



SCE1000A

Crawler Crane

100 Tons Lifting Capacity

Quality Changes the World



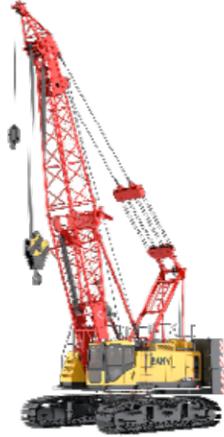
Max. lifting moment: 380t·m

Max. boom length: 64m

Max. fixed jib combination: 52m+22.5m

The parameters, pictures and standard/optional equipment are only for reference in this brochure, the actual machine is based on the effective price list and contract.

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Crawler Crane Series
SCE1000A

P03

Main
Characteristics

Product Specification
Safety Device

P09

Technical
Parameters

Major Performance & Specifications
Outline Dimension
Transport Dimension
Transport Plan 1
Transport Plan 2

P18

Configurations

H Configuration
FJ Configuration
HC Configuration



SCE1000A
SANY CRAWLER CRANE
100 TONS LIFTING CAPACITY

QUALITY CHANGES THE WORLD

Main Characteristics

Page 04 Product Specification

Page 07 Safety Device

> 03

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 Non-road Tier V Emission Standard and US EPA Tier F4(f) Emission Standard;
Displacement: 8.9L;
Rated power: 242kW/1800rpm;
Operation power: 242kW/1800rpm;
Max. Torque: 1526N.m/1400rpm;
Starter: 24V-7.8kW;
Radiator: fin type aluminum plate core;
Air cleaner: Dry type system with main filter element, safety element and resistance indicator;
Throttle: Hand throttle, foot throttle, electrically-controlled;
Fuel filter: Replaceable paper element;
Batteries: Two 12V×165Ah capacity batteries, connected in series (24V system);
Fuel tank capacity: 400L.

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, LML 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 volume, engine oil pressure, servo pressure, engine working hours, lifting conditions and boom angle.

Hydraulic System

Main pumps: three open variable displacement piston pumps are adopted to provide oil supply for main actuators of machine;
Gear pump: two types of gear pump for radiator and control circuit;
Control: main pump adopts electrically-controlled positive flow control; winch motor adopts limitless adjustable piston motor of variable displacement. The operating components are two cross hydraulic handles, dual one-axis control handle for travel (EU market); or one cross handle plus three one-axis handles, and dual one-axis handles (US and other markets), to control various actuators proportionally;
Way of cooling: heat exchanger, plate fan core and multi-stage cooling;
Filter: large flow, high precision filter, with bypass valve and transmitter, which can remind the user to replace the filter element in time;
Max. pressure of system: 32MPa;
Main/aux. load hoist, boom hoist and travel system: 32MPa;
Swing system: 32MPa;
Control system: 5MPa;
Hydraulic Tank Capacity: 460L.

Product Specification



Main and Aux. Hoist Mechanism

Main and aux. hoist winches are driven separately by motor via gearbox. Operating winch handle can control the winch to rotate to two directions, which are lifting and lowering of hook. Excellent inching function is equipped on the machine;
Drums with fold-line grooves can ensure the wire rope reeved in order in multilayers;
Free fall for main/aux. load hoist is offered as optional.

Main Hoisting Mechanism	Drum diameter	630mm
	Rope speed on the first work layer	0~121m/min
	Wire rope diameter	26mm
	Wire rope length of main hoist	240m
	Rated single line pull	12t
Auxiliary Hoisting Mechanism	Drum diameter	630mm
	Rope speed on the first work layer	0~121m/min
	Wire rope diameter	26mm
	Wire rope length of auxiliary hoist	180m
	Rated single line pull	12t

Boom Hoist Mechanism

Boom hoist winch is driven separately by motor via gearbox. Operating handle can control the winch to rotate to two directions, which are lifting and lowering of boom;
Drums with fold-line grooves can ensure the wire rope reeved in order in multilayers.

Boom Hoist Mechanism	Drum diameter	420mm
	Rope speed on the first work layer	0~59m/min
	Wire rope diameter	20mm
	Wire rope length of boom hoist	140m
	Rated single line pull	7t

Optional 3rd winch mechanism

Optional 3rd winch mechanism is connected with boom base with pins and driven separately by motor via gearbox. Operating handle can control the winch to rotate to two directions, which are lifting and lowering of hook;
Drums with fold-line grooves can ensure the wire rope reeved in order in multilayers.

Optional 3rd Winch Mechanism	Drum diameter	522mm
	Rope speed on the outermost work layer	0~100m/min
	Wire rope diameter	22mm
	Wire rope length	130m
	Rated single line pull	9t

Swing Mechanism

Swing brake adopts wet, spring loaded, normally-closed brake, and braking through spring force;
Swing system has three work modes to accommodate different needs. It is featured in small backlash, steady control, and excellent inching function. It also has free slipping function and swing control on slope to provide smoother braking;
Swing drive: internal engaged swing drive with 360° swing range, and the max. swing speed is 2.7r/min. The max. drive pressure can reach 32MPa;
Swing lock: cylinder lock can ensure the upperworks locked securely on four directions after work or during transport;
Swing ring: single row ball bearing.

Cab and Control

Novel operator's cab with fashionable profile, nice interior and large window glass. There are low and high-beam lights, back-view mirror, heater and A/C, radio and other functions. The layout of seat, handles, control buttons are designed with ergonomic principles to make operation more comfortable;
Cab layout: Integrated 10.4-inch touch screen, programmable smart switches, and man-machine interaction interface are more improved;
Armrest box: on the left and right armrest box are control handles, electrical switches, emergent stop and ignition switch. The armrest box can be adjusted along with the seat;
Seat: multi-way and multi-level floating adjustable seat with unload switch;
A/C: cool and heat air; optimized air channels and vents;
Multiple cameras can present on the monitor at the same time to realize backing video, real-time monitoring of wire rope on each winch, conditions behind the counterweight and surrounding the machine.

Counterweight

Counterweight tray and blocks are piled up for easier assembly and transport;
Rear counterweight is self-assembled, total 31.2t;
Self-assembled counterweight: tray 9.9t×1, left counterweight block 3.45t×3, and right counterweight block 3.45t × 3, cylinder bracket 0.6×1;
Carbody counterweight: 5.5t×2 at the front and rear of carbody.

Upperworks

High-strength steel weld framework. The parts are laid out in the way that is easier for maintenance and service.

Product Specification



Lowerworks

Independent travel driving units are adopted for each side of the crawler, to realize straight walking and turning driven by travel motor through gearbox and drive wheel.

Crawler Extension and Retraction

The crawlers can extend and retract via cylinders. During Work Mode, the crawlers must be extended, and retracted during transport with crawlers on when there is no restrictions.

Crawler Tensioning

Use the jack to push the guide wheel and insert the shim to adjust crawler tension.

Track Pad

High-strength alloy cast steel track pad can prolong the service life. They are 850mm wide, and the total amount is 62pcs×2.

Jack cylinder

Jack cylinders are provided as standard offering to make jobsite transfer easier.

Self-assembly cylinder

Self-assembly cylinder is provided as standard offering to help crawlers and carbody counterweight assembly during jobsite transfer.

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 hooks are installed with rolled welded steel sheave. Pendant cables with quick hitch connector that are easy to assemble are adopted.

Boom

Lattice structure. The chord adopts high-strength structural tube and each section is connected through pins;
Basic boom: 6.5m boom top + 6.5m boom base;
Boom insert: 3m×1, 6m×2, 9m×4;
Boom length: 13m~64m.

Fixed Jib

Lattice structure. The chord adopts high-strength structural tube and each section is connected through pins;
Basic boom: 4.5m boom top + 4.5m boom base;
Boom insert: 4.5m×3;
Boom length: 9m~22.5m;
Longest boom + jib: 52m boom +22.5m jib.

Extension Jib

The extension jib is a welded structure connected to the boom tip by pins, used for auxiliary hook;
Extension jib length: 1.66m.

Hook Block

100t hook block, five sheaves;
50t hook block, three sheaves;
25t hook block, one sheave;
13.5t 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 activate to protect the operation.

Emergent Stop

In emergent situation, this button is pressed down to cut off the power supply of whole machine and all actions stop.

Load Moment Limiter (LML)

It is an independent computerized safety control system. LML can automatically detect the load weight, work radius and boom angle, and present on the display the rated load, actual load, work radius and boom angle. In normal operation, the LML can make a judgment and cut off automatically if the crane moves towards dangerous direction. It can also perform as a black box to record the lifting information;
Composition: monitor, angler sensor, force sensor and other electrical components.

Over-hoist Protection of the Main/Auxiliary Hooks

Over-hoist protection device comprises of limit switch and weight on boom top, which prevents the hook lift up too much. When the hook lifts up to the limit height, the limit switch activates, buzzer on the left control panel sends alarm, and failure indicator light starts to flash, the hook hoisting action is cut off automatically.

Over-release Protection Device of the Main/Auxiliary Winch

It is comprised of activator in the drum and proximity switch to prevent over release of wire rope. When the rope is paid out close to the last three wraps, the limit switch acts, and the system sends alarm through buzzer and show the alarm on the instrument panel, automatically cutting off the winch 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 accidental collision.

Drum Lock

Hydraulically controlled lock is installed for boom hoist drum, which needs to unlock by switch before operation, in order to prevent mis-operation of handles and ensure safety during non-work time.

Swing Lock

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

Boom Limit Device

When the boom elevation angle reaches the maximum angle the buzzer sounds and boom action cut off. This protection is two-stage control ensured by both LML system and travel switch.

Back-stop Device

Its major components are tubes and spring, in order to buffer the boom backlash and prevent further tipping back.

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.

Safety Device



Monitoring System

Remote Monitoring system is a standardized offering to provide functions like GPS locating, GPRS data transfer, machine status inquiry and statistics, operating data monitoring and analysis, remote diagnosis of failures.

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 102% of rated load, the red light on, the alarm light flashes and sends out continuous sirens. At this moment, the system will automatically cut off the crane's dangerous operation.

Audio-Visual Alarm

It flashes once the machine is powered on with electricity, so as to warn people around.

Swing Indicator Light

The swing indicator light flashes during traveling or swing.

Illuminating Light

The machine is equipped with, short-beam light in front of machine, front angle adjustable far-beam, lamps in operator's cab, lighting devices for night operation, so as to increase the visibility during work.

Rearview Mirror

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

Pharos

Pharos is mounted on the top of boom/jib to indicating the height.

Anemometer

It is mounted on the top of boom/jib, and displayed 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 volume, total work hours, engine oil pressure, engine speed, battery charging, voltage.



