Main/Auxiliary Winch (Third Wrap Indicator)

- It is used to prevent the wire rope over-release. When the wire rope is released to the last three wraps, the limit switch will activate, and the releasing of rope will be automatically stopped by the control system. Warning will be displayed in monitor and alarm will sound. At this moment, only rope retraction is allowed to prevent over release action.

### Function Lock

- If the function lock level is not in work position, all the other handles won't work, which prevents any mis-operation caused by control handle movement.

### Boom Hoist Drum Lock

- Pawl lock is used on boom hoist winch, which needs to unlock by switch before operation, in order to prevent mis-operation of handles and ensure safety during nonwork time.

### House Lock Device

- House Lock can lock the machine at four positions, front and back, left and right.

### Boom Limit Device

- When the boom angle exceeds 80° or jib angle exceeds 65°, corresponding limit switch will be triggered, and the control system will automatically cut off the boom hoisting. Warning will be displayed in monitor and alarm will sound. At this moment, boom/jib luffing winch won't hoist but it can still lower down.
- When the boom angle is less than 30° or jib down angle is less than 15°, the control system will automatically cut off the boom/jib from further lowering. Warning will be displayed in monitor and alarm will sound. At this moment, boom/jib luffing winch won't be able to lower. This protection is automatically controlled by Load Moment Indicator.

### Back-stop Device

- Its major components are nesting tubes and spring, in order to buffer the boom and prevent boom overhaul.

### Boom Angle Indicator

- Pendulum angle indicator is fixed on the side of boom base close to the cab, so as to provide convenience to the operator.

### Hook Latch

- The lifting hook is installed with a baffle plate to prevent wire rope from falling off.

## Product Specification



### Zoom Camera

- It can monitor load lifting on the main hook and the surroundings at real time. The camera can zoom in/out as needed.
- Components: wireless remote transmitter, wireless remote receiver, zoom camera.

### Lightning Protection Device

- It is offered as an optional feature, which includes the grounding device that can effectively protect the electric system elements and workers from lightning.

### Tri-color Load Indicator

- The load indication light has three colors, green, yellow and red, and the real time load status is presented on the display. When the actual load is smaller than 90% of rated load, the green light is on;
- When the actual load is larger than 90% and smaller than 100%, the yellow light is on, the alarm light flashes and sends out intermittent sirens;
- When the actual load reaches 100% of rated load, the red light is on, the alarm light flashes and sends out continuous sirens;
- When the actual load reaches 102% of rated load, the system will automatically cut off the crane operation.

### Audio-Visual Alarm

- Lights flash when the engine is running. During travel and swinging and audible alarm is sounded.

### Swing Indicator Light

- The swing indicator light flashes during traveling or swing.

### Illuminating Light

- The machine is equipped with the low beam light and high beam light at the front of the cab, illumination light in cab, and other lights for night operation, boom lights to improve the visibility during operation.

### Rear View Mirror

- It is installed on the left of the operator's cab for monitoring the rear part of the machine.

### Pharos (Aircraft Warning Light)

- Light mounted on the top of boom/jib that flashes at night.

### Anemometer

- It is mounted on the top of boom/jib, and displays the wind speed on the monitor in the cab.

### Electronic Level Gauge

- It displays the tipping angle of crane on the monitor in real time, protecting the machine from dangerous situation.

### Operation Release

- If the operator leaves the seat, all control handles will be locked immediately to prevent any mis-operation due to accidental collision.

### Engine Power Limit Load Adjustment and Stalling Protection

- The controller monitors the engine power to prevent engine getting stuck and stalling.

### Engine Status Monitoring

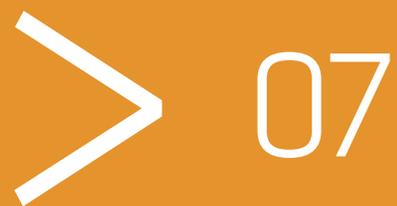
- The engine status will be presented, such as engine coolant temperature, fuel level, total work hours, engine oil pressure, engine speed, battery charging, voltage.



**SCA1000A**  
**SANY CRAWLER CRANE**  
**110 UST (100 mt) LIFTING CAPACITY**  
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## Technical Parameters

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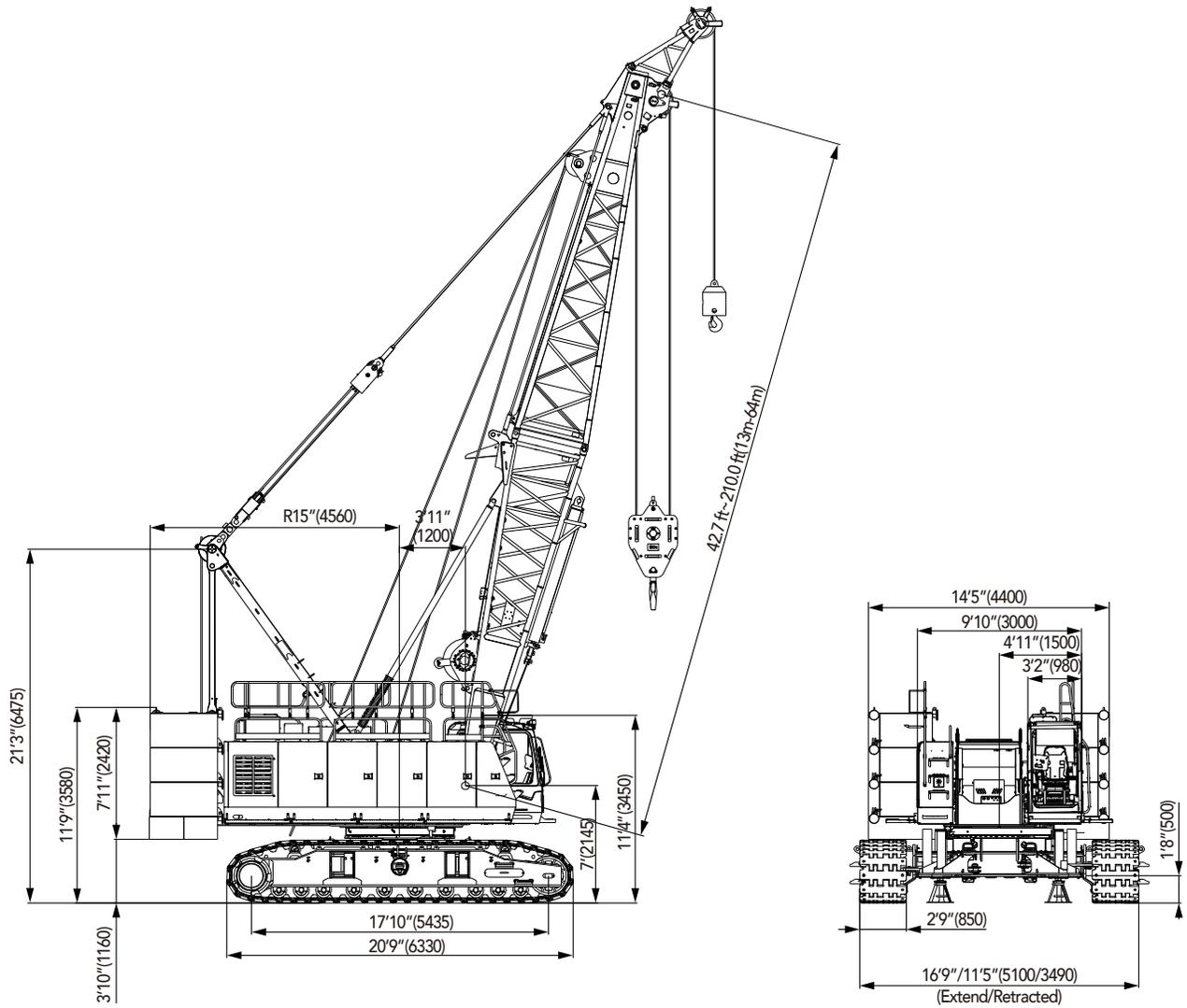


## Major Performance & Specifications

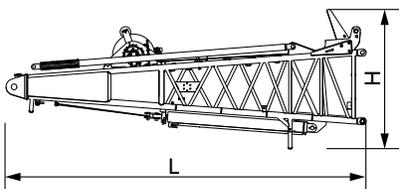
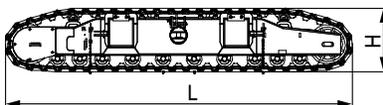
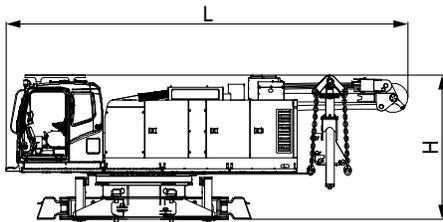
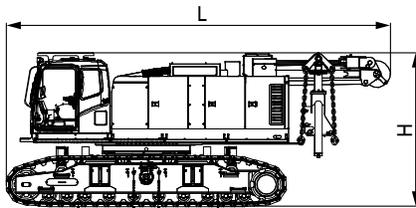
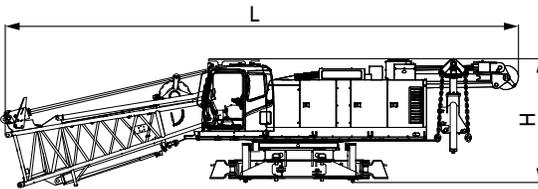
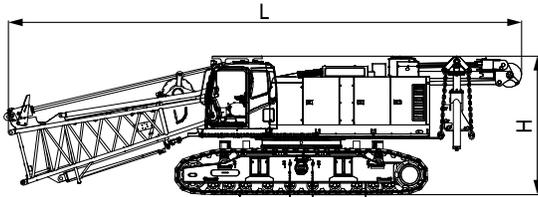
Major Performance & Specifications of SCA1000A			
Performance Indicators		Unit	Parameter
Boom Configuration	Max. rated lifting capacity	Klb (mt)	220 (100)
	Max. lifting moment	Klb×ft (mt·m)	220Klb×12.5ft (100 x3.8=380)
	Boom length	ft (m)	42.7~210 (13~64)
	Boom angle	°	30~80
Fixed Jib Configuration	Max. rated lifting capacity	Klb (mt)	24.3 (11)
	Jib length	ft (m)	29.5 ~73.8 (9~22.5)
	Longest boom + longest jib	ft (m)	170.6 +73.8 (52+22.5)
	Jib angle offset	°	15, 30
Operation Speed	Rope speed of main/aux. hoist (1st layer)	ft/min (m/min)	397.0 (121)
	Rope speed of boom hoist winch (1st layer)	ft/min (m/min)	193.6 (59)
	Swing speed	rpm	3.5
	Travel speed (high/low)	mile/h (km/h)	1.2/0.6 (2\1)
Wire Rope	Main hoist wire rope: diameter × length	in×ft (mm×m)	1.02×787.4 (26×240)
	Aux. hoist wire rope: diameter × length	in×ft (mm×m)	1.02×590.6 (26×180)
	Single line pull of main/aux. hoist wire rope	Klb (mt)	26.5 (12)
Engine	Output power	HP	325
	Rated speed	rpm	1800
Transport Parameter	Weight of machine with basic boom	Klb (mt)	210.8 (95.6)
	Transport weight of basic machine (with boom base, crawlers and 4 winches)	Klb (mt)	113.5 (51.5)
	Transport weight of basic machine (without crawlers)	Klb (mt)	71.7 (32.5)
	Machine transport dimension (with boom base, crawlers and 4 winches) L×W×H	ft (m)	43.6×11.5×11.4 (13.3×3.49×3.46)
	Machine transport dimension(without crawlers ) L×W×H	ft (m)	27.3×9.8×10.0 (8.31×3×3.07)
Other specifications	Average ground pressure (basic boom)	PSI	13.8
	Gradeability	%	30

Unit: ft (mm)

## Outline Dimension



## Transport Dimension



### Basic Machine 1 (with base boom, crawlers and 4 winches)

×1

Length (L)	43.6 ft (13.3m)
Width (W)	11.5 ft (3.49m)
Height (H)	11.4 ft (3.46m)
Weight	113.5Klb (51.5mt)

Note: weight of the optional 3rd winch is 2.3Klb (1.04mt).

