



SCS900A

SANY Crawler Crane Southeast Asia 90 Tons Lifting Capacity

Quality Changes the World



Max. lifting capacity: 90t
Max. boom length: 57m
Max. fixed jib combination: 48m+18m

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.

■ www.sanyglobal.com

V1.3



Crawler Crane Series SCS900A

P03

Main
Characteristics

- Product Specification
- Safety Device

P09

Technical
Parameters

- Major Performance & Specifications
- Outline Dimension
- Transport Dimensions
- Transport Plan

P18

Configurations

- H Configuration
- FJ Configuration

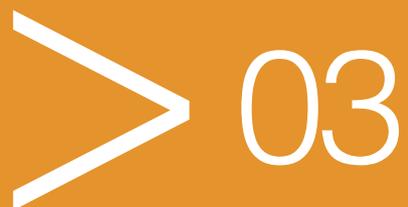


SCS900A
SANY Crawler Crane Southeast Asia
90 Tons Lifting Capacity

QUALITY CHANGES THE WORLD

Main Characteristics

- Page 04 Product Specification
- Page 07 Safety Device



Product Specification



Engine

- Model: Weichai WP7.
- Type: Water-cooled, vertical in-line 6 cylinders, electronic control, turbo-charger, intercooler.
- Displacement: 7.47L.
- Rated power: 199kW/2000rpm.
- Operation power: 199kW/1800rpm.
- Max. torque: 1200N·m/1200~1500rpm.
- Cooling system: Water-cooled.
- Starter: 24V-8.0kW.
- Radiator: Fin type aluminum plate core.
- Air cleaner: Dry type system with main filter element, safety element and resistance indicator.
- Throttle: Pedal-operated throttle, adjustable speed.
- Fuel filter: With electric pumping oil, fuel heating, water removal filter functions.
- Batteries: Two 12V×180Ah capacity batteries, connected in series.
- Emission standard: Complied with Non-road Euro III emission standard.
- Fuel tank capacity: 400L.

Electrical control system

- Self-developed SYIC-III 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 2.0B is used for data communication between controller, monitor and the engine.
- Power control: Multi-process display, power control is maintained at about 5ms running cycle.
- Intelligent safety: center of gravity control, wind speed early warning, ground pressure early warning, all-round safety protection, reduce the probability of operation error.
- Intelligent operation and maintenance: Predictive maintenance, OTA upgrade, remote machine lock.

Hydraulic system

- Main pumps: Open variable displacement piston pumps of large displacement are adopted to provide oil supply for main actuators of main machine.
- Gear pump: Dual gear pump for slewing, radiator and control circuit.
- Control: Main pump adopts electrically-controlled positive flow control; winch motor adopts adjustable piston motor of variable displacement. The operating components are two cross hydraulic handle, one dual travel pedal control valve to control various actuators proportionally.
- Way of cooling: Heat exchanger, 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 and travel system: 32Mpa.
- Slewing system: 22MPa.
- Control system: 5MPa.
- Hydraulic tank capacity: 310L.

Main and auxiliary load hoist mechanism

- Main and aux. hoist winches are driven separately by the winch motor through the reducer. 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.

Non free fall for main and aux. load hoist (standard) :

Main hoisting mechanism	Drum diameter	520mm
	Rope speed	0~135m/min
	Diameter of wire rope	Φ 22mm
	Main load hoist wire rope length	240m
	Rated single line pull	8.2t
Auxiliary hoisting mechanism	Drum diameter	520mm
	Rope speed	0~135m/min
	Diameter of wire rope	Φ 22mm
	Aux. load hoist wire rope length	150m
	Rated single line pull	8.2t



Product Specification

Free fall for main/aux. load hoist (optional) :

Main hoisting mechanism	Drum diameter	541mm
	Rope speed	0~135m/min
	Wire rope diameter	Φ 22mm
	Main hoist wire rope length	240mm
	Rated single line pull	8.2t
Aux. hoisting mechanism	Drum diameter	541mm
	Rope speed	0~135m/min
	Wire rope diameter	Φ 22mm
	Aux. hoist wire rope length	150mm
	Rated single line pull	8.2t

Luffing mechanism

- Boom hoist winch is driven directly by reducer. Operating winch 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	355mm
	Rope speed	0~55m/min
	Diameter of wire rope	Φ 16mm
	Boom hoist wire rope length	158m

Slewing mechanism

- Slewing brake adopts wet, spring loaded, normally-closed brake, and braking through spring force.
- Slewing system, equipped with integrated slewing buffer valve. It is featured in steady starting and control, and excellent inching function. Three slewing mode: anti-slip, semi-drift, drift.
- Slewing drive: External engaged slewing drive with 360° slewing range, and the max. slewing speed is 2.8r/min.
- Slewing ring: Single row ball bearing.

Cab and control

- Industrial modeling design of C6 intelligent operator's cab, intelligent, control comfort, safety and interior comfort greatly improved, equipped with open front window, left sliding door, touch screen control system. There are low and high-beam lights, back-view mirror, panoramic skylight, 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.
- Display: Integrated 10.1-inch touch screen with visualization fault self-diagnosis, car phone, bluetooth audio, video storage and export, high-definition camera display screen. 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.
- Armrest box and panel: On the left and right armrest box are control handles, electrical switches, emergent stop, reading light, microphone, USB port, cigarette lighter and ignition switch.
- Seat: Longer and wider dynamic suspension seat with six position adjustable headrest and weight adaptation adjustment function.
- A/C: High-powered heating and cooling air conditioning system with, multi-vent layout, CFD flow field simulation design and touch screen control, making the operation more comfortable.
- Safety: Metal profile sheet metal welded frame, more stable structure. High-density top grille guardrail, can effectively block falling objects from height.

Counterweight

- The stacking mode of counterweight tray and blocks is used for easy assembly, disassembly and transportation.
- Rear counterweight: Total weight 27.5t.
- The standard counterweight tray 5t×1, Middle counterweight 7.5t×2, Upper counterweight 7.5t×1.
- Carbody counterweight: Total weight of 4.8t×2.