SCE1000A SANY CRAWLER CRANE 100 TONS LIFTING CAPACITY

QUALITY CHANGES THE WORLD

Technical Parameters

Page 10 Major Performance & Specifications

Page 11 Outline Dimension

Page 12 Transport Dimension

Page 16 Transport Plan 1

Page 17 Transport Plan 2

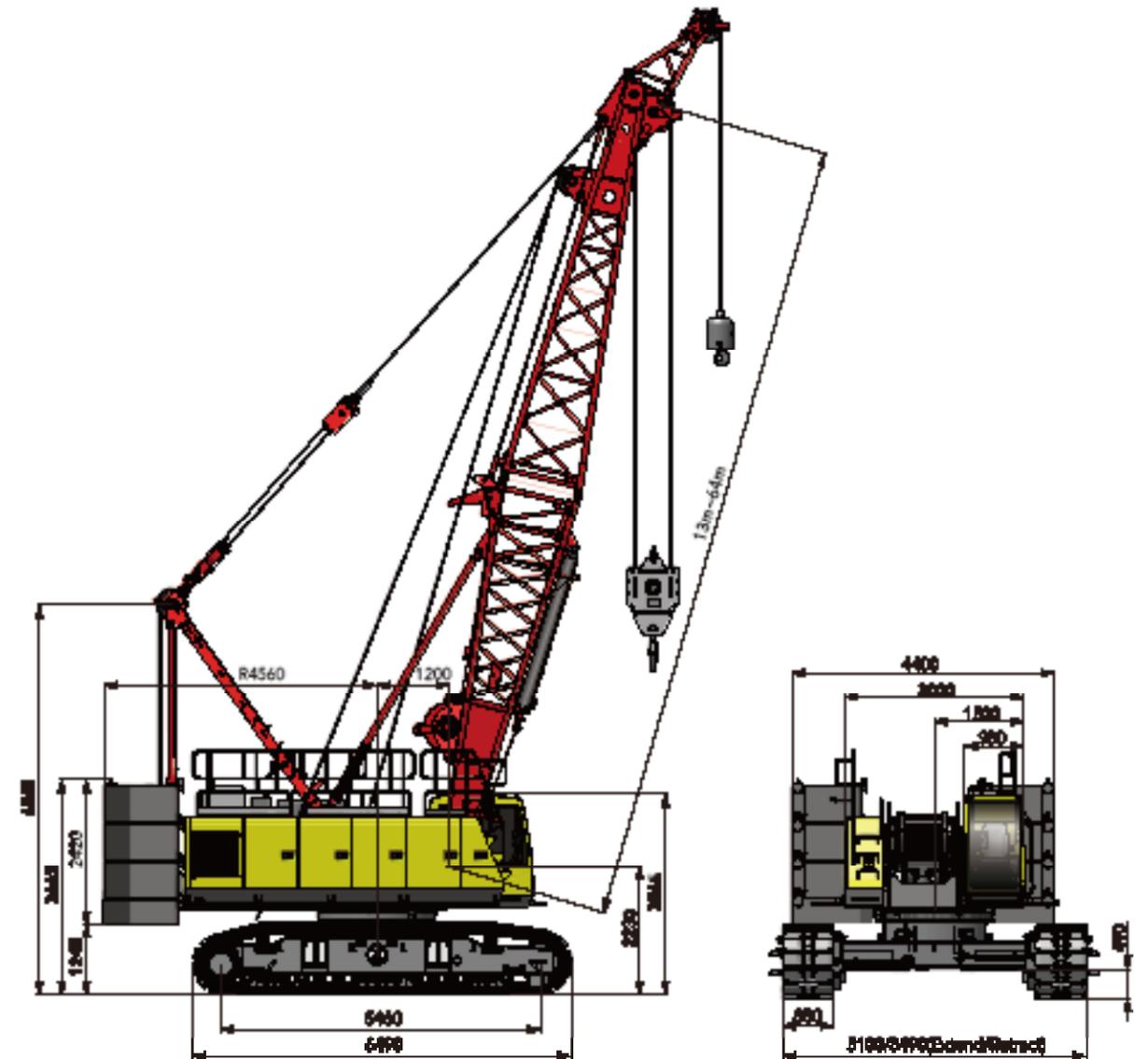


Major Performance & Specifications

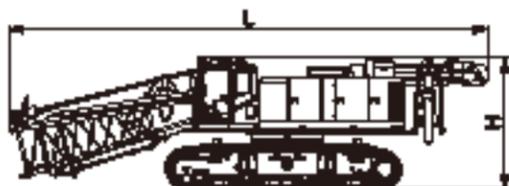
Major Performance & Specifications of SCE1000A			
Performance Indicators		Unit	Parameter
H	Max. rated lifting capacity	t	100
	Max. lifting moment	t · m	100×3.8=380
	Boom length	m	13~64
	Boom luffing angle	°	30~80
FJ	Max. rated lifting capacity	t	11
	Jib length	m	9~22.5
	Longest boom + longest jib	m	52+22.5
	Jib angle	°	15\30
Speed	Rope speed of main/aux. winch (1st layer)	m/min	121
	Rope speed of boom hoist winch (1st layer)	m/min	59
	Swing speed	rpm	2.7
	Travel speed	km/h	2\1
Wire rope	Main hoist wire rope: diameter × length	φmm×m	φ26×240
	Aux. hoist wire rope: diameter × length	φmm×m	φ26×180
	Single line pull of main/aux. hoist wire rope	t	12
Engine	Output power	kW	242
	Rated speed	rpm	1800
Transport	Weight of machine with basic boom	t	99.93
	Transport weight of basic machine (with boom base, crawlers and 4 winches)	t	55.84
	Transport weight of basic machine (without crawlers)	t	34.54
	Machine transport dimension (with boom base, crawlers and 4 winches)L×W×H	mm	13300×3490×3560
	Machine transport dimension (without crawlers)L×W×H	mm	8310×3000×3070
Other specifications	Average ground pressure (basic boom)	MPa	1.09
	Gradeability	%	30

Outline Dimension

Unit: mm



Transport Dimension



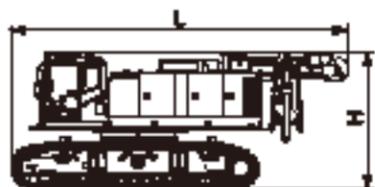
Basic Machine 1 (with boom base , crawlers and 4 winches) ×1

Length(L)	13.30m
Width(W)	3.49m
Height(H)	3.56m
Weight with 3rd winch	55.84t
Weight without 3rd winch	54.80t



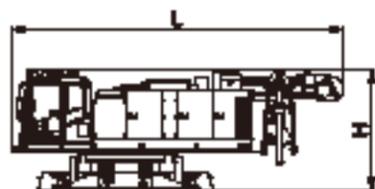
Basic Machine 2 (with boom base and 4 winches) ×1

Length (L)	13.30m
Width (W)	3.00m
Height (H)	3.07m
Weight with 3rd winch	34.54t
Weight without 3rd winch	33.50t



Basic Machine 3 (with crawlers and 3 winches) ×1

Length (L)	8.67m
Width (W)	3.49m
Height (H)	3.56m
Weight	52.25t



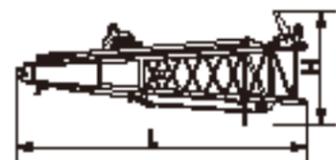
Basic Machine 4 ×1

Length(L)	8.31m
Width(W)	3.00m
Height(H)	3.07m
Weight	30.95t



Crawlers ×2

Length(L)	6.49m
Width(W)	1.10m
Height(H)	1.22m
Weight	10.65t



Boom base with the 3rd winch ×1

Length(L)	6.72 m
Width(W)	1.78m
Height(H)	2.06m
Weight	3.58t

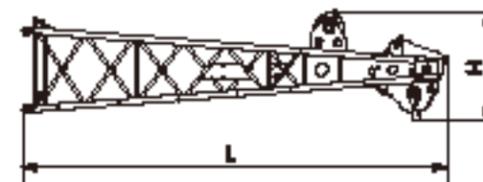
Note: weight of the optional 3rd winch is 1.04t.

Transport Dimension



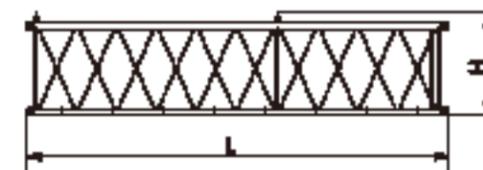
3rd winch ×1

Length(L)	1.11m
Width(W)	0.95m
Height(H)	0.94m
Weight	1.04t



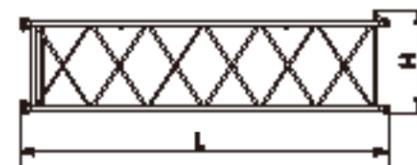
Boom Top ×1

Length(L)	7.13m
Width(W)	1.49m
Height(H)	1.79m
Weight	1.50t



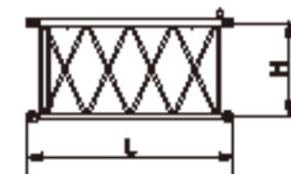
9m Boom Insert ×4

Length (L)	9.14m
Width (W)	1.51m
Height (H)	1.47m
Weight	1.07t



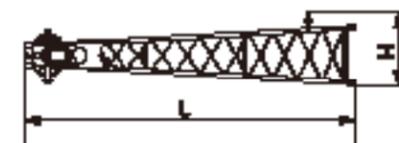
6m Boom Insert ×2

Length (L)	6.14m
Width (W)	1.51m
Height (H)	1.47m
Weight	0.78t



3m Boom Insert ×1

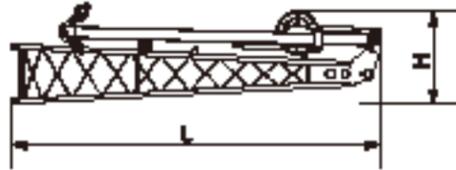
Length(L)	3.14m
Width(W)	1.51m
Height(H)	1.47m
Weight	0.50t



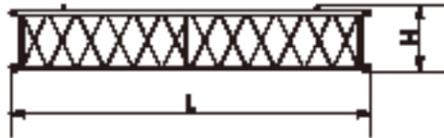
Fixed Jib Top ×1

Length(L)	4.93m
Width(W)	0.87m
Height(H)	0.92m
Weight	0.31t

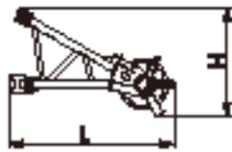
Transport Dimension



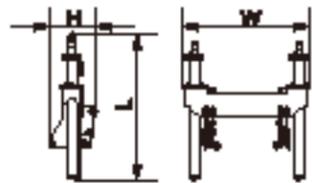
Fixed Jib Base and Strut ×1	
Length(L)	4.75m
Width(W)	0.87m
Height(H)	1.18m
Weight	0.75t