### Basic Machine 2 (with boom base and 4 winches)

×1

Length (L)	43.6 ft (13.3m)
Width (W)	9.8 ft (3.00m)
Height (H)	10.1 ft (3.07m)
Weight	71.7Klb (32.5mt)

### Basic Machine 3 (with crawlers and 3 winches)

×1

Length (L)	28.4 ft (8.67m)
Width (W)	11.5 ft (3.49m)
Height (H)	11.4 ft (3.46m)
Weight	106.0Klb (48.1mt)

### Basic Machine 4

×1

Length (L)	27.3 ft (8.31m)
Width (W)	9.8 ft (3.00m)
Height (H)	10.1 ft (3.07m)
Weight	64.2Klb (29.1mt)

### Crawler

×2

Length (L)	20.8 ft (6.33m)
Width (W)	3.6 ft (1.09m)
Height (H)	3.8 ft (1.15m)
Weight	20.9Klb (9.5mt)

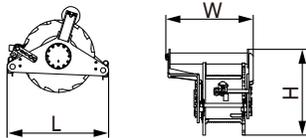
### Boom base with the 3rd winch

×1

Length (L)	22.0 ft (6.72m)
Width (W)	5.8 ft (1.78m)
Height (H)	6.8 ft (2.06m)
Weight	7.6Klb (3.44mt)

Note: weight of the optional 3rd winch is 2.3Klb (1.04mt).

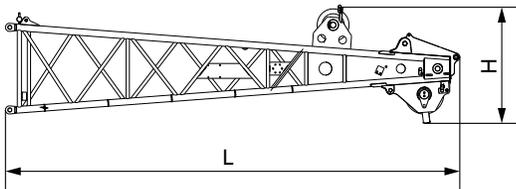
## Transport Dimension



### 3rd winch

×1

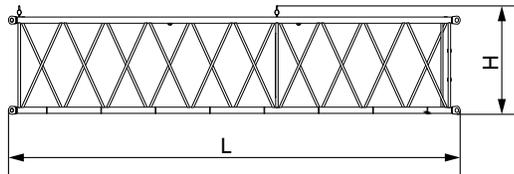
Length (L)	3.6 ft (1.11m)
Width (W)	3.1 ft (0.95m)
Height (H)	3.1 ft (0.94m)
Weight	2.3Klb (1.04mt)



### Boom Top

×1

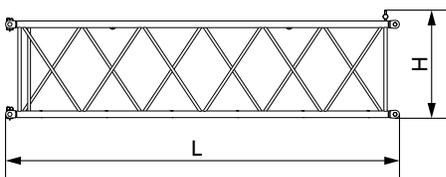
Length (L)	23.4 ft (7.13m)
Width (W)	4.9 ft (1.49m)
Height (H)	5.9 ft (1.79m)
Weight	3.3Klb (1.50mt)



### 9m Boom Insert

×4

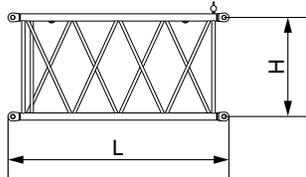
Length (L)	30.0 ft (9.14m)
Width (W)	5.0 ft (1.51m)
Height (H)	4.8 ft (1.47m)
Weight	2.4Klb (1.07mt)



### 6m Boom Insert

×2

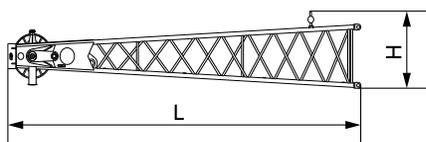
Length (L)	20.1 ft (6.14m)
Width (W)	5.0 ft (1.51m)
Height (H)	4.8 ft (1.47m)
Weight	1.7Klb (0.78mt)



### 3m Boom Insert

×1

Length (L)	10.3 ft (3.14m)
Width (W)	5.0 ft (1.51m)
Height (H)	4.8 ft (1.47m)
Weight	1.1Klb (0.50mt)

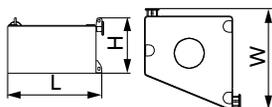
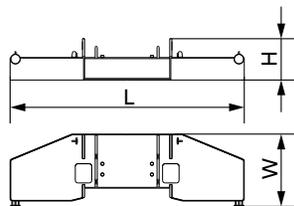
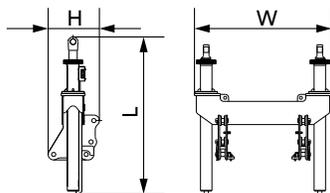
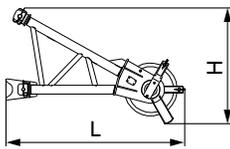
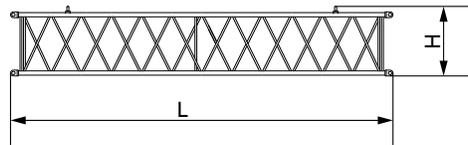
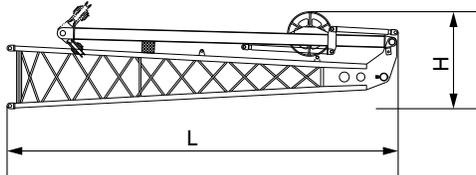


### Fixed Jib Top

×1

Length (L)	16.2 ft (4.93m)
Width (W)	2.9 ft (0.87m)
Height (H)	3.01 ft (0.92m)
Weight	0.7Klb (0.31mt)

## Transport Dimension



### Fixed Jib Base and Strut

×1

Length (L)	15.6 ft (4.75 m)
Width (W)	2.9 ft (0.87m)
Height (H)	3.9 ft (1.18m)
Weight	1.7Klb (0.75mt)

### 4.5m Fixed Jib

×3

Length (L)	15.0 ft (4.57m)
Width (W)	2.9 ft (0.87m)
Height (H)	2.7 ft (0.83m)
Weight	0.5Klb (0.24mt)

### Auxiliary Tip Extension

×1

Length (L)	6.0 ft (1.82m)
Width (W)	3.0 ft (0.9m)
Height (H)	3.9 ft (1.2m)
Weight	0.4Klb (0.2mt)

### Counterweight cylinder bracket

×1

Length (L)	7.5ft (2.28m)
Width (W)	6.5 ft (1.98m)
Height (H)	2.4 ft (0.74m)
Weight	3.1Klb (1.4mt)

Note: weight includes that for chains and pendant bar

### Counterweight tray

×1

Length (L)	14.4 ft (4.40m)
Width (W)	4.4 ft (1.35m)
Height (H)	2.5 ft (0.77m)
Weight	22Klb (9.9mt)

### Left Counterweight Block

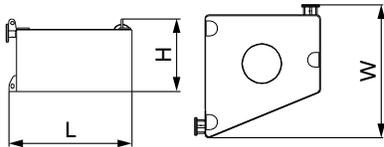
×3

Length (L)	4.4 ft (1.33m)
Width (W)	4.1 ft (1.26m)
Height (H)	2.4 ft (0.72m)
Weight	7.6Klb (3.45mt)

## Transport Dimension

**Note:**

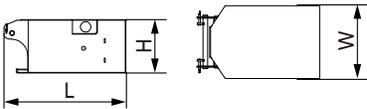
1. The transport dimensions of each part in the table are schematic, not proportional to the real parts. The dimensions are designed value without package considered.
2. The Weight is designed value that the actual manufactured part may deviate a little.



### Right Counterweight Block

×3

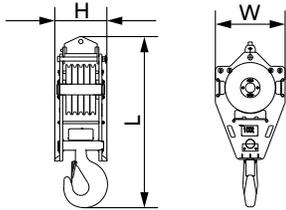
Length (L)	4.4 ft (1.33m)
Width (W)	4.1 ft (1.26m)
Height (H)	2.4 ft (0.72m)
Weight	7.6Klb (3.45mt)



### Carbody Counterweight

×2

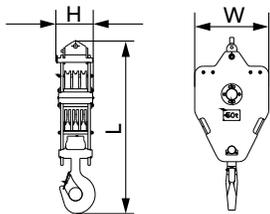
Length (L)	6.1 ft (1.85m)
Width (W)	3.7 ft (1.13m)
Height (H)	2.7 ft (0.81m)
Weight	12.1Klb (5.5mt)



### 100T hook

×1

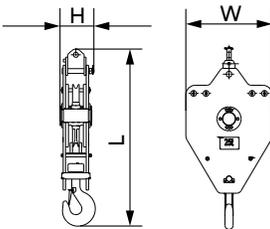
Length (L)	6.8 ft (2.08m)
Width (W)	2.8 ft (0.85m)
Height (H)	2.1 ft (0.63m)
Weight	3.0Klb (1.36mt)



### 50T hook

×1

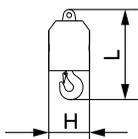
Length (L)	6.4 ft (1.95m)
Width (W)	3.0 ft (0.90m)
Height (H)	1.5 ft (0.45m)
Weight	2.3Klb (1.04mt)



### 25T hook

×1

Length (L)	6.1 ft (1.86m)
Width (W)	3.0 ft (0.90m)
Height (H)	1.1 ft (0.35m)
Weight	1.7Klb (0.79mt)

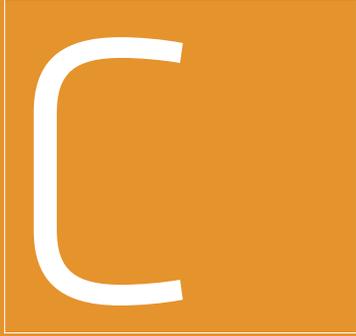


### 13.5T Ball Hook

×1

Length (L)	3.1 ft (0.95m)
Width (W)	1.4 ft (0.43m)
Height (H)	1.4 ft (0.43m)
Weight	1.0Klb (0.45mt)