Superstructure

- High-strength steel weld framework, with no torsion or deformation. The parts are laid out in the way that is easier for maintenance and service.

Product Specification



Lower structure

- 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.

Crawler tensioning

- The jack is used to push the guide wheel and insert the shim to adjust crawler tension.

Track pad

- High strength alloy cast steel track pad ensure long service life.
- They are 800mm wide with a quantity of 66 pcs×2.

Outrigger of lower structure

- Optional configuration, it is convenient to realize assembly/disassembly of track frame during the transport.

Boom

- Lattice structure. The chord adopts high-strength structural tube and each section is connected through pins.
- Basic boom: 6m boom base + 6m boom top.
- Boom insert: 3m×1, 6m×1, 9m×4.
- Boom length: 12m~57m.

Fixed jib

- Lattice structure. The chord adopts high-strength structural tube and each section is connected through pins.
- Basic jib: 4.5m jib base+4.5m jib top.
- Jib insert: 4.5m×2.
- Fixed jib: 9m~18m.
- Longest boom+jib: 48m+18m.

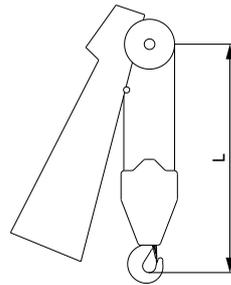
Runner

- The extension jib is a welded structure connected to the boom tip by pins, used for auxiliary hook.
- Length: 1.1m.

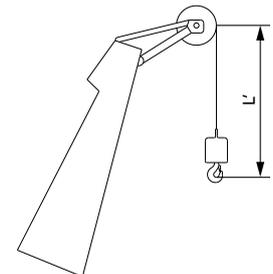
Hook block

- 100t hook block, 5 sheaves.
- 45t hook block, 3 sheaves.
- 15t hook block, 1 sheave.
- 9t ball hook.

Hook limitation height



Hook	L
100t	3.5m
45t	3.2m
15t	2.9m



Hook	L'
9t	2.8m

Safety Devices



Assembly/work mode control switch

- In assembly mode, the over-hoist protection, boom limit, LMI are all off work to facilitate crane assembly.
- In work mode, all safety devices activate to protect the operation.

Emergency stop

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

Load limit Indicator (LMI)

- It is an independent computerized safety control system. LMI 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 LMI 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.
- It is composed of monitor, angle sensor and force sensor and other parts.

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 lifting up too much.
- When the hook lifts up to the limit height, the limit switch activates, buzzer on the left control panel sends alarm, failure indicator light starts to flash, and 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 lever

- If the function lock lever is not in work position, all the other handles won't work, which prevents any mis-operation caused by accidental collision.

Luffing winch lock device

- 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.

Slewing lock device

- Slewing Lock can lock the superstructure and lower structure during transportation.

Boom limit device

- When the boom elevation angle reaches the max. set limit, the buzzer sounds and boom action cut off. This protection is two-stage control ensured by both LMI system and travel switch;

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 hook is provided with a baffle to prevent wire rope from falling off.

Safety Devices



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 in dangerous trend.

Audio-visual alarm

- When the engine is working, the light flashes; when the machine is traveling or slewing, it sends out sirens.

Slewing indicator light

- The slewing indicator light flashes during traveling or slewing.

Illuminating light

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

Camera

- Set the front armrest of the right hood to monitor the rear of the whole machine.

Pharos

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

Anemometer

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

Electronic level indicator

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

Seat interlock

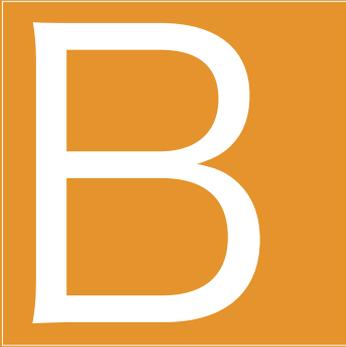
- Put down the function lock lever on the left side of cab seat or if the operator leaves the seat, all control levers will be deactivated to prevent any mis-operation due to accidental collision.

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.