4.5m Fixed Jib ×3	
Length(L)	4.57m
Width(W)	0.87m
Height(H)	0.83m
Weight	0.24t

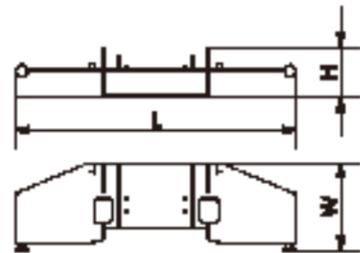


Extension Jib ×1	
Length (L)	1.82m
Width (W)	0.90m
Height (H)	1.20m
Weight	0.2t

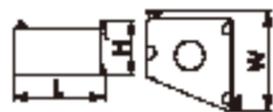


Counterweight cylinder bracket ×1	
Length(L)	2.28m
Width(W)	1.98m
Height(H)	0.74m
Weight	1.4t

Note: weight includes that for chains and pendant bar

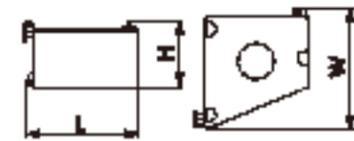


Counterweight tray ×1	
Length (L)	4.40m
Width (W)	1.35m
Height (H)	0.77m
Weight	9.9t



Left Counterweight Block ×3	
Length (L)	1.33m
Width (W)	1.26m
Height (H)	0.72m
Weight	3.45t

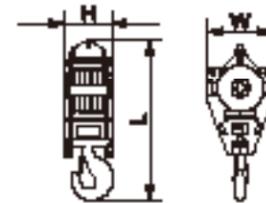
Transport Dimension



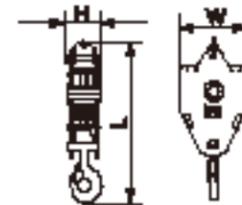
Right Counterweight Block ×3	
Length(L)	1.33m
Width(W)	1.26m
Height(H)	0.72m
Weight	3.45t



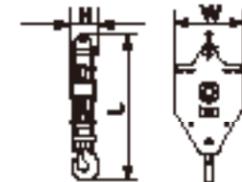
Carbody Counterweight ×2	
Length(L)	1.85m
Width(W)	1.13m
Height(H)	0.81m
Weight	5.5t



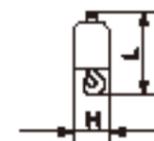
100T hook ×1	
Length (L)	2.08m
Width (W)	0.85m
Height (H)	0.63m
Weight	1.36t



50T hook ×1	
Length(L)	1.95m
Width(W)	0.90m
Height(H)	0.45m
Weight	1.04t



25T hook ×1	
Length(L)	1.86m
Width(W)	0.90m
Height(H)	0.35m
Weight	0.79t



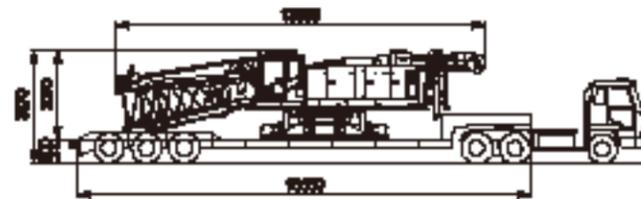
13.5T Ball Hook ×1	
Length(L)	0.95m
Width(W)	0.43m
Height(H)	0.43m
Weight	0.45t

Note:

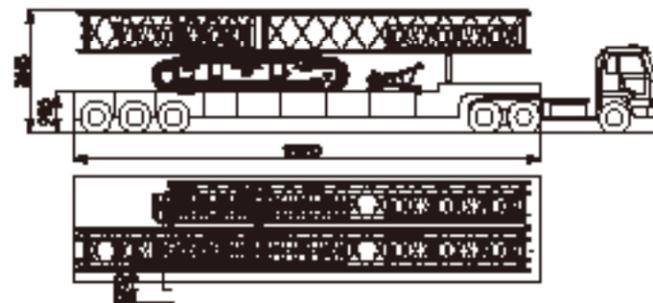
- 1.The transport dimensions of each part in the table are schematic, not proportional to the real parts. The dimensions are designed value without package considered.
- 2.The Weight is designed value that the actual manufactured part may deviate a little.

Transport Plan 1

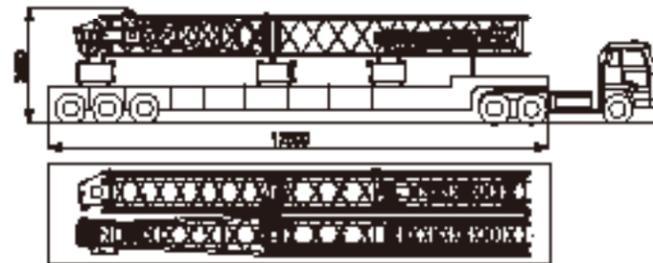
Trailer 1	
Part(s)	Basic machine with 4 winches
Weight	34.54t



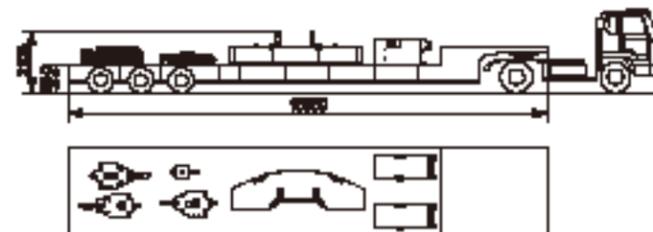
Trailer 2	
Part(s)	9m boom x2 6m boom x1 3m boom x1 Extension jib x1 4.5m fixed jib x3 Left crawler frame x1 Right crawler frame x1
Weight	25.7t



Trailer 3	
Part(s)	9m boom x2 6m boom x1 Boom top x1 Fixed jib base x1 Fixed jib top x1 Left counterweight block x3 Right counterweight block x3
Weight	26.4t



Trailer 4	
Part(s)	Counterweight tray x1 Carbody counterweight x2 100t hook x1 50t hook x1 25t hook x1 13.5t ball hook x1
Weight	24.6t

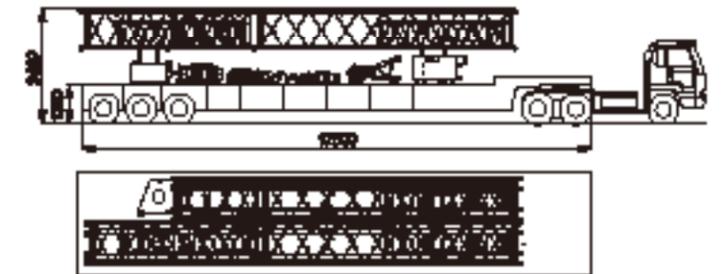


Transport Plan 2

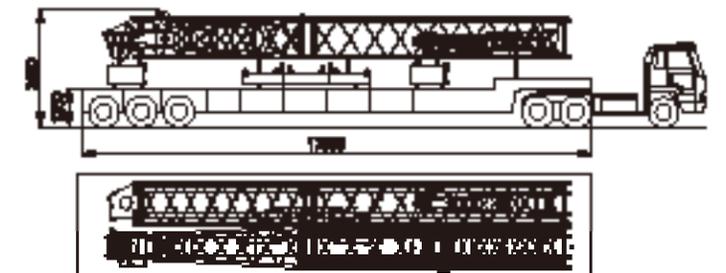
Trailer 1	
Part(s)	Basic machine with 4 winches
Weight	55.84t



Trailer 2	
Part(s)	9m boom x2 6m boom x1 3m boom x1 Extension jib x1 4.5m fixed jib x3 Carbody counterweight x2 Left counterweight x1 Right counterweight x1 100t hook x1 50t hook x1 25t hook x1 13.5t hook x1
Weight	26t



Trailer 3	
Part(s)	9m boom x2 6m boom x1 Boom top x1 Fixed jib base x1 Fixed jib top x1 Counterweight tray x1 Left counterweight x2 Right counterweight x2
Weight	29.5t