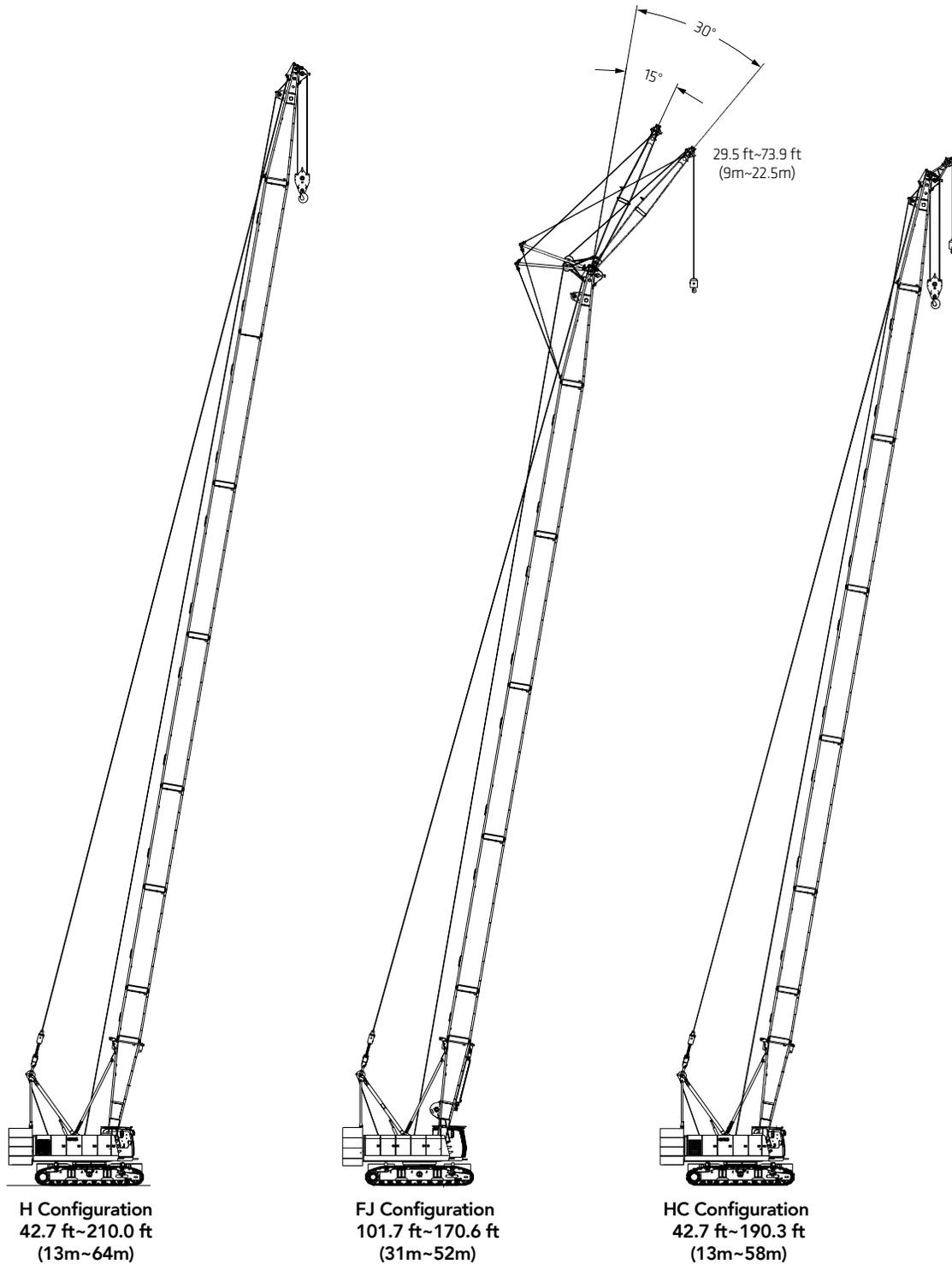




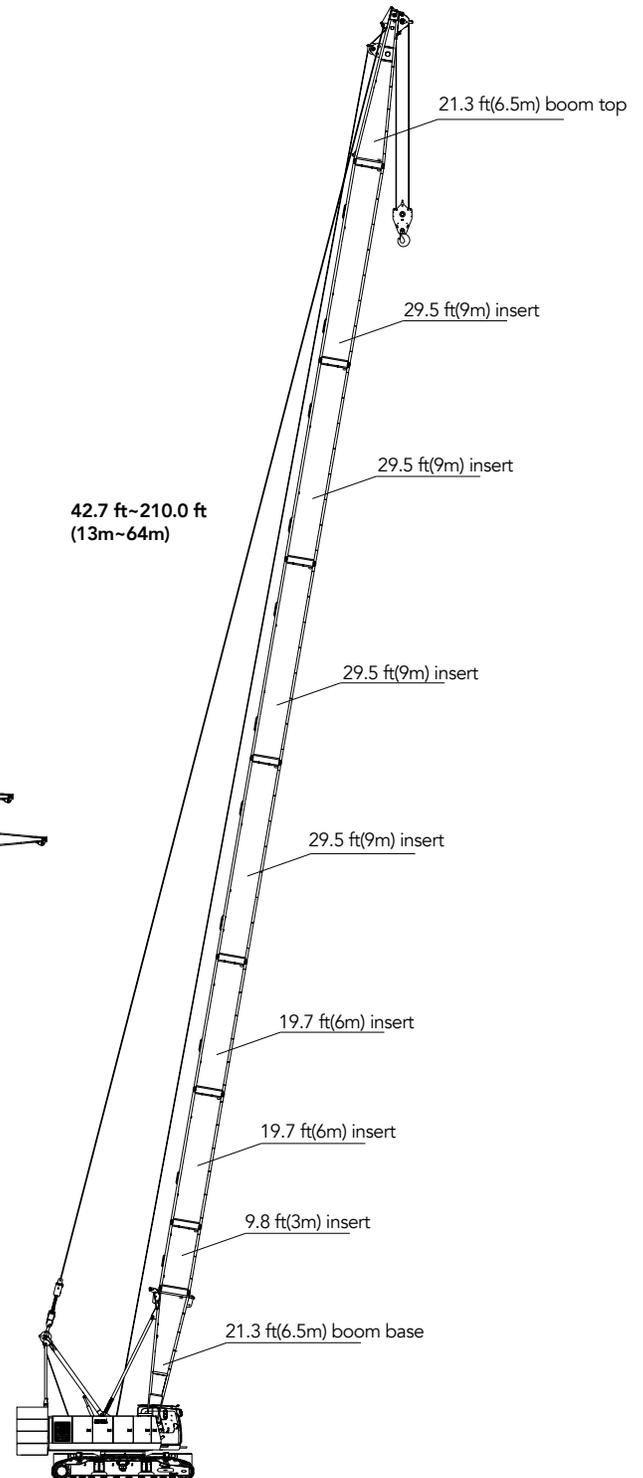
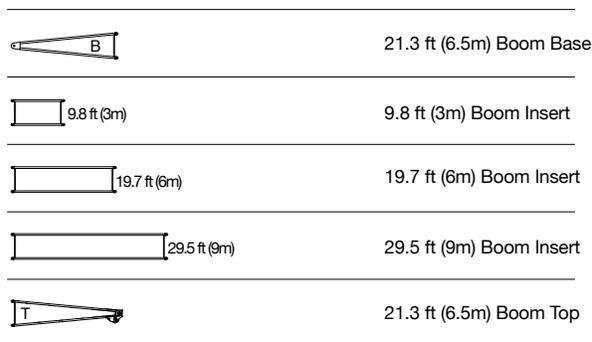
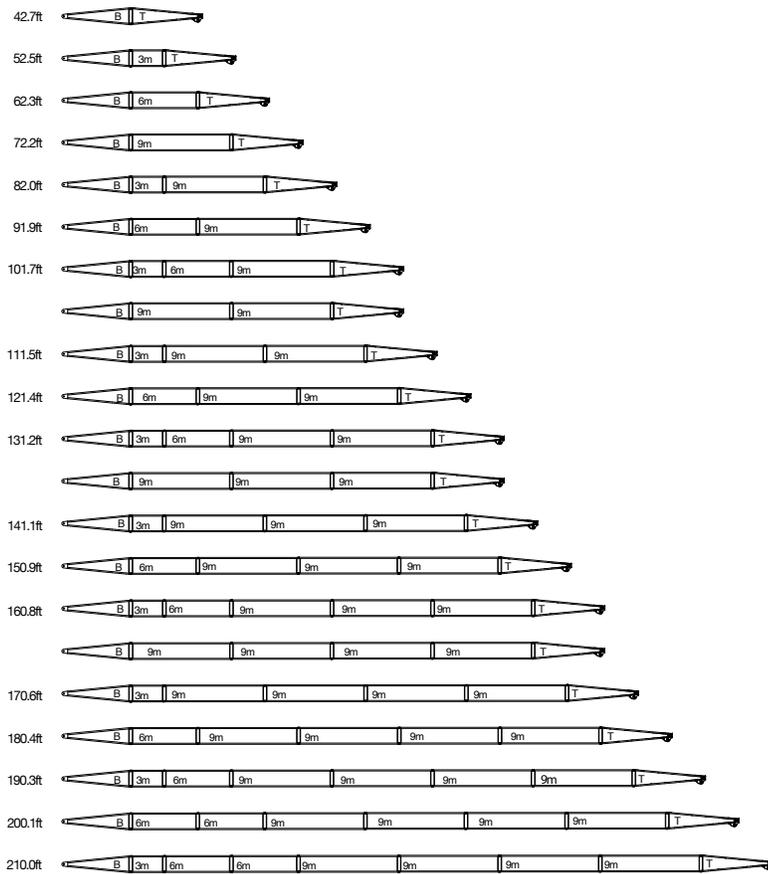
**SCA1000A**  
**SANY CRAWLER CRANE**  
**110 UST (100 mt) LIFTING CAPACITY**  
MADE FOR AMERICA

## Configuration

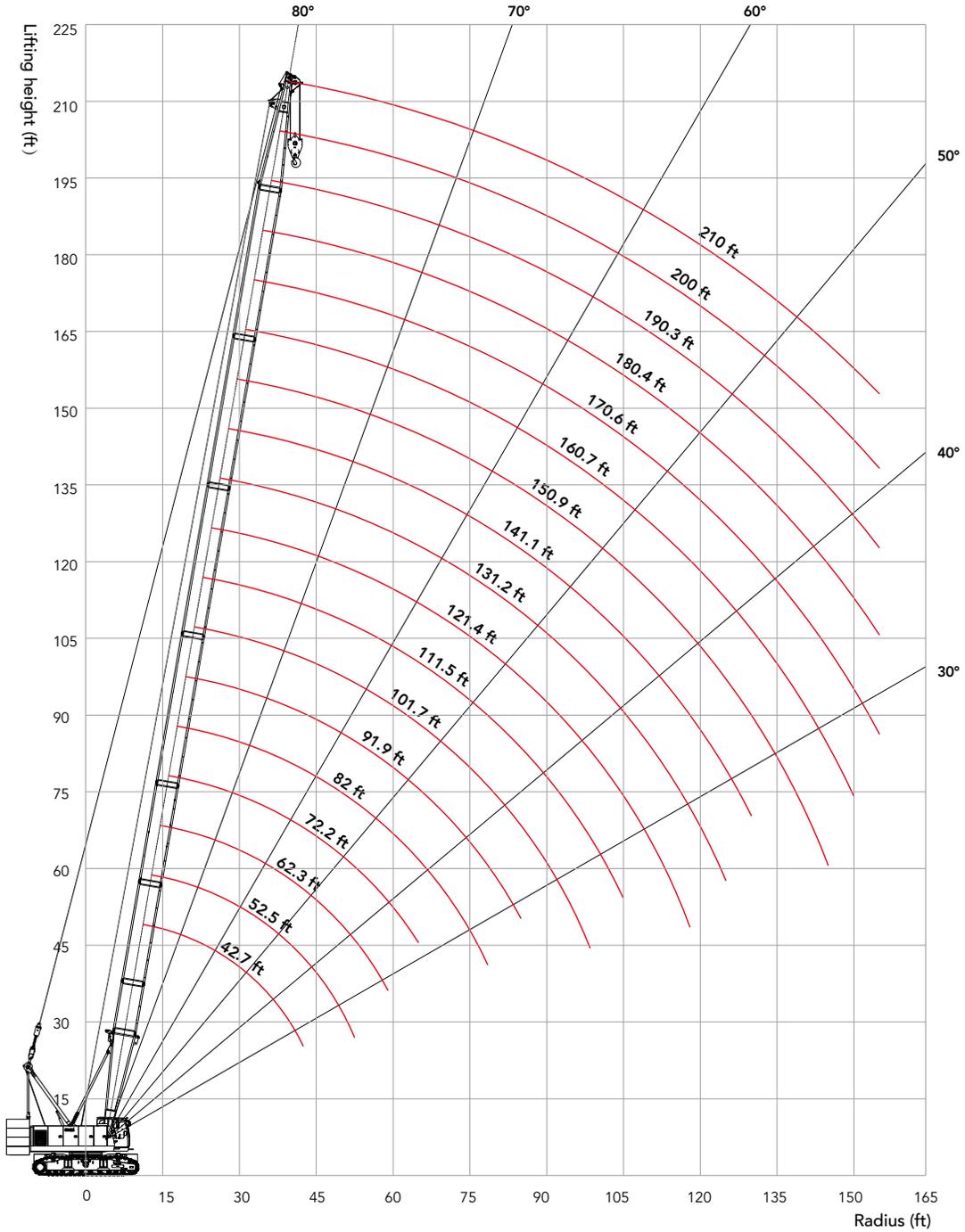
- Page 16 H Configuration
- Page 22 FJ Configuration
- Page 28 HC Configuration

**Combination**

## Boom Combination in H



## Working Radius in H Configuration



Unit: Klb

## Load Chart of H Configuration

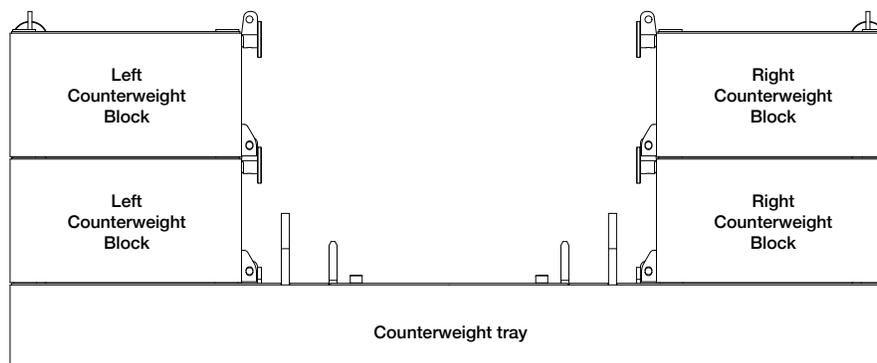
Note:

1. The rated load in the load chart is calculated complying with ASME B30.5;
2. The working radius is the horizontal distance from the load center to the swing center;
3. The actual lifting capacity must subtract the weight of hooks and other riggings from the rated capacity in the load chart.
4. The load value is calculated when the object is hung freely, without considering the influence of wind on the load, ground conditions and slope, operation speed and the influence of any other negative factors over safe operation. Therefore, the operator bears the responsibility of making a judgment and decreasing the load and lowering speed.
5. All ratings are calculated when the machine is parking on firm and level ground with less than 1% gradient.
6. The load value is calculated with wind speed of 32.2ft/s (9.8m/s).
7. More detailed information needs to refer to Operator Manual.
8. This note is applicable to all the following load charts.