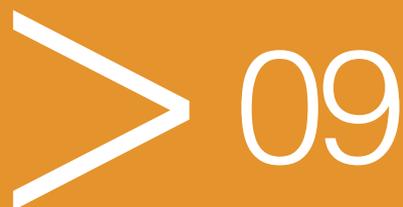


SCS900A
SANY Crawler Crane Southeast Asia
90 Tons Lifting Capacity

QUALITY CHANGES THE WORLD

Technical Parameters

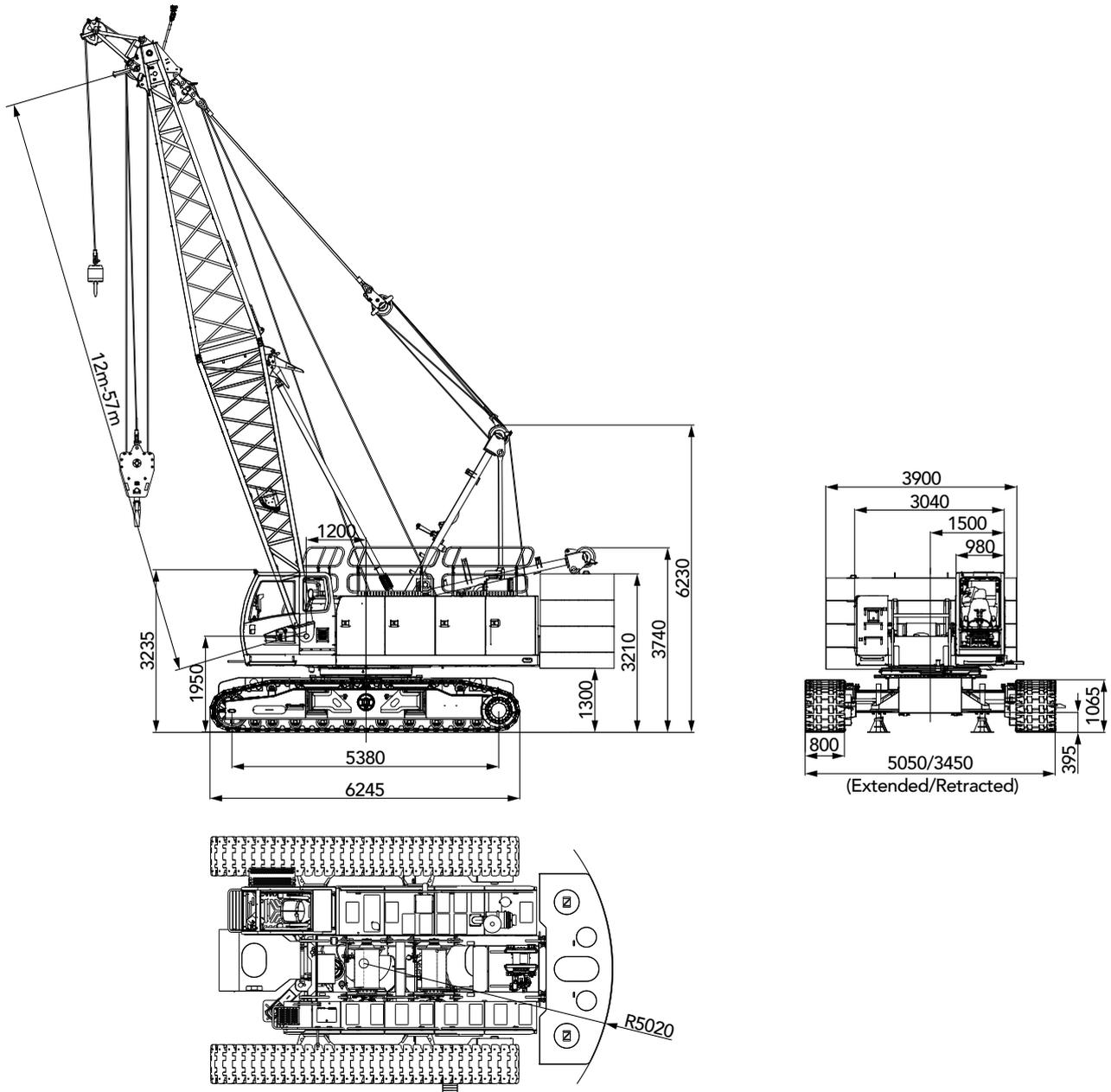
- Page 10 Major Performance & Specifications
- Page 11 Outline Dimension
- Page 12 Transport Dimension
- Page 16 Transport Plan



Major Performance Specifications

Major Performance & Specifications of SCS900A			
Performance Indicators		Unit	Parameter
Boom configuration	Max. lifting capacity	t	90
	Max. lifting moment	t.m	375
	Boom length	m	12~57
	Boom luffing angle	°	30~80
Fixed jib configuration	Max. lifting capacity	t	8
	Jib length	m	9~18
	Longest boom + longest fixed jib	m	48+18
	Fixed jib angle	°	15,30
Operation speed	Rope speed of main/aux. winch	m/min	0~135
	Rope speed of boom hoist winch	m/min	0~55
	Slewing speed	rpm	2.8
	Travel speed	km/h	0~1.1
Wire rope	Main hoist wire rope: diameter × length	φ mm×m	22×240
	Aux. hoist wire rope: diameter × length	φ mm×m	22×150
	Rated single line pull of main/aux. hoist wire rope	t	8.2
Engine	Model/Displacement	/L	Weichai WP7/7.47
	Rated power/Revolution speed	kW/rpm	199/2000
Transport parameter	Weight of machine with basic boom	t	Non-free fall 76.1t Single free fall 76.8t Double free fall 77.5t
	Rear counterweight	t	27.5
	Carbody counterweight	t	4.8×2
	Transport weight of basic machine (with crawler frames and boom base)	t	Non-free fall 37.0t Single free fall 37.7t Double free fall 38.4t
	Transport weight of basic machine (without crawler frame)	t	Non-free fall 21.9t Single free fall 22.6t Double free fall 23.3t
	Machine transport dimension (with crawlers and boom base) L×W×H	mm	12100×3450×3350
	Machine transport dimension (without crawlers and boom base) L×W×H	mm	7650×3040×3100
Other parameters	Average ground pressure (basic boom)	Mpa	0.088
	Gradeability	%	30

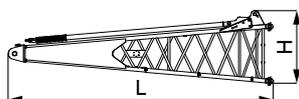
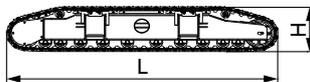
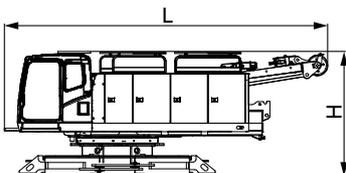
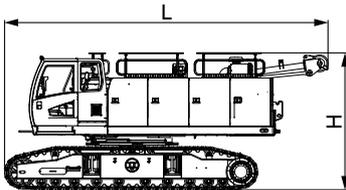
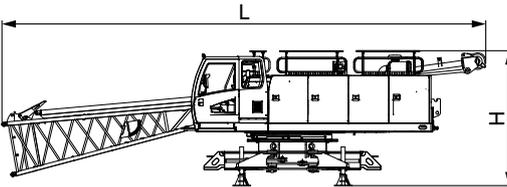
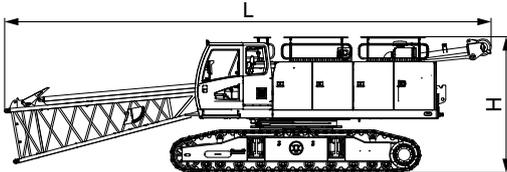
Outline Dimension



Transport Dimensions

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.
- ③ . The design value of the parts may differ due to product upgrade, the latest values shall prevail.