Combination



**SCE1000A
SANY CRAWLER CRANE
100 TONS LIFTING CAPACITY**

QUALITY CHANGES THE WORLD

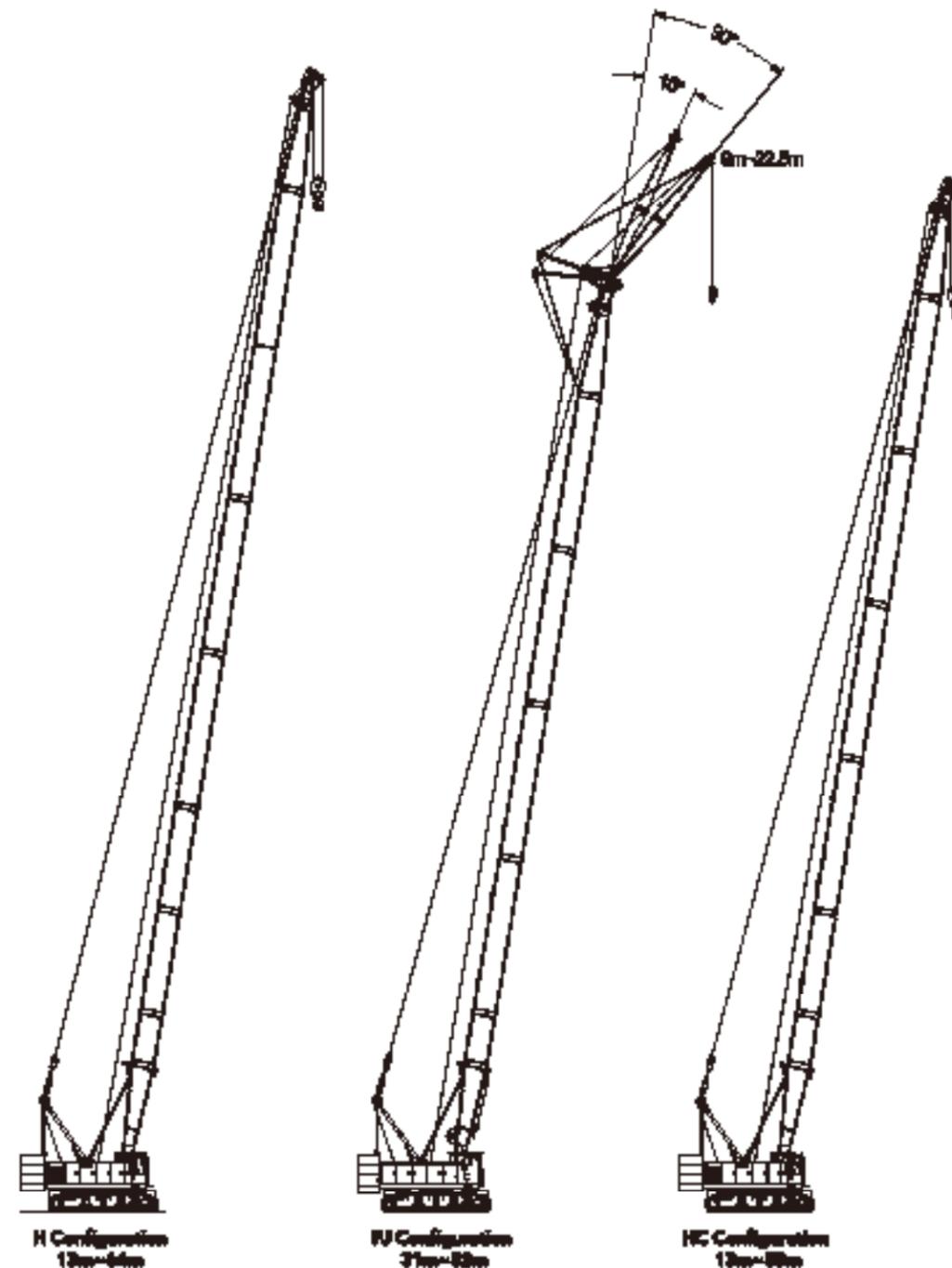
Configuration

Page 20 H Configuration

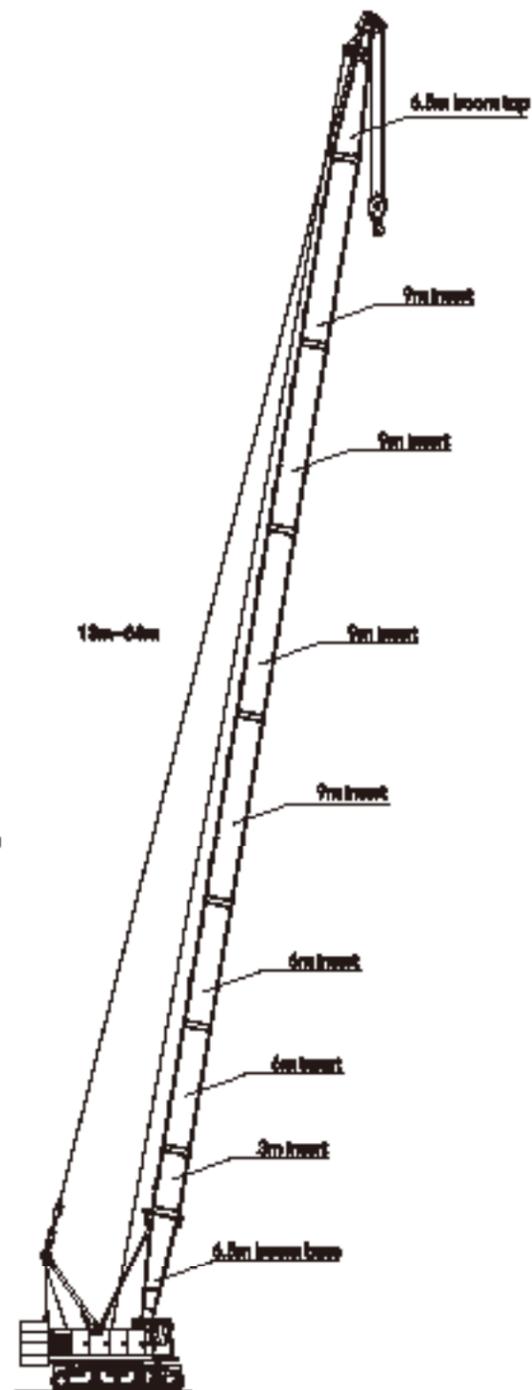
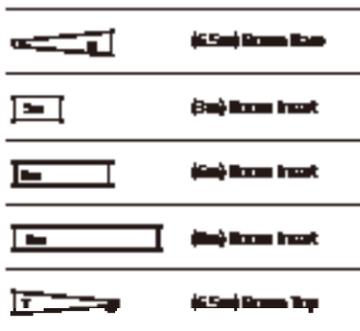
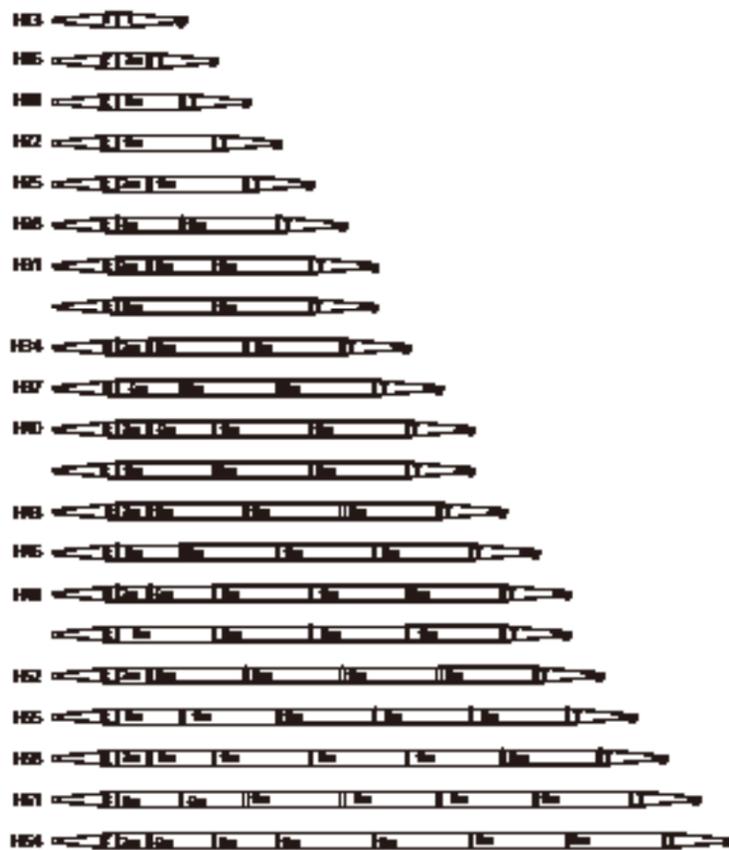
Page 26 FJ Configuration

Page 32 HC Configuration

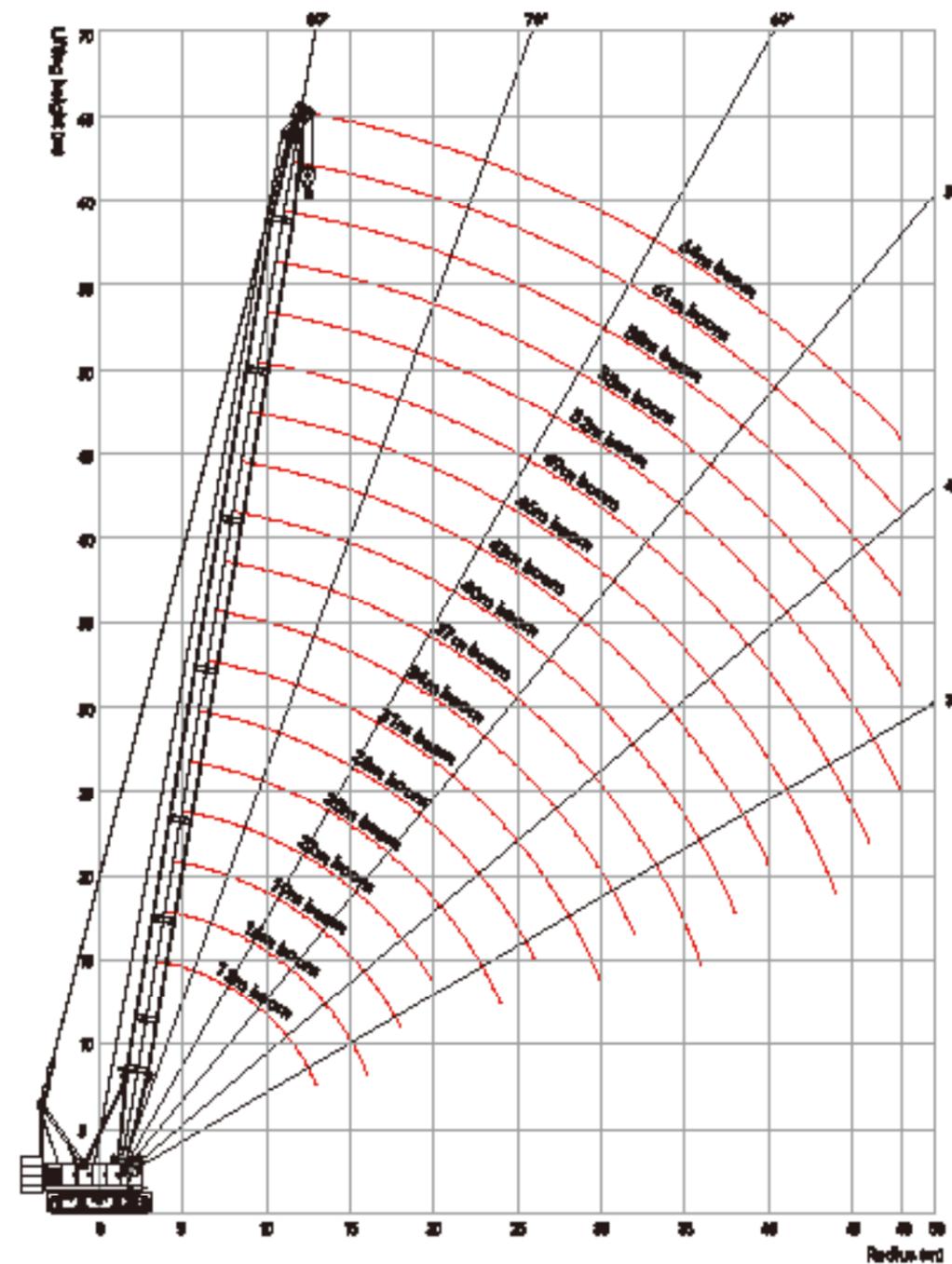
> 18



Boom Combination in H



Working Radius in H Configuration



Load Chart of H Configuration

- Note:
- 1.The rated load in the load chart is calculated complying with EN 13000;
 - 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 9.8m/s.
 7. More detailed information needs to refer to Operator Manual.
 8. This note is applicable to all the following load charts.