SCA1000A - H																			
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																			
R/BL (ft)	42.7	52.5	62.3	72.2	82.0	91.9	101.7	111.5	121.4	131.2	141.1	150.9	160.7	170.6	180.4	190.3	200.0	210.0	R/BL (ft)
12.5	220.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5
13.0	202.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.0
14.0	191.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.0
15.0	182.7	177.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.0
16.0	170.3	165.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.0
17.0	160.5	157.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.0
18.0	152.5	151.9	150.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.0
19.0	144.3	143.2	141.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.0
20.0	135.6	134.1	132.5	128.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0
21.5	121.2	120.1	119.0	117.4	113.6	-	-	-	-	-	-	-	-	-	-	-	-	-	21.5
23.0	109.8	108.7	107.8	106.9	104.7	101.7	-	-	-	-	-	-	-	-	-	-	-	-	23.0
25.0	97.3	96.5	95.6	95.0	94.1	92.4	89.9	-	-	-	-	-	-	-	-	-	-	-	25.0
26.0	92.1	91.2	90.5	89.9	89.0	88.1	86.0	64.3	-	-	-	-	-	-	-	-	-	-	26.0
30.0	75.9	75.0	74.4	74.0	73.3	72.7	72.2	71.2	69.6	68.1	-	-	-	-	-	-	-	-	30.0
33.0	66.8	65.9	65.4	65.0	64.3	63.9	63.3	62.8	62.2	61.1	59.6	-	-	-	-	-	-	-	33.0
35.0	61.8	61.1	60.6	60.2	59.5	59.1	58.6	58.0	57.5	56.8	55.9	-	-	-	-	-	-	-	35.0
36.0	59.3	58.7	58.2	57.8	57.1	56.7	56.2	55.6	55.1	54.7	54.0	52.7	51.6	-	-	-	-	-	36.0
40.0	51.9	51.2	50.8	50.5	49.9	49.5	49.0	48.6	48.1	47.7	47.3	46.9	45.9	44.8	-	-	-	-	40.0
42.5	47.8	47.2	46.7	46.3	45.9	45.4	45.0	44.5	44.1	43.9	43.2	43.0	42.6	41.7	39.9	35.3	-	-	42.5
45.0	-	44.1	43.7	43.2	42.8	42.4	41.9	41.5	41.2	40.8	40.3	39.9	39.5	38.9	38.0	34.3	-	-	45.0
46.0	-	42.9	42.5	42.0	41.6	41.1	40.7	40.3	40.0	39.6	39.2	38.7	38.3	37.8	37.2	33.9	31.3	-	46.0
50.0	-	38.5	38.3	37.8	37.4	37.0	36.6	36.1	35.9	35.4	35.0	34.6	34.3	33.7	33.4	32.2	29.6	25.3	50.0
52.5	-	36.2	35.9	35.5	35.1	34.6	34.4	33.7	33.5	33.1	32.6	32.4	32.0	31.5	31.1	30.6	28.4	23.2	52.5
55.0	-	-	34.0	33.5	33.1	32.8	32.4	31.9	31.6	31.2	30.8	30.5	30.1	29.7	29.2	28.8	27.3	22.6	55.0
59.0	-	-	30.9	30.4	30.0	29.8	29.3	28.9	28.4	28.2	27.8	27.3	27.1	26.7	26.2	25.8	25.6	21.6	59.0
60.0	-	-	-	29.9	29.4	29.2	28.8	28.3	27.9	27.7	27.2	26.8	26.6	26.1	25.7	25.2	25.0	21.3	60.0
65.0	-	-	-	27.0	26.4	26.2	25.9	25.3	25.0	24.8	24.2	23.9	23.7	23.1	22.8	22.4	22.2	19.6	65.0
70.0	-	-	-	-	23.9	23.7	23.4	22.8	22.6	22.4	21.7	21.5	21.3	20.8	20.4	20.0	19.8	17.9	70.0
75.0	-	-	-	-	21.8	21.5	21.2	20.7	20.4	20.2	19.6	19.4	19.1	18.7	18.3	17.9	17.7	16.2	75.0
78.5	-	-	-	-	20.5	20.1	19.8	19.4	19.0	18.7	18.3	18.1	17.6	17.2	17.0	16.5	16.3	15.0	78.5
80.0	-	-	-	-	-	19.6	19.4	18.9	18.5	18.3	17.8	17.6	17.2	16.8	16.5	16.0	15.8	14.5	80.0
85.0	-	-	-	-	-	18.2	17.7	17.3	17.1	16.8	16.2	16.0	15.7	15.3	14.9	14.4	14.2	12.9	85.0
90.0	-	-	-	-	-	-	16.4	15.9	15.7	15.3	14.8	14.6	14.4	13.9	13.5	13.1	12.8	11.8	90.0
95.0	-	-	-	-	-	-	15.1	14.7	14.5	14.0	13.6	13.4	13.2	12.7	12.3	11.8	11.6	10.7	95.0
98.5	-	-	-	-	-	-	14.3	13.9	13.7	13.2	12.8	12.6	12.3	11.9	11.5	11.0	10.8	9.9	98.5
100.0	-	-	-	-	-	-	-	13.6	13.4	12.9	12.5	12.3	12.0	11.6	11.2	10.7	10.5	9.6	100.0
105.0	-	-	-	-	-	-	-	12.6	12.3	11.9	11.5	11.2	11.0	10.6	10.1	9.7	9.5	8.6	105.0
110.0	-	-	-	-	-	-	-	-	11.3	11.1	10.6	10.4	10.0	9.6	9.3	8.9	8.6	7.8	110.0
115.0	-	-	-	-	-	-	-	-	10.6	10.2	9.8	9.6	9.2	8.8	8.4	8.0	7.8	6.9	115.0
118.0	-	-	-	-	-	-	-	-	10.1	9.7	9.3	9.0	8.8	8.4	7.9	7.5	7.3	6.4	118.0
120.0	-	-	-	-	-	-	-	-	-	9.4	9.0	8.8	8.5	8.0	7.7	7.2	7.0	6.1	120.0
125.0	-	-	-	-	-	-	-	-	-	8.8	8.3	8.1	7.9	7.4	7.1	6.6	6.3	5.5	125.0
130.0	-	-	-	-	-	-	-	-	-	-	7.7	7.4	7.2	6.7	6.5	5.9	5.7	4.8	130.0
135.0	-	-	-	-	-	-	-	-	-	-	-	6.9	6.5	6.1	5.9	5.3	5.1	4.2	135.0
140.0	-	-	-	-	-	-	-	-	-	-	-	6.4	5.9	5.5	5.3	4.8	4.6	3.7	140.0
145.0	-	-	-	-	-	-	-	-	-	-	-	6.0	5.5	5.0	4.8	4.3	4.1	3.2	145.0
150.0	-	-	-	-	-	-	-	-	-	-	-	-	5.1	4.7	4.3	3.8	3.6	2.7	150.0
155.0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2	3.9	3.5	3.1	2.4	155.0

## Instructions on H load chart with reduced counterweight

1. Please follow the instructions in the Operator Manual to set properly via Menu Setting–Configuration Setting–Counterweight Selection.
2. Machine rear counterweight is about 51.8Klb (23.5t), with rear counterweight tray, two left counterweight blocks, two right counterweight blocks, no carbody counterweight.



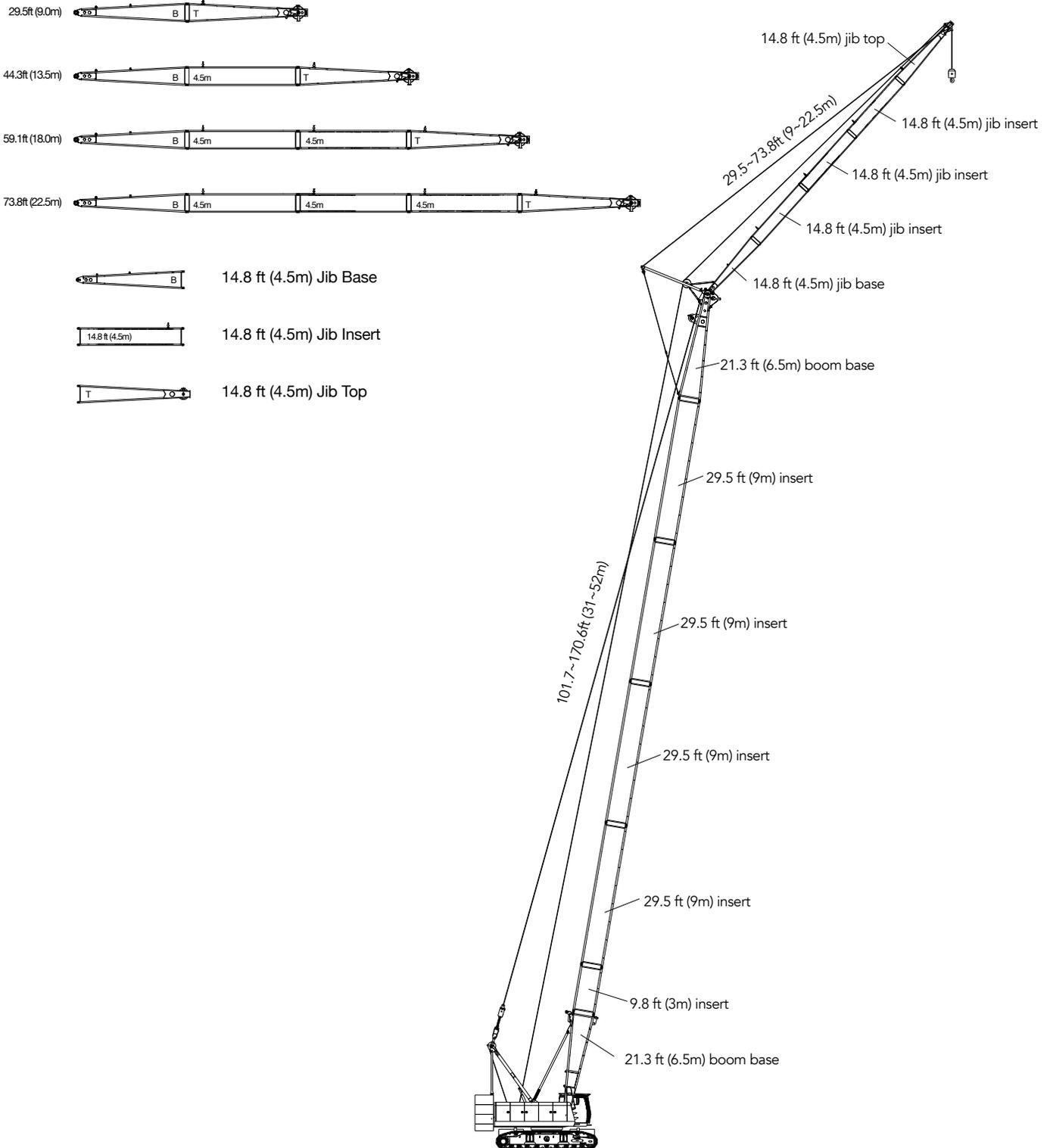
## H load chart with reduced counterweight