Basic machine 1 (with boom base and crawlers) ×1

Length (L)	12.10m	
Width (W)	3.45m	
Height (H)	3.35m	
Weight	Non-free fall	37.0t
	Single free fall	37.7t
	Double free fall	38.4t

Basic machine 2 (with boom base, without crawlers) ×1

Length (L)	12.10m	
Width (W)	3.00m	
Height (H)	3.27m	
Weight	Non-free fall	21.9t
	Single free fall	22.6t
	Double free fall	23.3t

Basic machine 3 (with crawlers, without boom base) ×1

Length (L)	8.00m	
Width (W)	3.45m	
Height (H)	3.35m	
Weight	Non-free fall	36.1t
	Single free fall	36.8t
	Double free fall	37.5t

Basic machine 4 (without boom base and crawlers) ×1

Length (L)	7.65m	
Width (W)	3.00m	
Height (H)	3.10m	
Weight	Non-free fall	21.0t
	Single free fall	21.7t
	Double free fall	22.4t

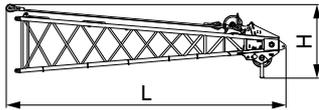
Crawlers ×2

Length (L)	6.24m
Width (W)	1.02m
Height (H)	1.06m
Weight	7.6t

Boom base ×1

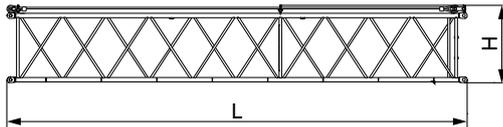
Length (L)	6.17m
Width (W)	1.51m
Height (H)	1.60m
Weight	1.3t

Transport Dimensions



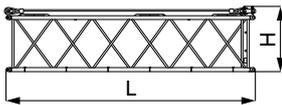
Boom top ×1

Length (L)	6.64m
Width (W)	1.51m
Height (H)	1.47m
Weight	1.1t



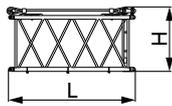
9m boom ×4

Length (L)	9.13m
Width (W)	1.51m
Height (H)	1.58m
Weight	0.9t



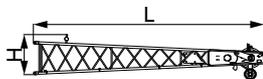
6m boom ×1

Length (L)	6.13m
Width (W)	1.51m
Height (H)	1.60m
Weight	0.6t



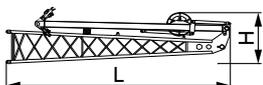
3m boom ×1

Length (L)	3.15m
Width (W)	1.51m
Height (H)	1.60m
Weight	0.4t



Fixed jib top ×1

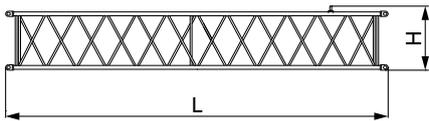
Length (L)	4.93m
Width (W)	0.87m
Height (H)	0.92m
Weight	0.3t



Fixed jib base and strut ×1

Length (L)	4.75m
Width (W)	0.87m
Height (H)	1.18m
Weight	0.7t

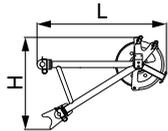
Transport Dimensions



4.5m fixed jib insert

×2

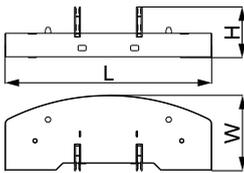
Length (L)	4.57m
Width (W)	0.87m
Height (H)	0.83m
Weight	0.3t



Runner

×1

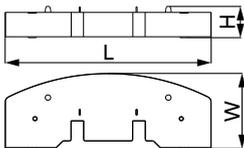
Length (L)	1.33m
Width (W)	0.91m
Height (H)	0.95m
Weight	0.2t



Counterweight tray

×1

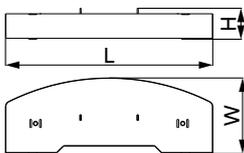
Length (L)	3.90m
Width (W)	1.50m
Height (H)	0.96m
Weight	5.0t



Middle counterweight

×2

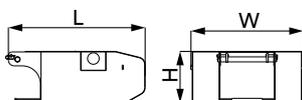
Length (L)	3.90m
Width (W)	1.50m
Height (H)	0.64m
Weight	7.5t



Upper counterweight

×1

Length (L)	3.90m
Width (W)	1.50m
Height (H)	0.63m
Weight	7.5t

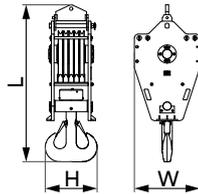


Carbody counterweight

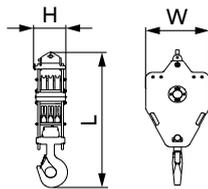
×2

Length (L)	1.90m
Width (W)	1.50m
Height (H)	0.72m
Weight	4.8t

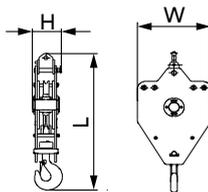
Transport Dimensions



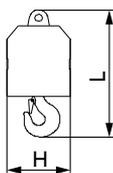
100t hook ×1	
Length (L)	2.05m
Width (W)	0.85m
Height (H)	0.65m
Weight	1.2t



45t hook ×1	
Length (L)	1.52m
Width (W)	0.69m
Height (H)	0.37m
Weight	0.5t



15t hook ×1	
Length (L)	1.34m
Width (W)	0.60m
Height (H)	0.34m
Weight	0.3t



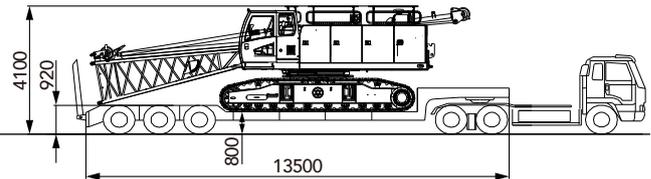
9t ball hook ×1	
Length (L)	0.75m
Width (W)	0.30m
Height (H)	0.30m
Weight	0.2t