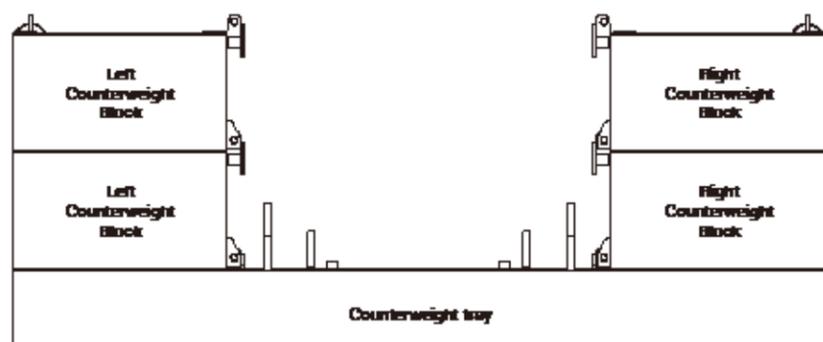
Load chart -H(Rear counterweight 31.2t, Carbody counterweight 11t) 1/2										
R/BL (m)	13	16	19	22	25	28	31	34	37	R/BL (m)
3.8	100									3.8
4	90									4
4.5	84.2	82								4.5
5	75	73								5
5.5	69	68.8	68.2							5.5
6	62.9	62.2	61.4	59.2						6
6.5	55.6	55.1	54.6	53.8	52					6.5
7	49.9	49.4	49	48.6	47.6	46.2				7
7.5	45.1	44.7	44.3	44	43.6	42.7	41.5			7.5
8	41.2	40.8	40.5	40.2	39.8	39.5	38.6	37.5		8
9	35.1	34.7	34.4	34.2	33.9	33.6	33.4	32.9	32.1	9
10	30.5	30.1	29.9	29.7	29.4	29.2	28.9	28.7	28.4	10
11	26.9	26.6	26.4	26.2	25.9	25.7	25.5	25.2	25	11
12	24	23.7	23.5	23.4	23.1	22.9	22.7	22.5	22.3	12
13	21.7	21.4	21.2	21	20.8	20.6	20.4	20.2	20	13
14		19.5	19.3	19.1	18.9	18.7	18.5	18.3	18.2	14
15		17.8	17.7	17.5	17.3	17.1	16.9	16.7	16.6	15
16		16.4	16.3	16.1	15.9	15.7	15.6	15.3	15.2	16
18			14	13.8	13.6	13.5	13.3	13.1	12.9	18
20				12.1	11.8	11.7	11.6	11.3	11.2	20
22					10.4	10.3	10.1	9.9	9.8	22
24					9.3	9.1	9	8.8	8.6	24
26						8.2	8	7.8	7.7	26
28							7.2	7	6.9	28
30							6.5	6.3	6.2	30
32								5.7	5.6	32
34									5	34
36									4.6	36

Load Chart of H Configuration

Load chart -H(Rear counterweight 31.2t, Carbody counterweight 11t) 2/2										
R/BL (m)	40	43	46	49	52	55	58	61	64	R/BL (m)
9	31.4									9
10	27.9	27.2								10
11	24.8	24.5	23.9	23.4						11
12	22.1	21.9	21.7	21.2	20.7					12
13	19.9	19.6	19.5	19.3	18.9	18.1	16			13
14	18	17.8	17.6	17.4	17.2	16.9	15.4	14.2		14
15	16.4	16.2	16	15.9	15.6	15.5	14.8	13.6	11.8	15
16	15	14.8	14.7	14.5	14.3	14.1	13.9	12.9	10.5	16
18	12.8	12.6	12.4	12.3	12.1	11.9	11.7	11.6	9.8	18
20	11.1	10.8	10.7	10.6	10.3	10.2	10	9.9	8.8	20
22	9.7	9.4	9.3	9.2	9	8.8	8.6	8.5	7.8	22
24	8.5	8.3	8.2	8	7.8	7.7	7.5	7.4	6.8	24
26	7.6	7.3	7.2	7.1	6.9	6.7	6.5	6.4	5.8	26
28	6.7	6.5	6.4	6.3	6.1	5.9	5.7	5.6	5.2	28
30	6	5.8	5.7	5.6	5.4	5.2	5	4.9	4.5	30
32	5.4	5.2	5.1	5	4.8	4.6	4.4	4.3	3.9	32
34	4.9	4.7	4.6	4.4	4.2	4.1	3.9	3.8	3.4	34
36	4.4	4.2	4.1	4	3.8	3.6	3.4	3.3	2.9	36
38	4	3.8	3.7	3.6	3.3	3.2	3	2.9	2.5	38
40		3.4	3.3	3.2	3	2.9	2.6	2.5	2.1	40
42			3	2.8	2.6	2.5	2.3	2.2	1.8	42
44			2.7	2.5	2.3	2.2	2	1.9	1.5	44
46				2.3	2.1	1.9	1.7	1.6	1.2	46
48					1.8	1.7	1.5	1.3	1	48

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 23.5t, with rear counterweight tray, two left counterweight blocks, two right counterweight blocks, no carbody counterweight.