### SCA1000A Crawler Crane -H Configuration with less counterweight (Imperial)

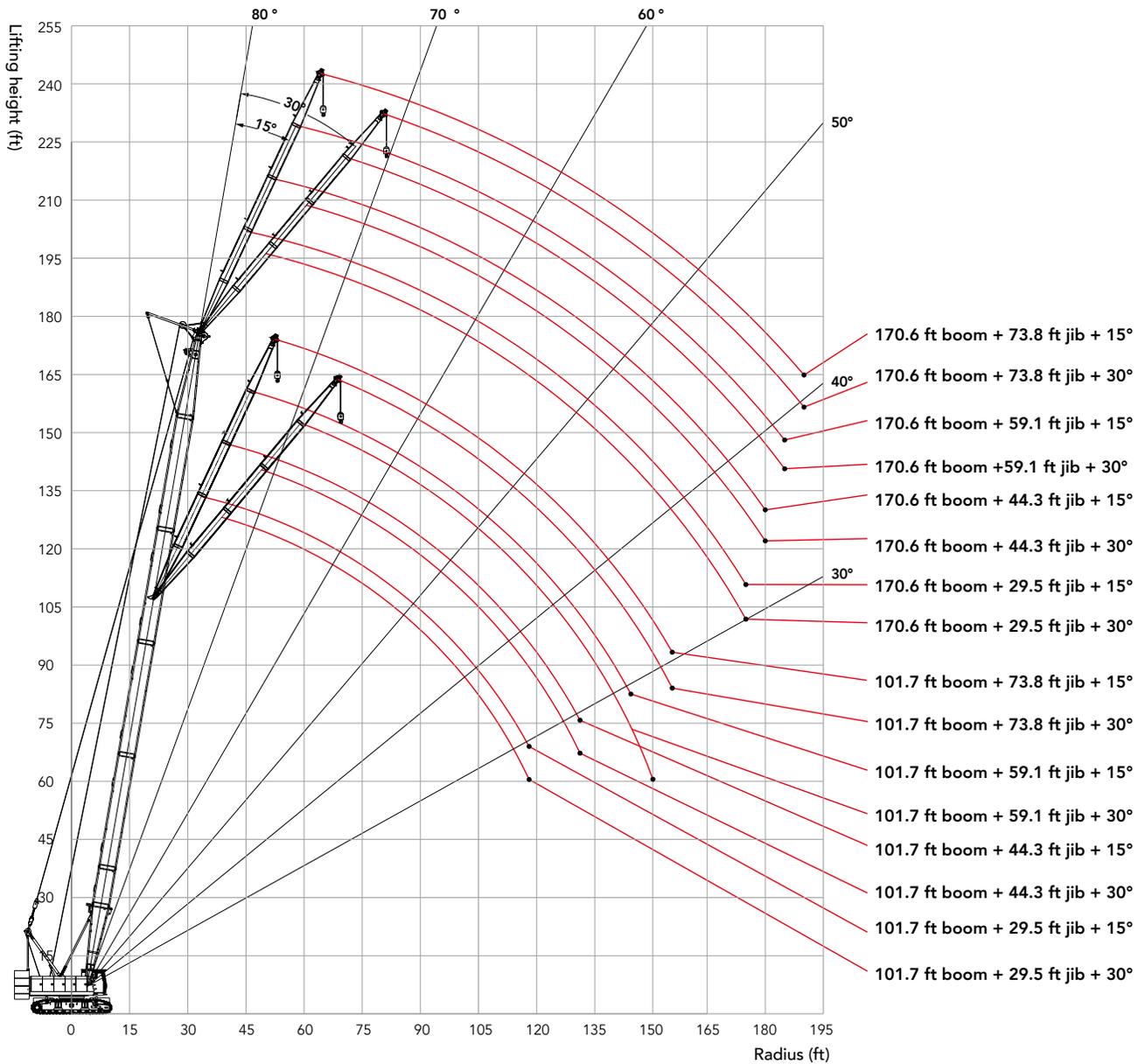
About 51.8Klb Rear Counterweight (Rear counterweight tray, two left and two right counterweight blocks) + 0Klb Carbody Counterweight

R/BL (ft)	42.7	52.5	62.3	72.2	82.0	91.9	101.7	111.5	121.4	131.2	141.1	150.9	160.7	170.6	180.4	R/BL (ft)
13.0	198.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.0
14.0	181.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.0
15.0	164.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.0
16.0	150.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.0
17.0	136.6	131.8	-	-	-	-	-	-	-	-	-	-	-	-	-	17.0
18.0	122.2	120.6	115.8	-	-	-	-	-	-	-	-	-	-	-	-	18.0
19.0	112.9	111.6	108.7	-	-	-	-	-	-	-	-	-	-	-	-	19.0
20.0	104.1	103.1	101.6	98.1	-	-	-	-	-	-	-	-	-	-	-	20.0
21.5	93.9	93.1	92.2	90.4	87.3	-	-	-	-	-	-	-	-	-	-	21.3
23.0	84.2	83.3	82.5	81.8	79.8	77.4	-	-	-	-	-	-	-	-	-	23.0
25.0	73.9	73.0	72.5	71.9	71.1	69.7	67.8	-	-	-	-	-	-	-	-	25.0
26.0	69.5	68.6	68.1	67.5	66.8	66.2	64.4	62.4	-	-	-	-	-	-	-	26.2
30.0	57.8	57.1	56.7	56.3	55.6	55.2	54.5	53.5	52.3	-	-	-	-	-	-	30.0
33.0	51.2	50.5	50.1	49.6	49.0	48.5	48.1	47.6	47.2	45.9	44.5	-	-	-	-	32.8
35.0	47.0	46.4	45.9	45.6	45.0	44.5	44.2	43.6	43.2	42.6	41.4	-	-	-	-	35.0
36.0	45.0	44.3	43.9	43.7	43.0	42.6	42.3	41.7	41.2	41.0	39.9	39.0	37.9	-	-	36.1
40.0	39.4	38.8	38.6	38.1	37.5	37.2	36.8	36.3	35.9	35.5	35.1	34.4	33.6	32.8	-	40.0
42.5	36.2	35.5	35.3	34.8	34.4	34.0	33.5	33.1	32.9	32.4	32.0	31.5	31.1	30.2	29.3	42.6
45.0	-	33.1	32.9	32.4	32.0	31.5	31.3	30.8	30.4	30.2	29.6	29.3	28.8	28.3	27.4	45.0
50.0	-	29.0	28.5	28.3	27.6	27.4	27.0	26.5	26.3	25.9	25.4	25.2	24.8	24.3	23.9	50.0
52.5	-	27.1	26.7	26.5	25.8	25.6	25.4	24.7	24.5	24.3	23.6	23.4	23.2	22.5	22.3	52.5
55.0	-	-	25.2	24.9	24.4	24.1	23.8	23.3	23.0	22.7	22.2	21.9	21.6	21.1	20.8	55.0
59.0	-	-	22.9	22.5	22.1	21.8	21.4	20.9	20.7	20.3	19.8	19.6	19.2	18.7	18.5	59.0
60.0	-	-	-	22.0	21.6	21.4	21.0	20.5	20.3	19.9	19.4	19.2	18.8	18.3	18.1	60.0
65.0	-	-	-	19.7	19.2	19.0	18.8	18.1	17.9	17.7	17.2	16.8	16.6	16.1	15.9	65.0
70.0	-	-	-	-	17.3	17.1	16.9	16.4	16.0	15.8	15.4	15.1	14.7	14.2	14.0	70.0
75.0	-	-	-	-	15.7	15.4	15.2	14.8	14.3	14.1	13.7	13.4	13.0	12.6	12.3	75.0
78.5	-	-	-	-	14.6	14.3	14.1	13.7	13.2	13.0	12.6	12.3	11.9	11.5	11.2	78.7
80.0	-	-	-	-	-	14.0	13.7	13.3	12.9	12.7	12.2	12.0	11.6	11.1	10.9	80.0
85.0	-	-	-	-	-	12.9	12.4	12.0	11.8	11.5	11.1	10.7	10.4	10.0	9.8	85.0
90.0	-	-	-	-	-	-	11.4	11.0	10.7	10.4	9.9	9.6	9.4	9.0	8.6	90.0
95.0	-	-	-	-	-	-	7.9	10.0	9.7	9.4	9.0	8.7	8.4	8.0	7.6	95.0
98.5	-	-	-	-	-	-	4.4	9.3	9.0	8.8	8.4	8.2	7.7	7.3	7.1	98.4
100.0	-	-	-	-	-	-	-	9.1	8.8	8.6	8.1	7.9	7.5	7.1	6.8	100.0
105.0	-	-	-	-	-	-	-	8.4	7.9	7.7	7.3	7.1	6.8	6.4	6.0	105.0
110.0	-	-	-	-	-	-	-	-	7.3	7.0	6.6	6.4	6.0	5.5	5.3	110.0
115.0	-	-	-	-	-	-	-	-	6.6	6.4	5.9	5.7	5.1	4.7	4.6	115.0
118.0	-	-	-	-	-	-	-	-	6.4	6.0	5.5	5.3	5.1	4.6	4.4	118.1
120.0	-	-	-	-	-	-	-	-	-	5.8	5.3	5.1	4.9	4.4	4.1	120.0
125.0	-	-	-	-	-	-	-	-	-	5.3	4.8	4.6	4.4	3.9	3.5	125.0
130.0	-	-	-	-	-	-	-	-	-	-	4.3	4.1	3.9	3.4	3.0	130.0
135.0	-	-	-	-	-	-	-	-	-	-	-	3.6	3.4	2.9	2.6	135.0

### Boom Combination of FJ Configuration



## Working Radius in FJ Configuration



## Load Chart of FJ Configuration

SCA1000A - FJ 1/4																	
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																	
R/BL (ft) Jib Length (ft) Boom to Jib Angle	101.7								111.6								R/BL (ft) Jib Length (ft) Boom to Jib Angle
	29.5		44.3		59.1		73.8		29.5		44.3		59.1		73.8		
	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	
40	24.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
45	24.3	-	-	-	-	-	-	-	24.3	-	-	-	-	-	-	-	45
50	24.3	24.3	24.3	-	-	-	-	-	24.3	24.3	24.3	-	-	-	-	-	50
55	24.3	24.3	24.3	22.2	23.8	-	-	-	24.3	24.3	24.3	-	23.8	-	-	-	55
60	24.3	24.3	24.3	21.2	22.9	-	15.5	-	24.3	24.3	24.3	21.2	22.9	-	15.7	-	60
65	24.3	24.3	24.3	20.2	21.5	-	14.9	-	24.3	24.3	24.3	20.2	21.5	-	15.1	-	65
70	23.4	23.5	23.5	19.5	20.4	15.3	14.2	-	23.1	23.4	23.2	19.5	20.4	15.3	14.4	-	70
75	21.8	22.0	22.0	18.8	19.3	14.6	13.6	12.2	21.3	21.8	21.6	18.8	19.3	14.6	13.8	12.5	75
80	19.9	20.1	20.1	18.1	18.3	14.0	13.1	11.6	19.4	19.9	19.6	18.1	18.3	14.0	13.3	12.0	80
85	18.2	18.4	18.4	17.5	17.5	13.5	12.6	11.1	17.7	18.2	18.0	17.5	17.5	13.5	12.8	11.5	85
90	16.8	17.0	17.0	16.9	16.6	13.1	12.3	10.7	16.4	16.7	16.6	16.8	16.5	13.1	12.5	11.1	90
95	15.6	15.8	15.7	16.0	15.7	12.7	11.8	10.4	15.1	15.4	15.4	15.8	15.4	12.7	12.0	10.8	95
100	14.4	14.6	14.5	14.9	14.6	12.2	11.4	10.0	14.0	14.2	14.2	14.6	14.2	12.2	11.6	10.5	100
105	13.2	13.4	13.4	13.9	13.4	11.9	11.0	9.7	12.8	13.0	13.0	13.4	13.2	11.9	11.2	10.1	105
110	12.4	12.4	12.6	12.9	12.6	11.6	10.7	9.5	11.9	12.2	12.2	12.4	12.2	11.6	10.9	9.8	110
115	11.5	11.5	11.8	12.0	11.8	11.3	10.4	9.4	11.1	11.3	11.3	11.5	11.3	11.3	10.6	9.6	115
120	-	-	11.0	11.1	11.0	11.1	10.1	9.1	10.3	10.5	10.5	10.8	10.5	11.0	10.2	9.4	120
125	-	-	10.3	10.3	10.3	10.5	9.9	8.8	-	-	9.9	10.1	9.9	10.3	9.9	9.0	125
130	-	-	9.6	9.6	9.6	9.9	9.6	8.6	-	-	9.2	9.4	9.2	9.5	9.4	8.9	130
135	-	-	-	-	9.0	9.2	9.1	8.5	-	-	8.5	8.8	8.7	8.9	8.9	8.7	135
140	-	-	-	-	8.4	8.6	8.6	8.3	-	-	-	8.1	8.1	8.3	8.4	8.4	140
145	-	-	-	-	7.9	8.1	8.1	8.1	-	-	-	7.4	7.4	7.6	7.9	8.1	145
150	-	-	-	-	-	7.4	7.8	7.8	-	-	-	-	6.9	7.1	7.6	7.6	150
155	-	-	-	-	-	-	7.3	7.3	-	-	-	-	-	-	7.1	7.1	155