Remarks:

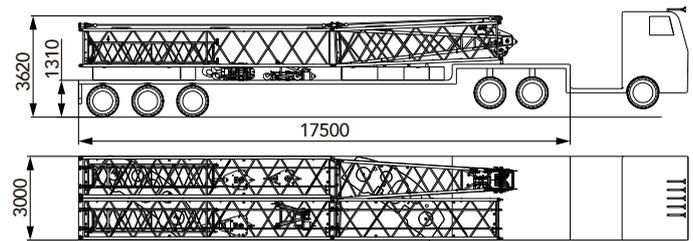
- 1.The transport dimensions for the parts are for reference that do not draw to the scale. The dimensions listed above are designed values excluding packing.
- 2.Weight is design values. It maybe different due to manufacturing tolerances.
- 3.The weight of the boom insert and boom top includes the boom pendant cable.

Transport Plan

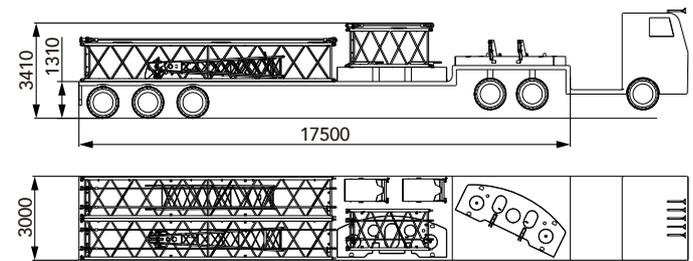
Trailer 1	
Part (s)	<ul style="list-style-type: none"> Basic machine (with boom base, crawler frame)
Transport weight	<ul style="list-style-type: none"> Non-free fall 37.0t Single free fall 37.7t Double free fall 38.4t



Trailer 2	
Part (s)	<ul style="list-style-type: none"> 9m boom insert × 2 6m boom insert × 1 Boom top × 1 Runner × 1 Middle counterweight × 1 4.5m fixed jib insert × 2 Upper counterweight × 1 100t hook × 1 45t hook × 1 15t hook × 1 9t ball hook × 1
Transport weight	21.7t



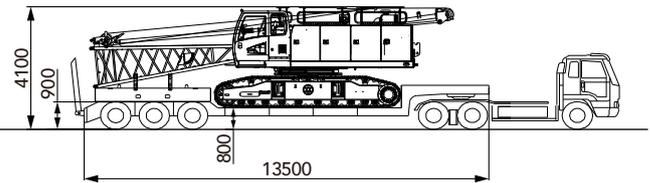
Trailer 3	
Part (s)	<ul style="list-style-type: none"> 9m boom insert × 2 3m boom insert × 1 Counterweight tray × 1 Fixed jib base × 1 Fixed jib top × 1 Carbody counterweight × 2 Middle counterweight × 1
Transport weight	25.3t



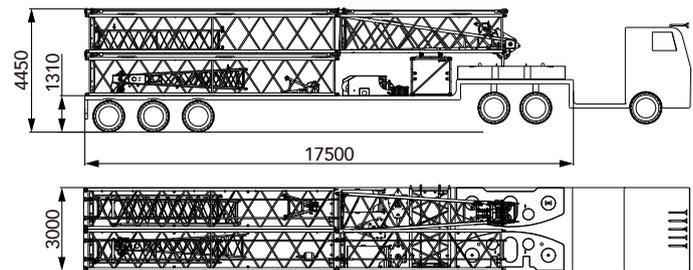
Note: The transport plan above is for reference only. The transport mode shall be subject to the actual boom sections, transport regulations, and other conditions.

Transport Plan

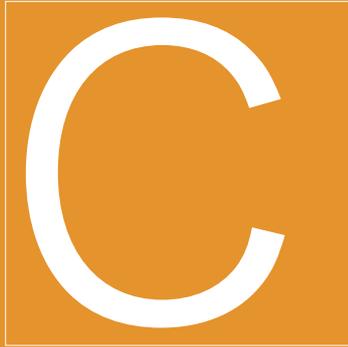
Trailer 1	
Part (s)	<ul style="list-style-type: none"> Basic machine (with boom base, clawer frame) Counterweight tray × 1 Upper counterweight × 1
Transport weight	<ul style="list-style-type: none"> Non-free fall 49.5t Single free fall 50.2t Double free fall 50.9t



Trailer 2	
Part (s)	<ul style="list-style-type: none"> 9m boom insert × 4 6m boom insert × 1 3m boom insert × 1 Boom top × 1 Fixed jib base × 1 Fixed jib top × 1 4.5m fixed jib insert × 2 Middle counterweight × 2 Carbody counterweight × 2 Runner × 1 100t hook × 1 45t hook × 1 15t hook × 1 9t ball hook × 1
Transport weight	34.5t



Note: The transport plan above is for reference only. The transport mode shall be subject to the actual boom sections, transport regulations, and other conditions.