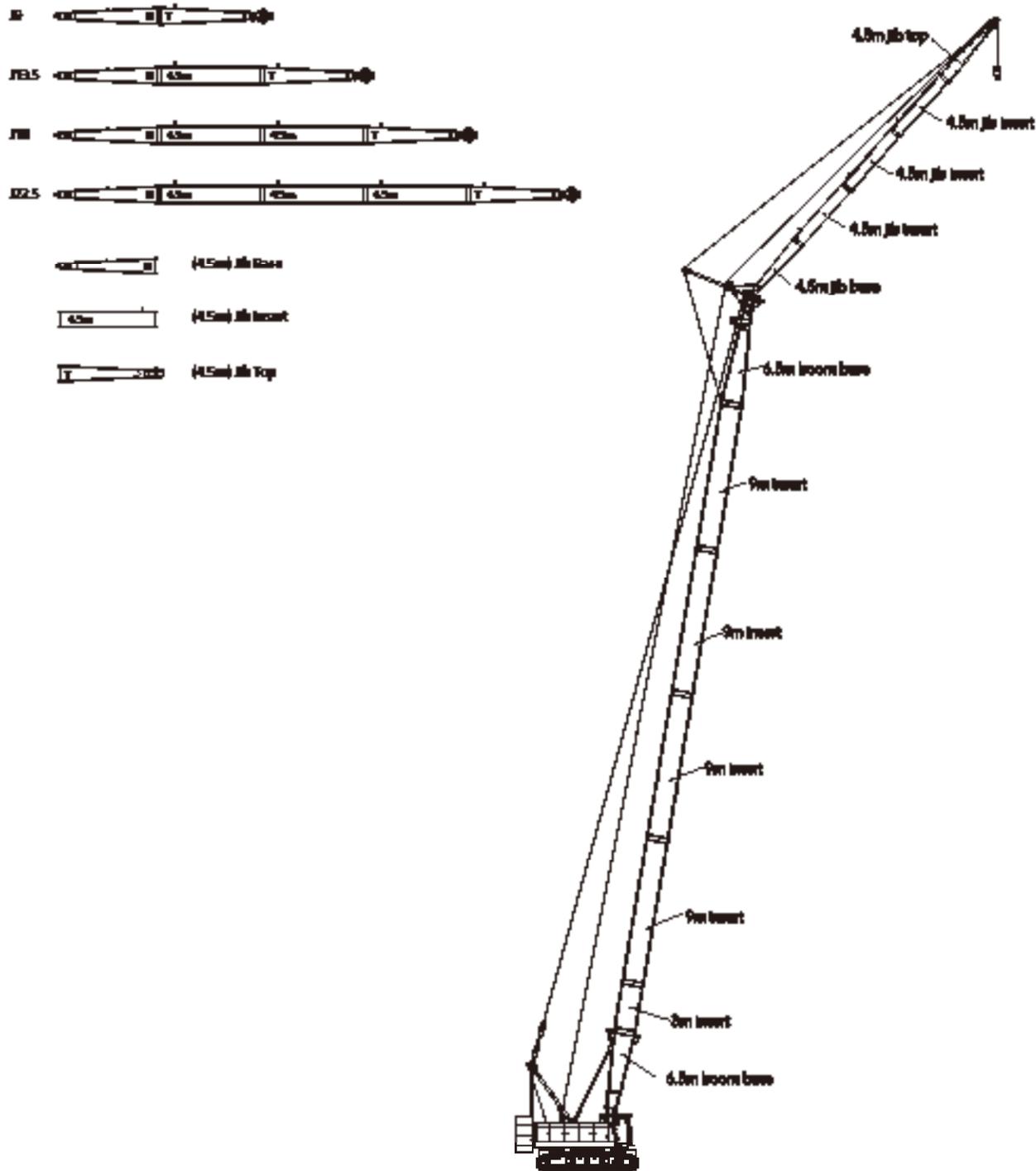


H load chart with reduced counterweight

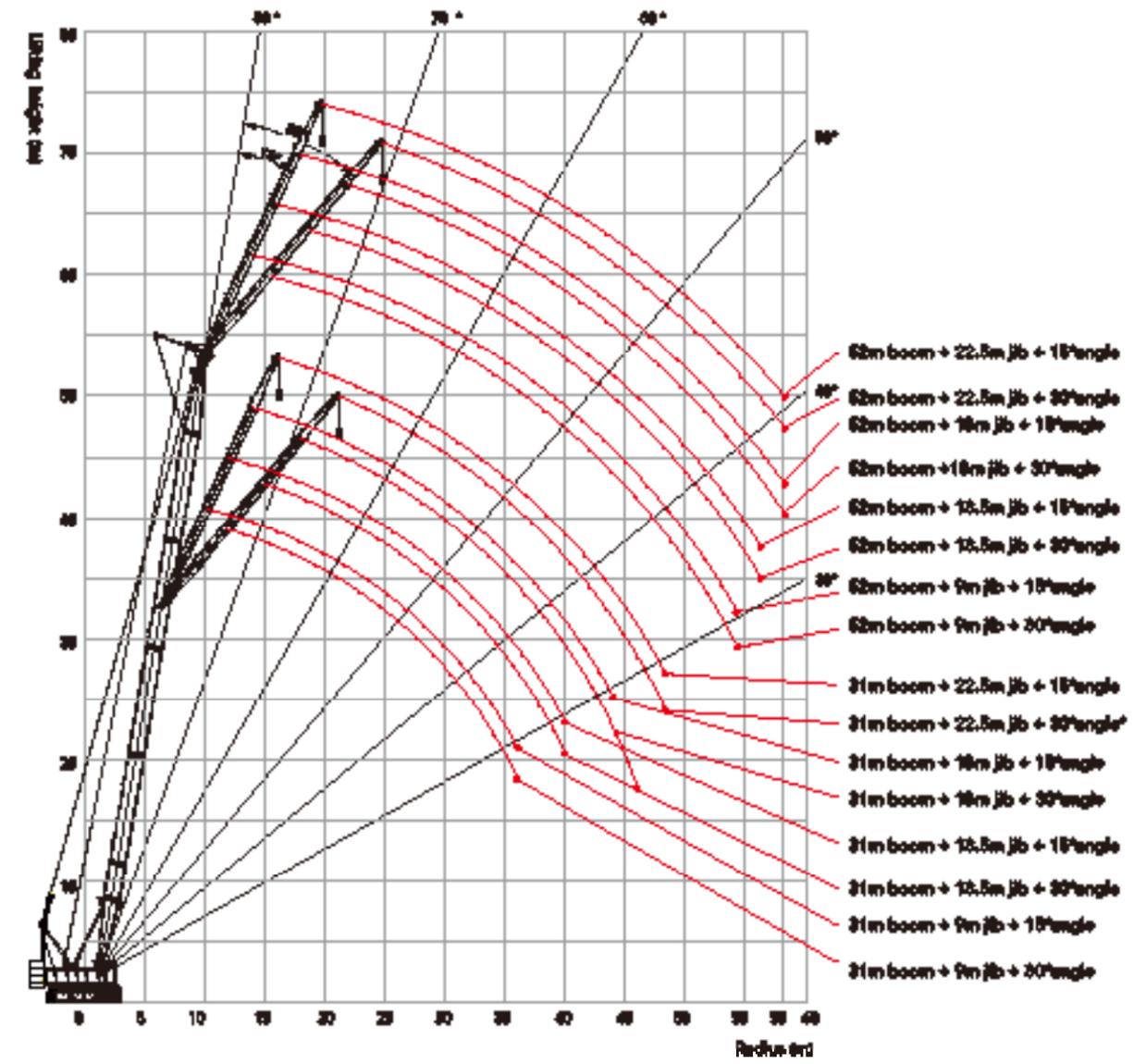
Unit: t

Load chart -H with less counterweight(Rear counterweight 23.5t, Carbody counterweight 0t)																
R/BL (m)	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	R/BL (m)
4	90															4
4.5	76															4.5
5	65.1	62.2														5
5.5	55.4	54.7	52.5													5.5
6	48.2	47.7	47	45.2												6
6.5	42.6	42.2	41.8	41	39.6											6.5
7	38.2	37.8	37.4	37.1	36.2	35.1										7
7.5	34.5	34.1	33.8	33.6	33.2	32.4	31.5									7.5
8	31.5	31.1	30.9	30.6	30.3	30	29.2	28.3								8
9	26.7	26.4	26.2	26	25.7	25.5	25.2	24.7	24.1							9
10	23.2	22.9	22.7	22.5	22.2	22	21.8	21.6	21.4	20.8	20.2					10
11	20.4	20.1	19.9	19.8	19.5	19.3	19.2	18.9	18.7	18.6	18.1	17.7	17.2			11
12	18.2	17.9	17.8	17.6	17.3	17.2	17	16.8	16.6	16.4	16.2	15.9	15.5	15.1		12
13	16.4	16.1	16	15.8	15.6	15.4	15.2	15	14.9	14.7	14.5	14.3	14.1	13.7	13.3	13
14		14.6	14.5	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13	12.9	12.7	12.5	12.1	14
15		13.4	13.2	13.1	12.8	12.7	12.5	12.3	12.2	12	11.8	11.7	11.5	11.3	11.1	15
16		12.3	12.1	12	11.7	11.6	11.5	11.2	11.1	11	10.7	10.6	10.5	10.2	10.1	16
18			10.4	10.2	10	9.9	9.7	9.5	9.4	9.2	9	8.9	8.7	8.5	8.4	18
20				8.8	8.6	8.5	8.4	8.1	8	7.9	7.7	7.5	7.4	7.2	7.1	20
22					7.5	7.4	7.3	7.1	6.9	6.8	6.6	6.5	6.3	6.1	6	22
24					6.6	6.5	6.4	6.2	6	5.9	5.7	5.6	5.4	5.2	5.1	24
26						5.8	5.6	5.4	5.3	5.2	5	4.8	4.7	4.5	4.4	26
28							5	4.8	4.7	4.5	4.3	4.2	4.1	3.9	3.7	28
30							4.4	4.2	4.1	4	3.8	3.7	3.5	3.3	3.2	30
32								3.8	3.6	3.5	3.3	3.2	3.1	2.9	2.7	32
34									3.2	3.1	2.9	2.8	2.6	2.4	2.3	34
36									2.9	2.7	2.5	2.4	2.3	2.1	2	36
38										2.4	2.2	2.1	2	1.8	1.6	38
40											1.9	1.8	1.7	1.5	1.3	40
42												1.5	1.4	1.2	1.1	42

Boom Combination of FJ Configuration



Working Radius in FJ Configuration



Load Chart of FJ Configuration

Load chart -FJ(Rear counterweight 31.2t, Carbody counterweight 11t) 1/4																	
R/BL (m)	31								34								R/BL (m)
Jib Length (m)	9		13.5		18		22.5		9		13.5		18		22.5		Jib Length (m)
Boom to Jib Angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom to Jib Angle
12	11																12
13	11								11								13
14	11	11	11						11	11							14
15	11	11	11						11	11	11						15
16	11	11	11	10.3	11				11	11	11		11				16
18	11	11	11	9.7	10.5		7.1		11	11	11	9.7	10.5		7.2		18
20	11	11	11	9.1	9.7	7.2	6.7		11	11	11	9.1	9.7	7.2	6.8		20
22	10.4	10.5	10.5	8.7	9	6.8	6.3	5.7	10.2	10.4	10.3	8.7	9	6.8	6.4	5.8	22
24	9.2	9.3	9.3	8.3	8.4	6.4	6	5.3	9	9.2	9.1	8.3	8.4	6.4	6.1	5.5	24
26	8.2	8.3	8.3	7.9	7.9	6.1	5.7	5	8	8.2	8.1	7.9	7.9	6.1	5.8	5.2	26
28	7.4	7.5	7.5	7.6	7.4	5.9	5.5	4.8	7.2	7.3	7.3	7.5	7.3	5.9	5.6	5	28
30	6.7	6.8	6.7	6.9	6.8	5.6	5.2	4.6	6.5	6.6	6.6	6.8	6.6	5.6	5.3	4.8	30
32	6	6.1	6.1	6.3	6.1	5.4	5	4.4	5.8	5.9	5.9	6.1	6	5.4	5.1	4.6	32
34	5.5	5.5	5.6	5.7	5.6	5.2	4.8	4.3	5.3	5.4	5.4	5.5	5.4	5.2	4.9	4.4	34
36	5	5	5.1	5.2	5.1	5.1	4.6	4.2	4.8	4.9	4.9	5	4.9	5.1	4.7	4.3	36
38			4.7	4.7	4.7	4.8	4.5	4	4.4	4.4	4.5	4.6	4.5	4.7	4.5	4.1	38
40			4.3	4.3	4.3	4.4	4.3	3.9			4.1	4.2	4.1	4.2	4.2	4	40
42					3.9	4	4	3.8			3.7	3.8	3.8	3.9	3.9	3.9	42
44					3.6	3.7	3.7	3.7			3.4	3.4	3.5	3.6	3.7	3.7	44
46					3.3	3.5	3.5				3.1	3.2	3.4	3.4			46
48						3.2	3.2						3.1	3.1			48

Note: the capacity values in shade are determined by single line pull or boom strength.

Load Chart of FJ Configuration

Load chart -FJ(Rear counterweight 31.2t, Carbody counterweight 11t) 2/4																	
R/BL (m)	37								40								R/BL (m)
Jib Length (m)	9		13.5		18		22.5		9		13.5		18		22.5		Jib Length (m)
Boom to Jib Angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom to Jib Angle
13	11																13
14	11																14
15	11	11	11														15
16	11	11	11														16
18	11	11	11	9.7	10.5												18
20	11	11	11	9.1	9.7		6.9										20
22	10	10.3	10.1	8.7	9	6.8	6.5		9.9	10.1	10	8.7	9	6.8	6.6		22
24	8.9	9.1	9	8.3	8.4	6.4	6.2	5.6	8.7	8.9	8.8	8.3	8.4	6.4	6.3	5.6	24
26	7.9	8	8	7.9	7.9	6.1	5.9	5.3	7.7	7.9	7.9	7.9	7.9	6.1	6	5.4	26
28	7.1	7.2	7.2	7.4	7.2	5.9	5.7	5.1	6.9	7.1	7	7.3	7.1	5.9	5.8	5.2	28
30	6.3	6.5	6.4	6.6	6.5	5.6	5.5	4.9	6.2	6.3	6.3	6.5	6.4	5.6	5.6	5	30
32	5.7	5.8	5.8	6	5.9	5.4	5.2	4.7	5.6	5.7	5.7	5.9	5.7	5.4	5.3	4.8	32
34	5.2	5.3	5.3	5.4	5.3	5.2	5	4.5	5	5.2	5.1	5.3	5.2	5.2	5.1	4.7	34
36	4.7	4.8	4.8	4.9	4.8	5	4.8	4.3	4.6	4.7	4.6	4.8	4.7	4.9	4.7	4.5	36
38	4.3	4.3	4.3	4.5	4.4	4.6	4.4	4.2	4.1	4.2	4.2	4.4	4.3	4.5	4.3	4.3	38
40	3.9	3.9	4	4.1	4	4.1	4	4.1	3.7	3.8	3.8	3.9	3.9	4	3.9	4.1	40
42	3.5	3.6	3.6	3.7	3.6	3.8	3.7	3.8	3.4	3.4	3.5	3.6	3.5	3.7	3.6	3.8	42
44			3.3	3.3	3.3	3.4	3.4	3.5	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.5	44
46			3	3	3	3.1	3.1	3.3			2.9	2.9	2.9	3	3	3.2	46
48					2.7	2.8	2.8	3			2.6	2.6	2.6	2.7	2.7	2.9	48
50					2.5	2.5	2.6	2.7					2.4	2.5	2.5	2.6	50
52							2.3	2.4					2.1	2.2	2.2	2.3	52
54														2	2	2.1	54

Note: the capacity values in shade are determined by single line pull or boom strength.