Unit: Klb

## Load Chart of FJ Configuration

SCA1000A - FJ 2/4																		
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																		
R/BL (ft)	121.4																R/BL (ft)	
	29.5		44.3		59.1		73.8		29.5		44.3		59.1		73.8			
Jib Length (ft)	15°		30°		15°		30°		15°		30°		15°		30°		Boom to Jib Angle	
Boom to Jib Angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°
40	24.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
45	24.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
50	24.3	24.3	24.3	-	-	-	-	-	24.3	-	-	-	-	-	-	-	-	50
55	24.3	24.3	24.3	-	-	-	-	-	24.3	24.3	24.3	-	-	-	-	-	-	55
60	24.3	24.3	24.3	21.2	22.9	-	-	-	24.3	24.3	24.3	-	22.9	-	-	-	-	60
65	24.3	24.3	24.3	20.2	21.5	-	-	-	24.3	24.3	24.3	-	21.5	-	-	-	-	65
70	22.8	23.2	22.9	19.5	20.4	-	14.6	-	22.6	22.9	22.8	19.5	20.4	-	14.8	-	-	70
75	21.0	21.6	21.2	18.8	19.3	14.6	14.0	-	20.7	21.1	20.9	18.8	19.3	14.6	14.3	-	-	75
80	19.2	19.6	19.4	18.1	18.3	14.0	13.5	12.2	18.8	19.2	19.0	18.1	18.3	14.0	13.8	12.3	-	80
85	17.5	17.7	17.7	17.5	17.5	13.5	13.0	11.7	17.1	17.5	17.5	17.5	17.5	13.5	13.3	11.9	-	85
90	16.2	16.4	16.4	16.6	16.3	13.1	12.7	11.4	15.7	16.2	16.0	16.5	16.2	13.1	12.9	11.6	-	90
95	14.8	15.1	15.0	15.5	15.1	12.7	12.4	11.0	14.5	14.8	14.7	15.2	14.9	12.7	12.6	11.3	-	95
100	13.6	14.0	13.8	14.2	14.0	12.2	12.0	10.7	13.3	13.6	13.6	14.0	13.7	12.2	12.2	10.9	-	100
110	11.7	11.9	11.9	12.2	12.0	11.6	11.1	10.0	11.3	11.7	11.6	12.0	11.7	11.6	11.3	10.4	-	110
115	10.9	11.1	11.1	11.3	11.1	11.2	10.8	9.7	10.6	10.9	10.7	11.1	10.9	11.1	10.8	10.1	-	115
120	10.1	10.3	10.3	10.5	10.3	10.8	10.3	9.4	9.8	10.0	9.9	10.3	10.1	10.5	10.1	9.8	-	120
125	9.4	9.4	9.4	9.9	9.7	10.1	9.7	9.2	9.0	9.2	9.2	9.6	9.4	9.9	9.4	9.5	-	125
130	8.8	8.8	8.9	9.2	9.0	9.2	9.0	9.1	8.3	8.5	8.5	8.8	8.8	9.0	8.8	9.1	-	130
135	8.1	8.2	8.3	8.5	8.3	8.7	8.4	8.7	7.8	7.9	8.0	8.2	8.1	8.4	8.2	8.7	-	135
140	5.1	5.2	7.7	7.9	7.7	8.1	7.9	8.2	7.3	7.3	7.5	7.6	7.5	7.9	7.7	8.2	-	140
145	-	-	7.2	7.2	7.2	7.4	7.4	7.7	6.1	6.1	7.0	7.0	7.0	7.2	7.2	7.6	-	145
150	-	-	6.7	6.7	6.7	6.9	6.9	7.3	-	-	6.5	6.5	6.5	6.7	6.7	7.1	-	150
155	-	-	-	-	6.2	6.4	6.4	6.9	-	-	6.0	6.0	6.0	6.2	6.2	6.6	-	155
160	-	-	-	-	5.8	5.9	6.0	6.4	-	-	-	-	5.6	5.8	5.8	6.1	-	160
165	-	-	-	-	-	-	5.6	5.9	-	-	-	-	5.2	5.4	5.4	5.6	-	165
170	-	-	-	-	-	-	5.1	5.3	-	-	-	-	4.7	4.9	4.9	5.1	-	170
175	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6	4.6	4.8	-	175

### Load Chart of FJ Configuration

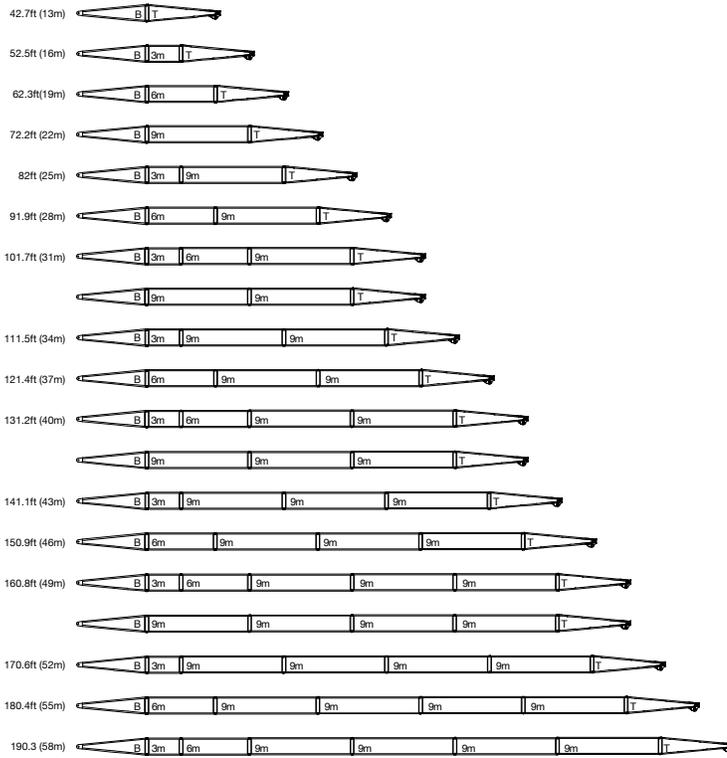
SCA1000A - FJ 3/4																	
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																	
R/BL (ft) Jib Length (ft) Boom to Jib Angle	141.1								150.9								R/BL (ft) Jib Length (ft) Boom to Jib Angle
	29.5		44.3		59.1		73.8		29.5		44.3		59.1		73.8		
	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	
45	24.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
50	24.3	-	-	-	-	-	-	-	24.3	-	-	-	-	-	-	-	50
50	24.3	24.3	24.3	-	-	-	-	-	24.3	-	-	-	-	-	-	-	50
60	24.3	24.3	24.3	-	22.0	-	-	-	24.3	24.3	24.3	-	-	-	-	-	60
65	24.3	24.3	24.3	-	21.4	-	-	-	24.3	24.3	24.3	-	-	-	-	-	65
70	22.3	22.8	22.5	19.5	20.4	-	15.0	-	22.2	22.6	22.3	19.5	20.1	-	-	-	70
75	20.2	20.9	20.6	18.8	19.3	14.6	14.5	-	20.0	20.7	20.2	18.8	19.1	-	14.7	-	75
80	18.4	19.0	18.8	18.1	18.3	14.0	14.0	12.5	18.1	18.7	18.4	18.1	18.2	14.0	14.2	12.7	80
85	16.8	17.3	17.1	17.5	17.3	13.5	13.5	12.1	16.4	16.9	16.8	17.5	16.8	13.5	13.7	12.4	85
90	15.3	15.8	15.6	16.2	15.8	13.1	13.1	11.8	15.0	15.5	15.3	16.0	15.5	13.1	13.2	12.0	90
95	14.0	14.5	14.3	14.9	14.5	12.7	12.7	11.5	13.8	14.3	14.0	14.7	14.3	12.7	12.8	11.7	95
100	12.9	13.3	13.1	13.7	13.3	12.2	12.2	11.1	12.7	13.1	12.9	13.5	13.1	12.2	12.4	11.3	100
105	11.9	12.1	12.1	12.6	12.3	11.9	11.9	10.8	11.7	11.9	11.9	12.3	11.9	11.9	11.9	10.8	105
110	11.1	11.3	11.3	11.7	11.3	11.6	11.2	10.6	10.7	11.1	10.9	11.3	11.1	11.6	11.1	10.3	110
115	10.2	10.4	10.4	10.8	10.4	11.0	10.6	10.4	9.8	10.2	10.0	10.4	10.2	10.9	10.2	9.9	115
120	9.4	9.6	9.6	9.9	9.7	10.3	9.8	10.0	9.0	9.4	9.2	9.7	9.4	10.0	9.4	9.6	120
125	8.6	8.8	8.8	9.2	9.0	9.4	9.0	9.7	8.3	8.6	8.6	9.0	8.8	9.2	8.8	9.2	125
130	8.1	8.1	8.1	8.5	8.3	8.8	8.5	9.0	7.7	7.9	7.9	8.3	8.1	8.5	8.3	8.7	130
135	7.4	7.6	7.6	7.9	7.6	8.1	8.0	8.3	7.1	7.3	7.3	7.6	7.4	7.9	7.8	8.2	135
140	6.8	7.0	7.1	7.3	7.1	7.5	7.4	7.7	6.6	6.8	6.8	7.1	6.8	7.3	7.2	7.6	140
145	6.3	6.3	6.5	6.8	6.5	7.0	6.8	7.2	6.1	6.1	6.1	6.5	6.3	6.8	6.5	7.0	145
150	5.8	5.8	6.0	6.3	6.0	6.5	6.3	6.7	5.6	5.6	5.8	6.0	5.8	6.3	6.0	6.5	150
155	-	-	5.5	5.8	5.5	6.0	5.8	6.2	5.1	5.2	5.3	5.5	5.3	5.8	5.5	6.0	155
160	-	-	5.1	5.3	5.1	5.5	5.3	5.7	3.0	4.8	4.8	5.0	4.9	5.3	5.1	5.5	160
165	-	-	-	4.8	4.8	5.0	4.8	5.2	-	-	4.3	4.6	4.6	4.8	4.8	5.0	165
170	-	-	-	4.4	4.4	4.7	4.4	4.9	-	-	4.0	4.2	4.2	4.4	4.2	4.7	170
175	-	-	-	-	4.1	4.2	4.1	4.5	-	-	3.7	3.7	3.7	4.0	3.9	4.2	175
180	-	-	-	-	3.8	3.8	3.8	4.1	-	-	-	-	3.3	3.6	3.6	3.8	180
185	-	-	-	-	-	-	3.4	3.7	-	-	-	-	3.0	3.2	3.2	3.4	185
190	-	-	-	-	-	-	3.1	3.3	-	-	-	-	2.9	2.9	2.9	3.1	190