SCS900A
SANY Crawler Crane Southeast Asia
90 Tons Lifting Capacity

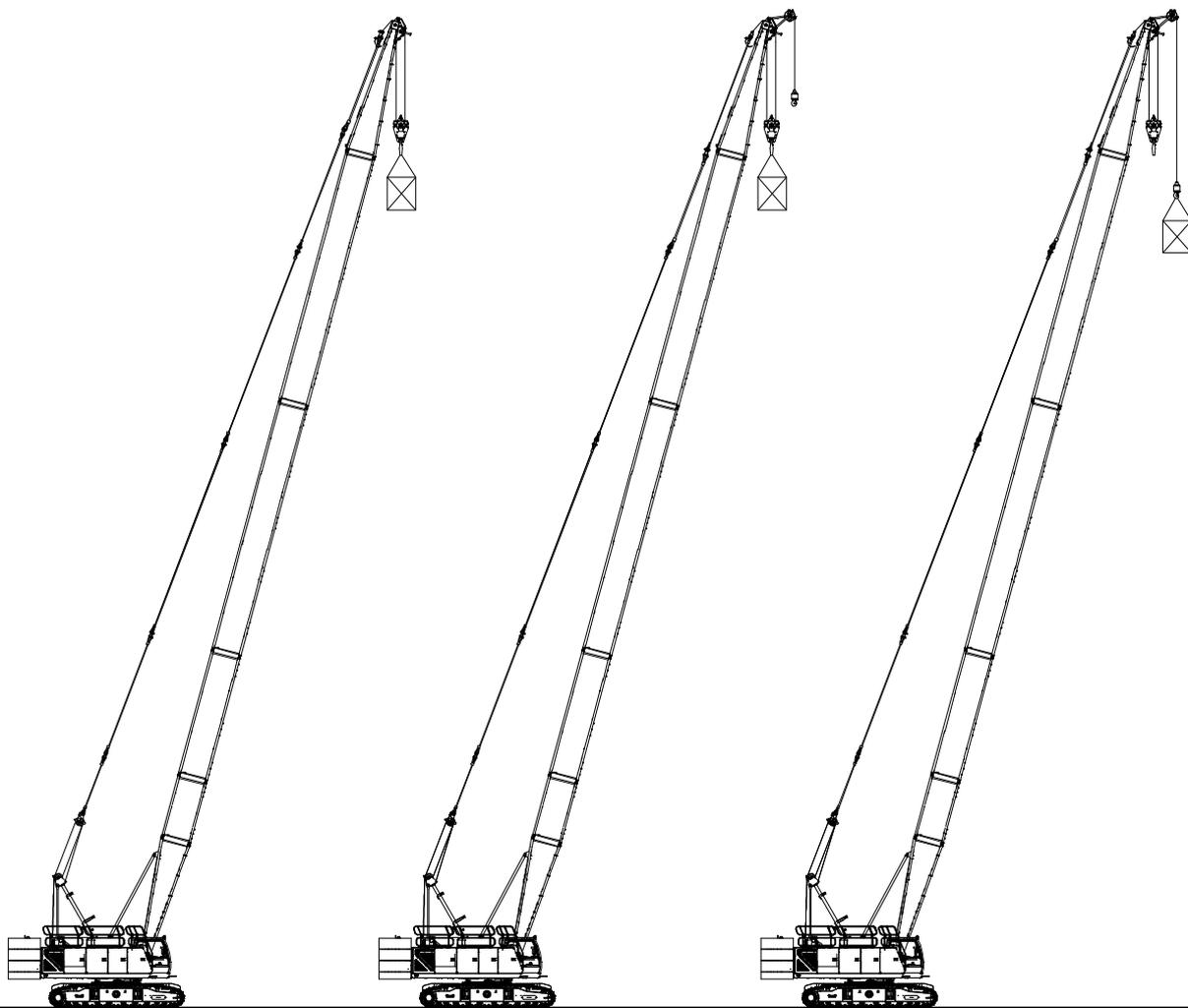
QUALITY CHANGES THE WORLD

Configurations

- Page 19 Combination
- Page 21 H Configuration
- Page 26 FJ Configuration

> 18

Combination



H Configuration

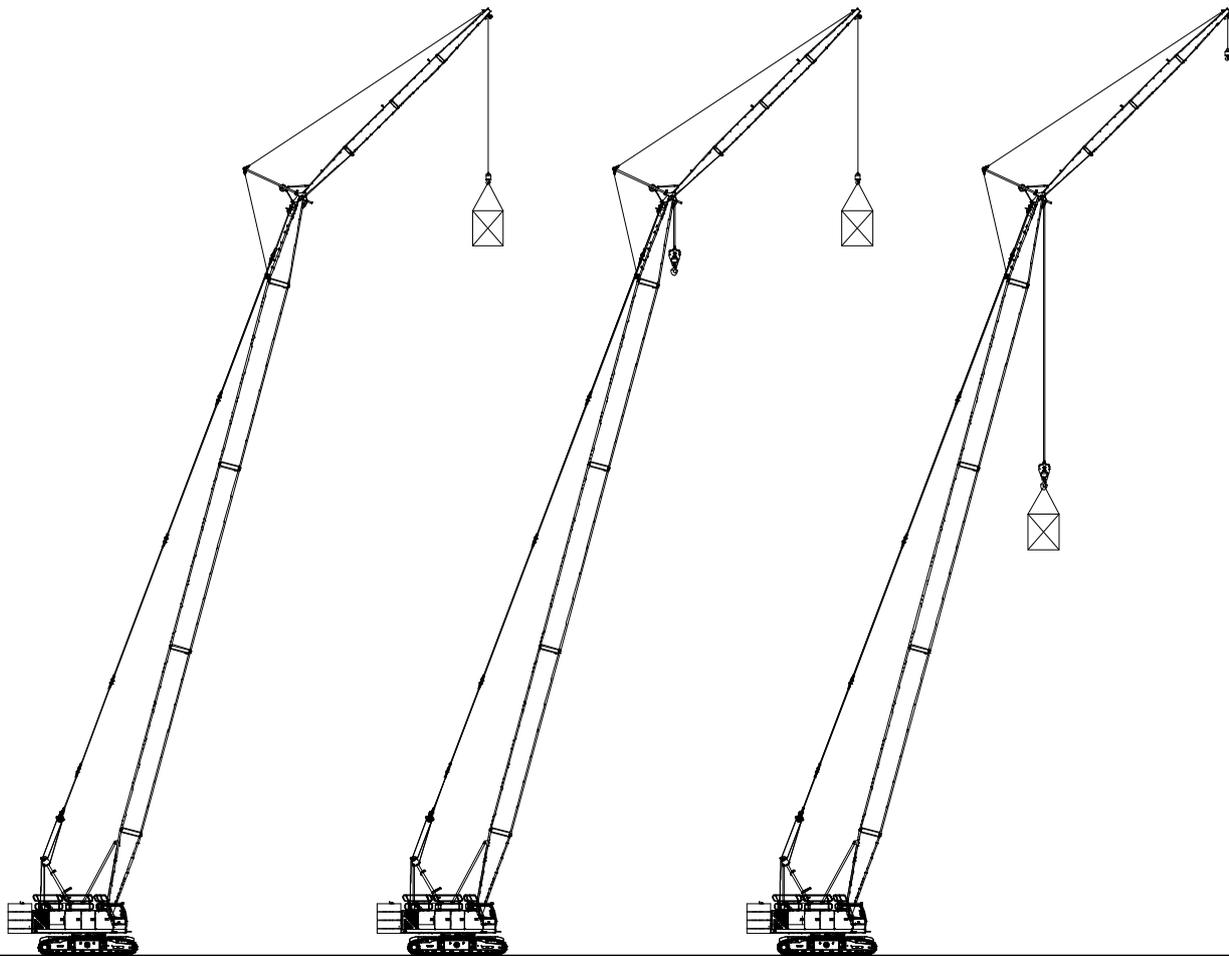
HCm Configuration
(double hooks, load on main hook)