Load Chart of FJ Configuration

Load chart -FJ(Rear counterweight 31.2t, Carbody counterweight 11t) 3/4																	
R/BL (m)	43								46								R/BL (m)
Jib Length (m)	9		13.5		18		22.5		9		13.5		18		22.5		Jib Length (m)
Boom to Jib Angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom to Jib Angle
14	11																14
15	11								11								15
16	11	11	11						11								16
18	11	11	11		10				11	11	11						18
20	11	11	11	9.1	9.7				11	11	11	9.1	9.6				20
22	9.7	10	9.8	8.7	9	6.8	6.7		9.6	9.9	9.7	8.7	8.9		6.8		22
24	8.5	8.8	8.7	8.3	8.4	6.4	6.4	5.7	8.4	8.7	8.5	8.3	8.4	6.4	6.5	5.8	24
26	7.6	7.8	7.7	7.9	7.8	6.1	6.1	5.5	7.4	7.6	7.6	7.9	7.6	6.1	6.2	5.6	26
28	6.7	6.9	6.8	7.1	6.9	5.9	5.9	5.3	6.6	6.8	6.7	7	6.8	5.9	5.9	5.4	28
30	6	6.2	6.1	6.4	6.2	5.6	5.6	5.1	5.9	6.1	6	6.3	6.1	5.6	5.7	5.2	30
32	5.4	5.5	5.5	5.7	5.6	5.4	5.4	4.9	5.3	5.4	5.4	5.6	5.4	5.4	5.4	4.9	32
34	4.9	5	5	5.2	5	5.2	5	4.8	4.7	4.9	4.8	5	4.9	5.2	4.9	4.6	34
36	4.4	4.5	4.5	4.6	4.5	4.8	4.6	4.6	4.2	4.4	4.3	4.5	4.4	4.7	4.4	4.4	36
38	3.9	4	4	4.2	4.1	4.3	4.1	4.4	3.8	3.9	3.9	4.1	4	4.2	4	4.2	38
40	3.6	3.6	3.6	3.8	3.7	3.9	3.8	4	3.4	3.5	3.5	3.7	3.6	3.8	3.7	3.9	40
42	3.2	3.3	3.3	3.4	3.3	3.5	3.5	3.6	3.1	3.2	3.2	3.3	3.2	3.4	3.4	3.6	42
44	2.9	2.9	3	3.1	3	3.2	3.1	3.3	2.8	2.8	2.8	3	2.9	3.1	3	3.2	44
46	2.6	2.6	2.7	2.8	2.7	2.9	2.8	3	2.5	2.5	2.6	2.7	2.6	2.8	2.7	2.9	46
48			2.4	2.5	2.4	2.6	2.5	2.7	2.2	2.3	2.3	2.4	2.3	2.5	2.4	2.6	48
50			2.2	2.2	2.2	2.3	2.2	2.4		2	2	2.1	2.1	2.2	2.2	2.3	50
52			2	2	2.1	2	2.2			1.8	1.9	1.9	2	1.9	2.1		52
54				1.8	1.8	1.8	1.95			1.6	1.6	1.6	1.7	1.7	1.8		54
56				1.6	1.6	1.6	1.7					1.4	1.5	1.5	1.6		56
58							1.4	1.5					1.3	1.3	1.3	1.4	58

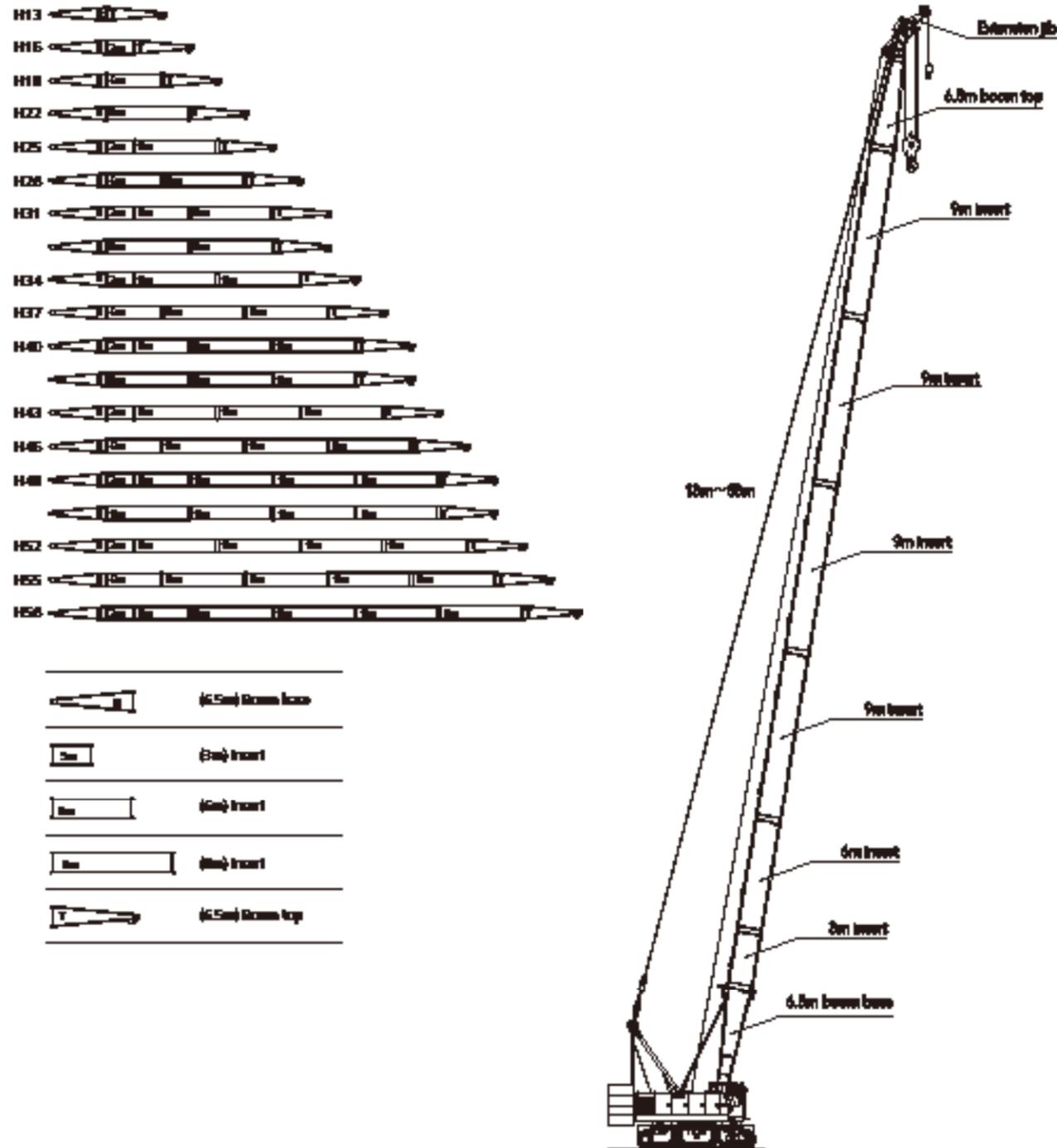
Note: the capacity values in shade are determined by single line pull or boom strength.

Load Chart of FJ Configuration

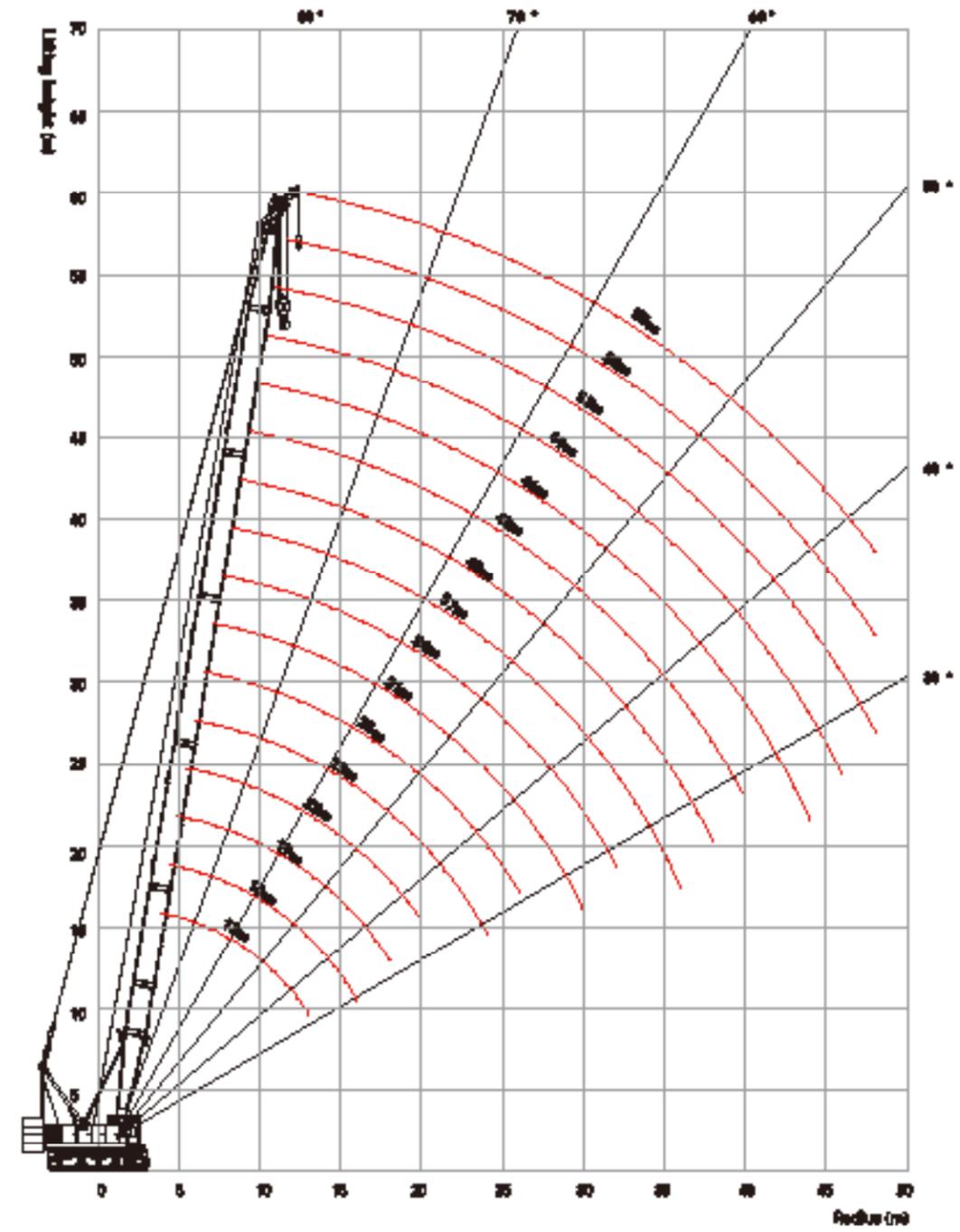
Load chart -FJ(Rear counterweight 31.2t, Carbody counterweight 11t) 4/4																	
R/BL (m)	49								52								R/BL (m)
Jib Length (m)	9		13.5		18		22.5		9		13.5		18		22.5		Jib Length (m)
Boom to Jib Angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom to Jib Angle
15	11																15
16	11																16
18	11	11	11														18
20	10.9	11	10.8	9.1	9												20
22	9.4	9.7	9.6	8.7	8.7												22
24	8.3	8.5	8.4	8.3	8	6.4	6.5										24
26	7.3	7.5	7.4	7.8	7.5	6.1	6.3	5.4									26
28	6.5	6.7	6.6	6.9	6.7	5.9	6.1	5.2									28
30	5.8	5.9	5.9	6.2	6	5.6	5.7	5									30
32	5.1	5.3	5.3	5.5	5.3	5.4	5.3	4.7									32
34	4.6	4.7	4.7	4.9	4.8	5.1	4.8	4.5									34
36	4.1	4.3	4.2	4.4	4.3	4.6	4.3	4.3									36
38	3.7	3.8	3.8	4	3.8	4.1	3.9	4.1									38
40	3.3	3.4	3.4	3.6	3.4	3.7	3.5	3.8									40
42	3	3.1	3	3.2	3.1	3.3	3.2	3.5									42
44	2.6	2.7	2.7	2.9	2.8	3	2.9	3.1									44
46	2.4	2.4	2.4	2.6	2.5	2.7	2.6	2.8									46
48	2.1	2.1	2.2	2.3	2.2	2.4	2.3	2.5	1.9	2	2	2.1	2	2.2	2.1	2.4	48
50	1.9	1.9	1.9	2	2	2.1	2.1	2.3	1.7	1.7	1.7	1.8	1.8	1.9	1.8	2.1	50
52	1.6	1.7	1.7	1.8	1.7	1.9	1.8	2	1.4	1.5	1.5	1.6	1.6	1.7	1.6	1.8	52
54			1.5	1.5	1.5	1.6	1.6	1.8	1.2	1.3	1.3	1.4	1.3	1.5	1.4	1.6	54
56			1.3	1.3	1.3	1.4	1.4	1.5				1.1	1.2	1.1	1.3	1.2	56
58						1.1	1.2	1.2	1.3						1	1	58