Unit: Klb

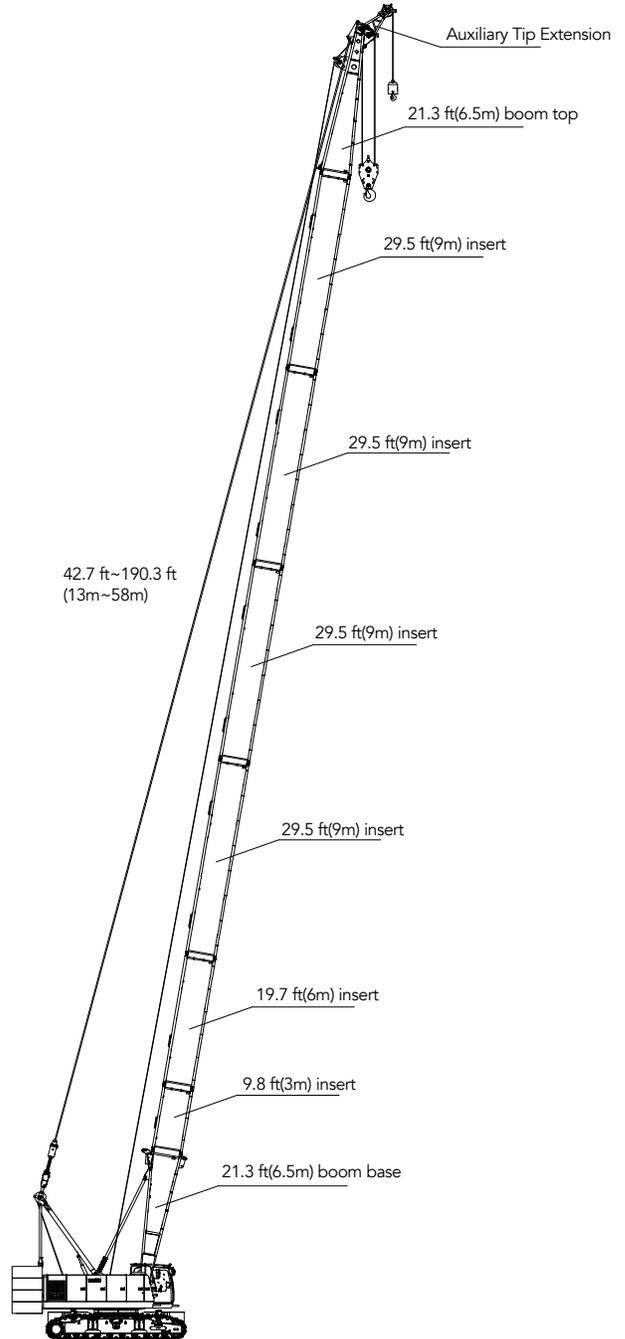
## Load Chart of FJ Configuration

SCA1000A - FJ 4/4																		
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																		
R/BL (ft)	160.7								170.6								R/BL (ft)	
	29.5		44.3		59.1		73.8		29.5		44.3		59.1		73.8			
Jib Length (ft)	15°		30°		15°		30°		15°		30°		15°		30°		Boom to Jib Angle	
50	24.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
55	24.3	-	-	-	-	-	-	-	24.3	-	-	-	-	-	-	-	-	55
60	24.2	24.3	24.2	-	-	-	-	-	24.2	24.3	22.8	-	-	-	-	-	-	60
65	24.1	24.3	23.9	-	-	-	-	-	23.7	24.3	22.3	-	-	-	-	-	-	65
70	21.8	22.3	22.0	19.5	19.4	-	-	-	21.5	22.2	21.1	-	18.0	-	-	-	-	70
75	19.7	20.2	20.0	18.8	18.5	-	14.7	-	19.4	20.0	19.5	18.8	17.6	-	15.1	-	-	75
80	17.9	18.3	18.1	18.1	17.4	14.0	14.2	-	17.4	18.1	17.7	18.0	17.0	14.0	14.6	-	-	80
85	16.2	16.6	16.4	17.2	16.6	13.5	13.9	-	15.7	16.4	16.2	16.8	16.4	13.5	14.1	-	-	85
90	14.8	15.3	15.0	15.8	15.3	12.8	13.6	11.6	14.4	14.9	14.7	15.5	14.9	13.1	13.6	11.4	-	90
95	13.6	13.9	13.8	14.5	14.0	12.5	13.0	11.3	13.1	13.6	13.4	14.1	13.6	12.7	13.1	10.9	-	95
100	12.4	12.7	12.7	13.3	12.9	12.2	12.4	10.9	12.0	12.4	12.2	12.9	12.5	12.2	12.5	10.5	-	100
105	11.2	11.7	11.7	12.1	11.7	11.9	11.7	10.4	11.0	11.2	11.2	11.9	11.5	11.9	11.5	10.1	-	105
110	10.4	10.7	10.7	11.1	10.8	11.4	10.8	10.0	10.0	10.4	10.2	10.9	10.4	11.1	10.6	9.8	-	110
115	9.6	9.9	9.8	10.2	10.0	10.7	10.0	9.7	9.1	9.6	9.3	10.0	9.6	10.2	9.8	9.5	-	115
120	8.8	9.2	9.0	9.4	9.2	9.8	9.2	9.4	8.3	8.7	8.6	9.2	8.8	9.4	9.0	9.1	-	120
125	8.1	8.3	8.3	8.8	8.3	9.0	8.6	9.0	7.7	7.9	7.9	8.3	8.1	8.8	8.3	8.8	-	125
135	6.9	7.1	7.0	7.4	7.1	7.6	7.3	8.0	6.5	6.7	6.7	7.0	6.8	7.3	7.1	7.8	-	135
140	6.3	6.5	6.4	6.8	6.6	7.1	6.8	7.4	5.9	6.1	6.1	6.4	6.2	6.8	6.5	7.2	-	140
145	5.7	5.9	5.9	6.3	6.1	6.5	6.3	6.8	5.4	5.4	5.4	5.9	5.7	6.1	5.9	6.5	-	145
150	5.4	5.4	5.4	5.8	5.6	6.0	5.8	6.3	4.9	4.9	4.9	5.4	5.2	5.6	5.4	6.0	-	150
155	4.9	4.9	5.0	5.3	5.1	5.5	5.3	5.8	4.4	4.6	4.6	4.9	4.7	5.1	4.9	5.5	-	155
160	4.5	4.5	4.6	4.8	4.7	5.0	4.9	5.3	4.0	4.2	4.2	4.4	4.2	4.6	4.4	5.0	-	160
165	4.1	4.1	4.1	4.3	4.3	4.6	4.5	5.0	3.6	3.7	3.7	3.9	3.9	4.1	3.9	4.5	-	165
170	3.6	3.8	3.8	4.0	3.8	4.2	4.0	4.5	3.1	3.3	3.3	3.6	3.6	3.8	3.6	4.0	-	170
175	-	-	3.5	3.5	3.5	3.7	3.7	4.1	2.8	3.0	3.0	3.2	3.1	3.5	3.2	3.7	-	175
180	-	-	3.1	3.1	3.1	3.3	3.3	3.7	-	-	2.7	2.9	2.7	3.1	2.9	3.3	-	180
185	-	-	-	-	2.8	3.0	3.0	3.2	-	-	-	-	2.4	2.7	2.6	3.0	-	185
190	-	-	-	-	2.4	2.7	2.7	2.9	-	-	-	-	2.2	2.2	2.2	2.7	-	190

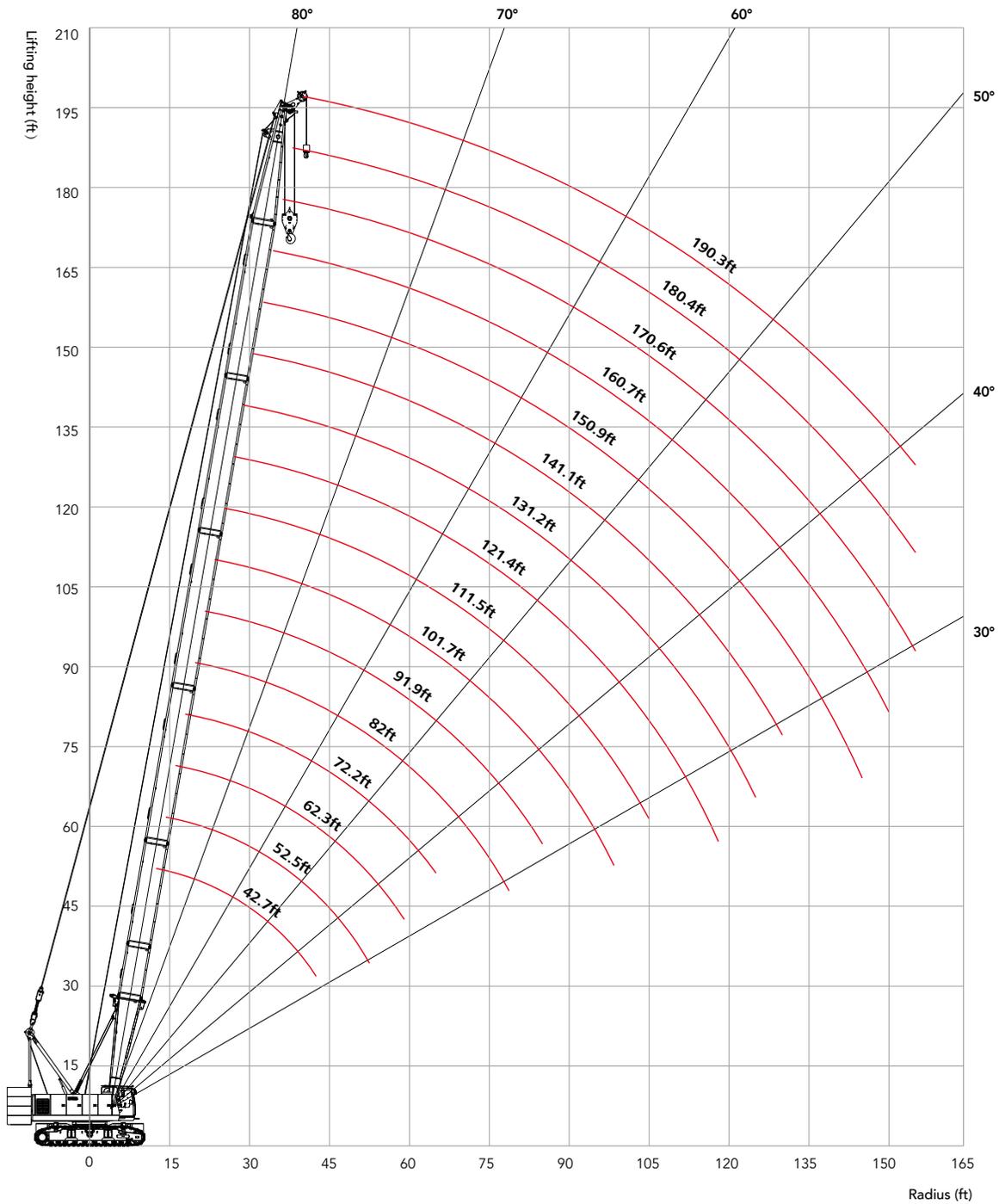
## Boom Combination of HC Configuration



	19.7 ft (6.5m) Boom base
	9.8 ft (3m) Insert
	19.7 ft (6m) Insert
	29.5 ft (9m) Insert
	19.7 ft (6.5m) Boom top