HCa Configuration
(double hooks, load on aux. hook)

Configuration	Boom Combination	Boom Length
H	Boom	12m~57m
HCm	Boom + Runner (double hooks, load on main hook)	
HCa	Boom + Runner (double hooks, load on aux. hook)	

The schematics above are reference for loading only.

Combination



FJ Configuration
(single hook)

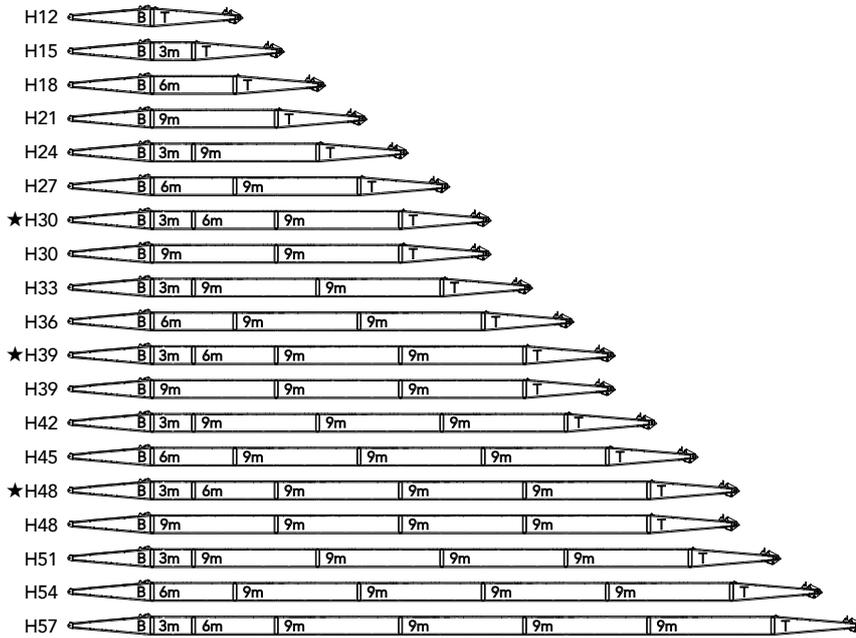
FJ Configuration
(double hooks, load on aux. hook)

FJ Configuration
(double hooks, load on main hook)

Configuration	Boom Combination	Boom Length
FJ	Boom + Fixed Jib (single hook)	(27m~48m)+(9m~18m)
FJa	Boom + Fixed Jib (double hooks, load on main hook)	
FJm	Boom + Fixed Jib (double hooks, load on aux. hook)	

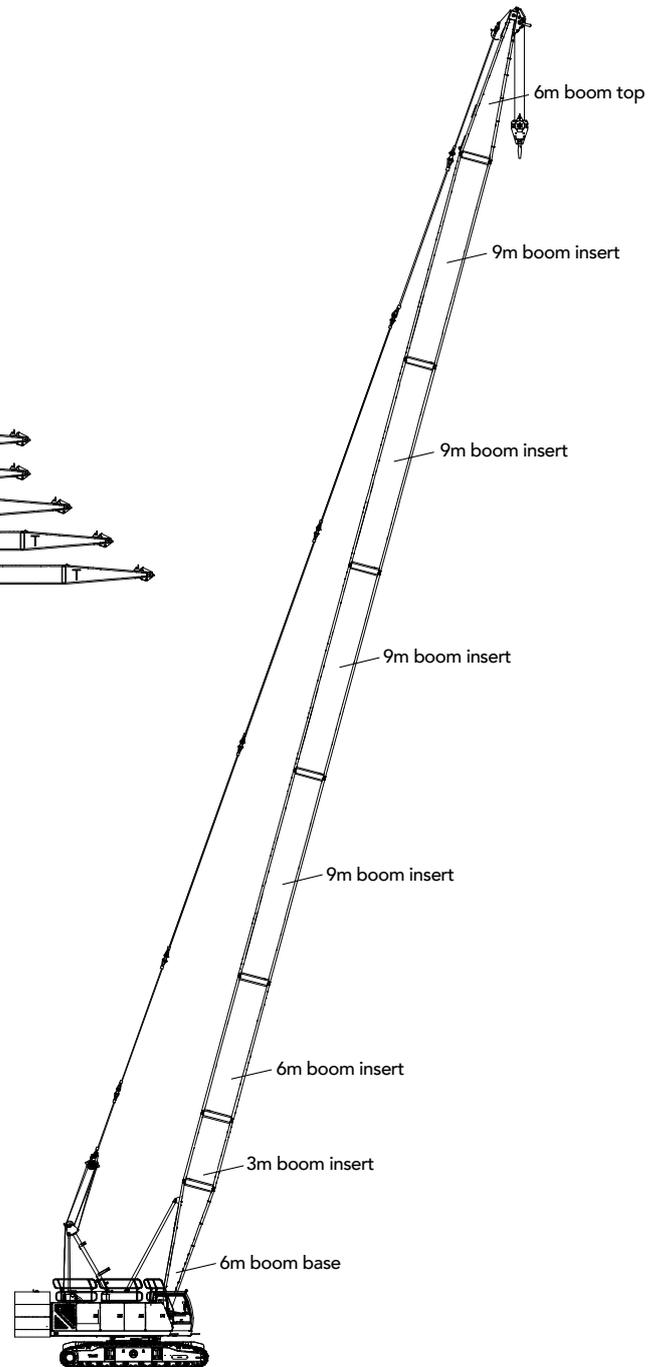
The schematics above are reference for loading only.