Note: the capacity values in shade are determined by single line pull or boom strength.

Boom Combination of HC Configuration



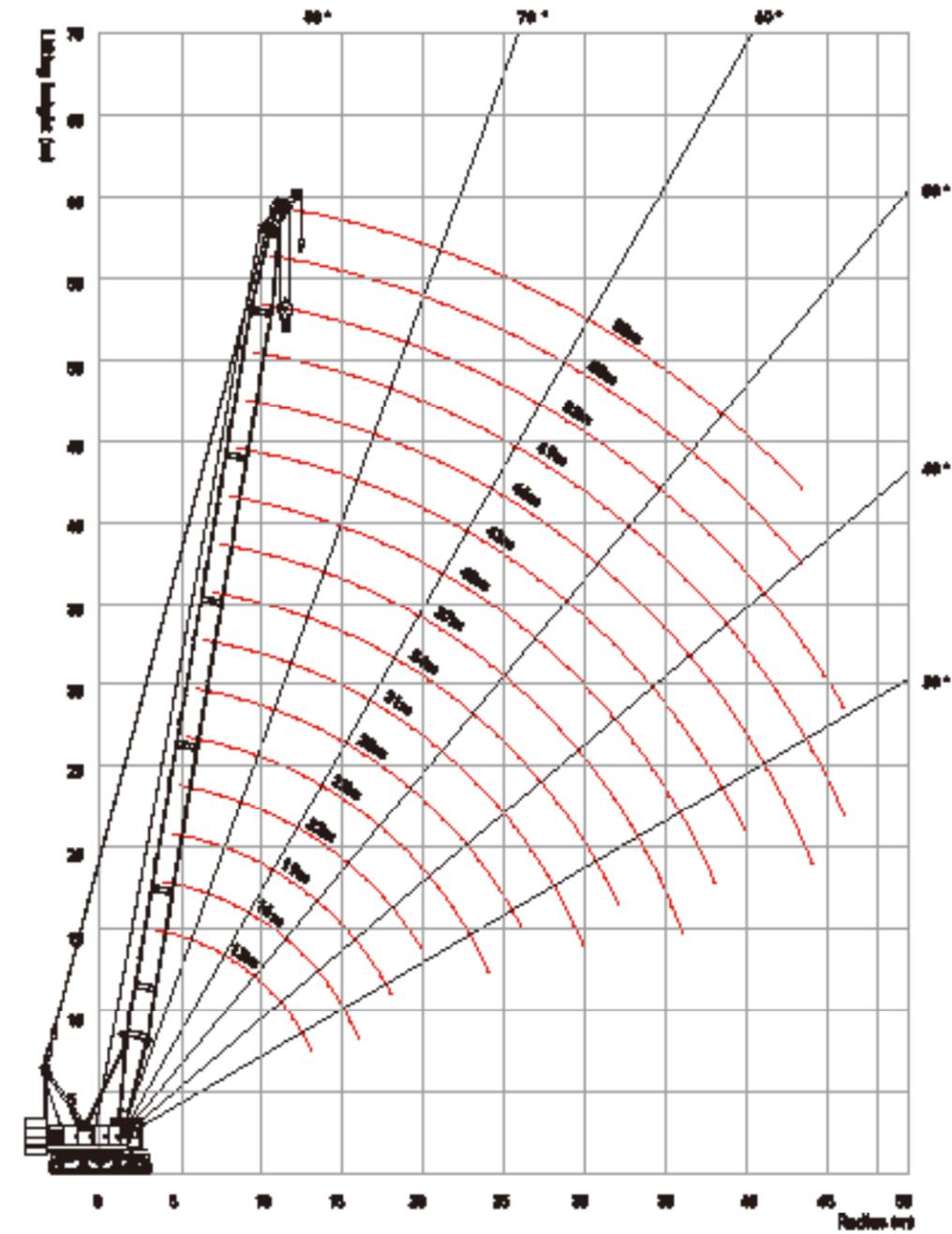
Working Radius of HC Configuration



Load Chart of HC Configuration

Load chart -HC(With aux. hook, Rear counterweight 31.2t, Carbody counterweight 11t)																	
R/BL (m)	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	R/BL (m)
3.8	12																3.8
4	12																4
4.5	12	12															4.5
5	12	12															5
5.5	12	12	12														5.5
6	12	12	12	12													6
6.5	12	12	12	12	12												6.5
7	12	12	12	12	12	12											7
7.5	12	12	12	12	12	12	12										7.5
8	12	12	12	12	12	12	12	12									8
9	12	12	12	12	12	12	12	12	12	12							9
10	12	12	12	12	12	12	12	12	12	12	12						10
11	12	12	12	12	12	12	12	12	12	12	12	12	12				11
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			12
13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13
14		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	14
15		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	15
16		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	16
18			12	12	12	12	12	12	12	12	12	12	12	12	11.9	11.7	18
20				12	11.8	11.7	11.6	11.3	11.2	11.1	10.8	10.7	10.6	10.3	10.2	10	20
22					10.4	10.3	10.1	9.9	9.8	9.7	9.4	9.3	9.2	9	8.8	8.6	22
24					9.3	9.1	9	8.8	8.6	8.5	8.3	8.2	8	7.8	7.7	7.5	24
26						8.2	8	7.8	7.7	7.6	7.3	7.2	7.1	6.9	6.7	6.5	26
28							7.2	7	6.9	6.7	6.5	6.4	6.3	6.1	5.9	5.7	28
30								6.5	6.3	6.2	6	5.8	5.7	5.6	5.4	5.2	30
32									5.7	5.6	5.4	5.2	5.1	5	4.8	4.6	32
34										5	4.9	4.7	4.6	4.4	4.2	4.1	34
36											4.6	4.4	4.2	4.1	4	3.8	36
38												4	3.8	3.7	3.6	3.3	38
40													3.4	3.3	3.2	3	40
42														3	2.8	2.6	42
44															2.7	2.5	44
46																2.3	46
48																	48

Working Radius of HC Configuration



Load Chart of HC Configuration

Load chart -HC(With main hook, Rear counterweight 31.2t, Carbody counterweight 11t)																		
R/BL (m)	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	R/BL (m)	
3.8	99																3.8	
4	89																4	
4.5	83.2	81															4.5	
5	74	72															5	
5.5	68	67.8	67.2														5.5	
6	61.9	61.2	60.4	58.2													6	
6.5	54.6	54.1	53.6	52.8	51												6.5	
7	48.9	48.4	48	47.6	46.6	45.2											7	
7.5	44.1	43.7	43.3	43	42.6	41.7	40.5										7.5	
8	40.2	39.8	39.5	39.2	38.8	38.5	37.6	36.5									8	
9	34.1	33.7	33.4	33.2	32.9	32.6	32.4	31.9	31.1	30.4							9	
10	29.5	29.1	28.9	28.7	28.4	28.2	27.9	27.7	27.4	26.9	26.2						10	
11	25.9	25.6	25.4	25.2	24.9	24.7	24.5	24.2	24	23.8	23.5	22.9	22.4				11	
12	23	22.7	22.5	22.4	22.1	21.9	21.7	21.5	21.3	21.1	20.9	20.7	20.2	19.7			12	
13	20.7	20.4	20.2	20	19.8	19.6	19.4	19.2	19	18.9	18.6	18.5	18.3	17.9	17.1	15	13	
14		18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.2	17	16.8	16.6	16.4	16.2	15.9	14.4	14	
15		16.8	16.7	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15	14.9	14.6	14.5	13.8	15	
16		15.4	15.3	15.1	14.9	14.7	14.6	14.3	14.2	14	13.8	13.7	13.5	13.3	13.1	12.9	16	
18			13	12.8	12.6	12.5	12.3	12.1	11.9	11.8	11.6	11.4	11.3	11.1	10.9	10.7	18	
20				11.1	10.8	10.7	10.6	10.3	10.2	10.1	9.8	9.7	9.6	9.3	9.2	9	20	
22					9.4	9.3	9.1	8.9	8.8	8.7	8.4	8.3	8.2	8	7.8	7.6	22	
24					8.3	8.1	8	7.8	7.6	7.5	7.3	7.2	7	6.8	6.7	6.5	24	
26						7.2	7	6.8	6.7	6.6	6.3	6.2	6.1	5.9	5.7	5.5	26	
28							6.2	6	5.9	5.7	5.5	5.4	5.3	5.1	4.9	4.7	28	
30								5.5	5.3	5.2	5	4.8	4.7	4.6	4.4	4	30	
32									4.7	4.6	4.4	4.2	4.1	4	3.8	3.6	3.4	32
34										4	3.9	3.7	3.6	3.4	3.2	3.1	2.9	34
36											3.6	3.4	3.2	3.1	3	2.8	2.6	36
38												3	2.8	2.7	2.6	2.3	2.2	38
40													2.4	2.3	2.2	2	1.9	40
42														2	1.8	1.6	1.5	42
44															1.7	1.5	1.3	44
46																1.3	1.1	46

Note: all the values provided in this material are subject to update without prior notice.



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