## Working Radius of HC Configuration



### Load Chart of HC Configuration

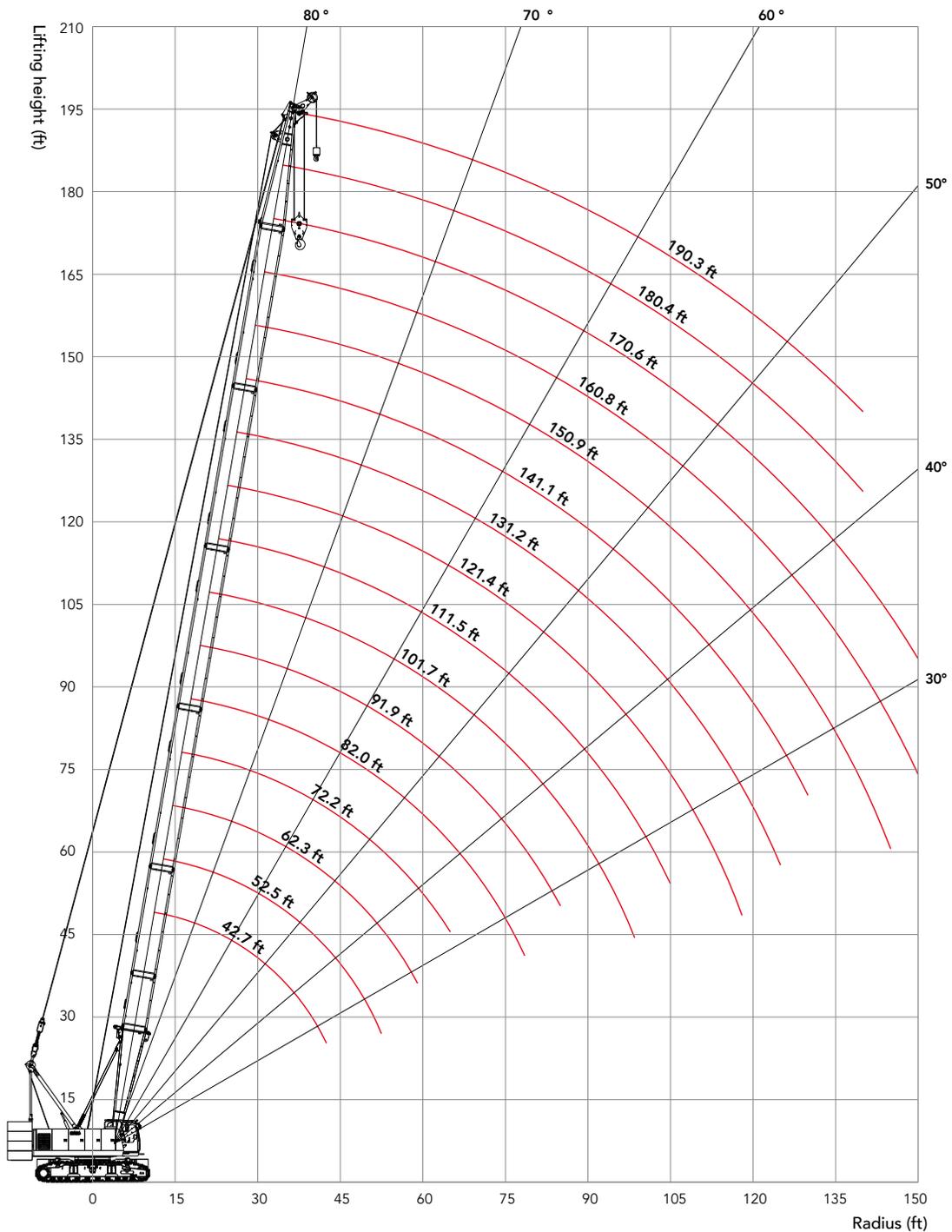
SCA1000A - HC (Using Aux. Hook)																	
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																	
R/BL (ft)	42.7	52.5	62.3	72.2	82.0	91.9	101.7	111.5	121.4	131.2	141.1	150.9	160.7	170.6	180.4	190.3	R/BL (ft)
12.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5
13.0	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1
14.0	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.0
15.0	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.0
16.0	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.0
17.0	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.0
18.0	26.5	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	18.0
19.0	26.5	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	-	19.0
20.0	26.5	26.5	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	-	20.0
21.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	-	-	-	-	-	-	21.3
23.0	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	-	-	-	-	-	23.0
25.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	-	-	-	-	25.0
26.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	-	-	-	26.2
30.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	-	30.0
33.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	32.8
35.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	-	-	35.0
36.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-	-	36.1
40.0	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	40.0
42.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	42.6
45.0	-	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	45.0
50.0	-	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	50.0
52.5	-	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	52.5
55.0	-	-	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.4	26.2	55.0
59.0	-	-	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.2	25.8	59.0
60.0	-	-	-	26.5	26.4	26.4	26.3	26.2	26.2	26.2	26.1	26.0	26.0	25.9	25.7	25.2	60.0
65.0	-	-	-	26.5	26.1	25.8	25.6	25.0	24.8	24.6	24.0	23.8	23.6	23.0	22.8	22.3	65.0
70.0	-	-	-	-	23.9	23.7	23.3	22.8	22.6	22.4	21.7	21.5	21.3	20.8	20.4	20.0	70.0
75.0	-	-	-	-	21.8	21.5	21.2	20.7	20.4	20.2	19.6	19.4	19.1	18.7	18.3	17.9	75.0
78.5	-	-	-	-	20.5	20.1	19.8	19.4	19.0	18.7	18.3	18.1	17.6	17.2	17.0	16.5	78.7
80.0	-	-	-	-	-	19.6	19.4	18.9	18.5	18.3	17.8	17.6	17.2	16.8	16.5	16.1	80.0
85.0	-	-	-	-	-	18.2	17.7	17.3	17.1	16.8	16.2	16.0	15.7	15.3	14.9	14.4	85.0
90.0	-	-	-	-	-	-	16.4	15.9	15.7	15.3	14.8	14.6	14.4	13.9	13.5	13.1	90.0
95.0	-	-	-	-	-	-	15.1	14.7	14.5	14.0	13.6	13.4	13.2	12.7	12.3	11.8	95.0
98.5	-	-	-	-	-	-	14.3	13.9	13.7	13.2	12.8	12.6	12.3	11.9	11.5	11.0	98.4
100.0	-	-	-	-	-	-	-	13.6	13.4	12.9	12.5	12.3	12.0	11.6	11.2	10.7	100.0
105.0	-	-	-	-	-	-	-	12.6	12.3	11.9	11.5	11.2	11.0	10.6	10.1	9.7	105.0
110.0	-	-	-	-	-	-	-	-	11.3	11.1	10.6	10.4	10.0	9.6	9.3	8.9	110.0
115.0	-	-	-	-	-	-	-	-	10.5	10.2	9.8	9.5	9.2	8.8	8.4	8.0	115.0
118.0	-	-	-	-	-	-	-	-	10.1	9.7	9.3	9.0	8.8	8.4	7.9	7.5	118.1
120.0	-	-	-	-	-	-	-	-	-	9.4	9.0	8.8	8.5	8.0	7.7	7.2	120.0
125.0	-	-	-	-	-	-	-	-	-	8.8	8.3	8.1	7.9	7.2	7.0	6.6	125.0
130.0	-	-	-	-	-	-	-	-	-	-	7.7	7.4	7.2	6.7	6.5	5.9	130.0
135.0	-	-	-	-	-	-	-	-	-	-	-	6.9	6.5	6.1	5.9	5.3	135.0
140.0	-	-	-	-	-	-	-	-	-	-	-	6.4	5.9	5.5	5.3	4.8	140.0
145.0	-	-	-	-	-	-	-	-	-	-	-	5.8	5.5	5.0	4.8	4.3	145.0
150.0	-	-	-	-	-	-	-	-	-	-	-	-	5.1	4.7	4.3	3.8	150.0
155.0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2	3.9	3.5	155.0

Unit: Klb

### Load Chart of HC Configuration

SCA1000A - HC (Using Main Hook)																	
68.8Klb Rear Counterweight + 24.3Klb Carbody Counterweight																	
R/BL (ft)	42.7	52.5	62.3	72.2	82.0	91.9	101.7	111.5	121.4	131.2	141.1	150.9	160.7	170.6	180.4	190.3	R/BL (ft)
12.5	218.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5
13.0	200.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.0
14.0	189.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.0
15.0	180.5	175.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.0
16.0	168.1	163.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.0
17.0	158.3	155.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.0
18.0	149.9	149.5	148.2	-	-	-	-	-	-	-	-	-	-	-	-	-	18.0
19.0	142.1	141.0	139.4	-	-	-	-	-	-	-	-	-	-	-	-	-	19.0
20.0	133.7	132.2	130.6	126.3	-	-	-	-	-	-	-	-	-	-	-	-	20.0
21.5	120.4	119.3	118.2	116.4	112.5	-	-	-	-	-	-	-	-	-	-	-	21.3
23.0	107.8	106.7	105.8	105.0	102.8	99.7	-	-	-	-	-	-	-	-	-	-	23.0
25.0	94.9	94.0	93.1	92.5	91.6	90.0	87.5	-	-	-	-	-	-	-	-	-	25.0
26.0	88.6	87.8	87.1	86.4	85.6	84.9	82.9	80.5	-	-	-	-	-	-	-	-	26.2
30.0	73.8	72.9	72.3	71.8	71.2	70.5	70.1	69.1	67.5	66.0	-	-	-	-	-	-	30.0
33.0	65.0	64.2	63.7	63.3	62.6	62.2	61.5	61.1	60.4	59.3	57.8	-	-	-	-	-	32.8
35.0	59.7	59.0	58.5	58.1	57.4	57.0	56.5	55.9	55.4	54.7	53.8	-	-	-	-	-	35.0
36.0	57.1	56.4	56.0	55.6	54.9	54.5	54.0	53.4	52.9	52.5	51.8	50.5	49.4	-	-	-	36.1
40.0	49.7	49.0	48.6	48.3	47.7	47.3	46.8	46.4	45.9	45.5	45.1	44.7	43.7	42.6	-	-	40.0
42.5	45.6	45.0	44.5	44.1	43.7	43.2	42.8	42.3	41.9	41.7	41.0	40.8	40.4	39.5	37.7	33.1	42.6
45.0	-	41.9	41.5	41.1	40.6	40.2	39.7	39.3	39.0	38.6	38.1	37.7	37.3	36.7	35.8	32.1	45.0
50.0	-	36.3	36.1	35.6	35.2	34.7	34.4	33.9	33.6	33.2	32.8	32.4	32.1	31.5	31.2	29.9	50.0
52.5	-	34.0	33.7	33.3	32.9	32.4	32.2	31.5	31.3	30.9	30.4	30.2	29.8	29.3	28.9	28.4	52.5
55.0	-	-	31.8	31.3	30.9	30.6	30.2	29.7	29.4	29.0	28.6	28.3	27.9	27.5	27.0	26.6	55.0
59.0	-	-	28.7	28.2	27.8	27.6	27.1	26.7	26.2	26.0	25.6	25.1	24.9	24.5	24.0	23.6	59.0
60.0	-	-	-	27.7	27.2	27.0	26.6	26.1	25.7	25.5	25.0	24.6	24.4	23.9	23.5	23.0	60.0
65.0	-	-	-	24.8	24.2	24.0	23.7	23.1	22.8	22.6	22.0	21.7	21.5	20.9	20.6	20.2	65.0
70.0	-	-	-	-	21.7	21.5	21.2	20.6	20.4	20.2	19.5	19.3	19.1	18.6	18.2	17.8	70.0
75.0	-	-	-	-	19.6	19.3	19.0	18.5	18.2	18.0	17.4	17.2	16.9	16.5	16.1	15.7	75.0
78.5	-	-	-	-	18.3	17.9	17.6	17.2	16.8	16.5	16.1	15.9	15.4	15.0	14.8	14.3	78.7
80.0	-	-	-	-	-	17.4	17.2	16.7	16.3	16.1	15.6	15.4	15.0	14.6	14.3	13.8	80.0
85.0	-	-	-	-	-	16.0	15.5	15.1	14.9	14.6	14.0	13.8	13.5	13.1	12.7	12.2	85.0
90.0	-	-	-	-	-	-	14.2	13.7	13.5	13.1	12.6	12.4	12.2	11.7	11.3	10.9	90.0
95.0	-	-	-	-	-	-	12.9	12.5	12.3	11.8	11.4	11.2	11.0	10.5	10.1	9.6	95.0
98.5	-	-	-	-	-	-	12.1	11.7	11.5	11.0	10.6	10.4	10.1	9.7	9.3	8.8	98.4
100.0	-	-	-	-	-	-	-	11.4	11.2	10.7	10.3	10.1	9.8	9.4	9.0	8.5	100.0
105.0	-	-	-	-	-	-	-	10.4	10.1	9.7	9.3	9.0	8.8	8.4	7.9	7.5	105.0
110.0	-	-	-	-	-	-	-	-	9.1	8.9	8.4	8.2	7.8	7.4	7.1	6.6	110.0
115.0	-	-	-	-	-	-	-	-	8.3	8.0	7.6	7.3	7.0	6.6	6.2	5.8	115.0
118.0	-	-	-	-	-	-	-	-	7.9	7.5	7.1	6.8	6.6	6.2	5.7	5.3	118.1
120.0	-	-	-	-	-	-	-	-	-	7.2	6.8	6.6	6.3	5.8	5.5	5.0	120.0
125.0	-	-	-	-	-	-	-	-	-	6.6	6.1	5.9	5.7	5.0	4.8	4.4	125.0
130.0	-	-	-	-	-	-	-	-	-	-	5.5	5.2	5.0	4.5	4.3	3.7	130.0
135.0	-	-	-	-	-	-	-	-	-	-	-	4.7	4.3	3.9	3.7	3.1	135.0
140.0	-	-	-	-	-	-	-	-	-	-	-	4.2	3.7	3.3	3.1	2.6	140.0
145.0	-	-	-	-	-	-	-	-	-	-	-	3.5	3.3	2.8	-	-	145.0
150.0	-	-	-	-	-	-	-	-	-	-	-	-	2.9	2.5	-	-	150.0

### Working Radius of HC Configuration





## Service

When we say that SANY machines are built to endure, we're really talking about service. SANY equipment is intentionally designed to be easily and efficiently serviced, with features such as wide compartment doors and easy access to make maintenance more efficient. Because ease of service means back in service.

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