Boom Combination in H



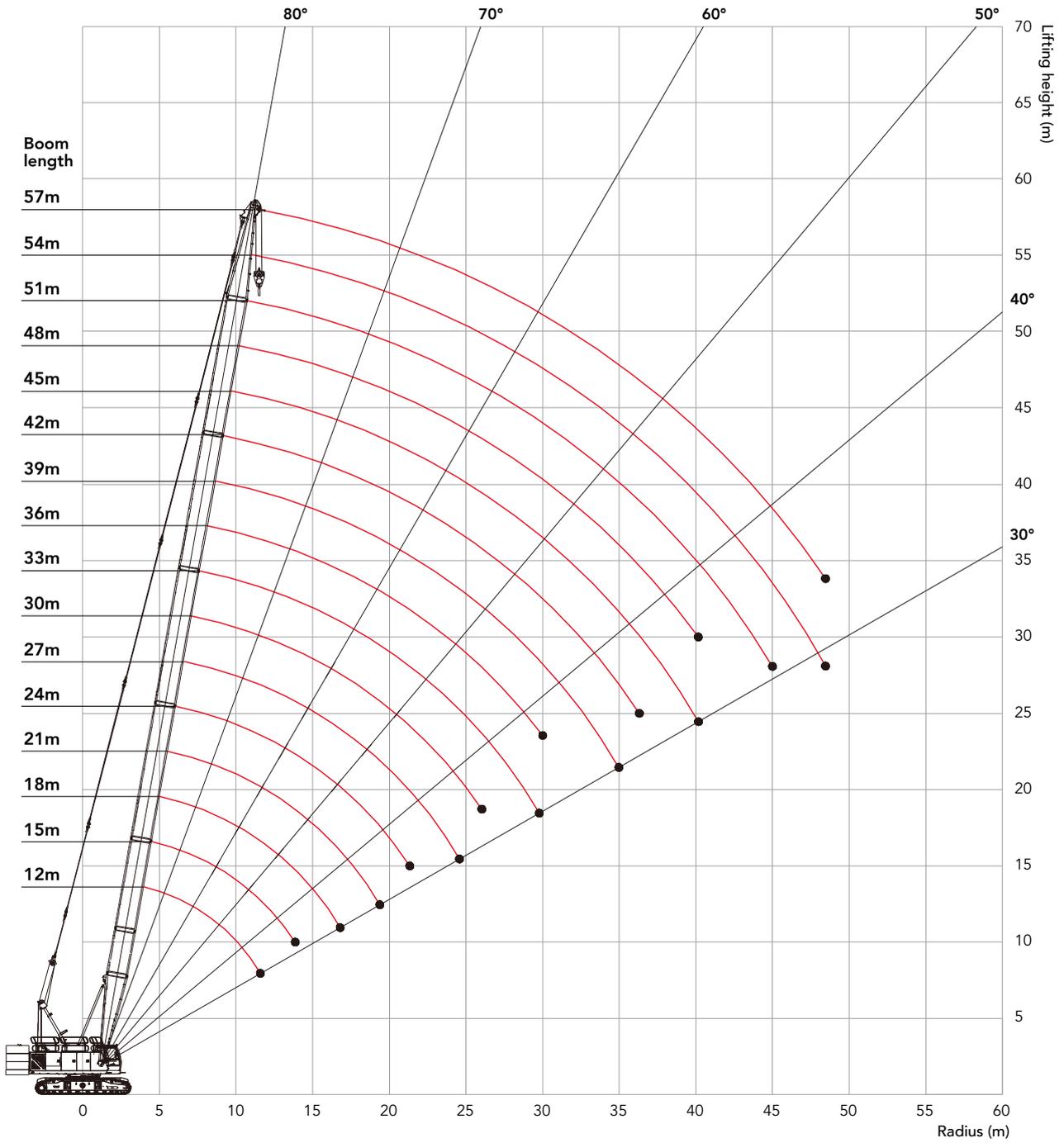
Note: The boom combinations with "★" are recommended for purchasing.

	6m	Boom base
	3m	Boom insert
	6m	Boom insert
	9m	Boom insert
	6m	Boom top



H Configuration
(12m~57m)

Working Range of H



Load Chart of H Configuration

Note:

The rated capacity in the load charts is calculated when the crane is parking on firm and level ground and lifting the load slowly and steadily.

The rated capacity in the load charts includes the weight of lifting hook, etc.; therefore, the actual rated capacity is the value after deducting the weight of lifting tools (such as lifting hook), from the rated load in the load charts. The gray area in the load chart is determined by strength.

Load chart -H																	
Rear counterweight 27.5t, Carbody counterweight 9.6t																	
Radius (m)	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	Radius (m)
4	90.0																4
5	75.0	73.1	70.2														5
6	58.5	58.2	57.9	57.4	55.7												6
7	46.1	45.8	45.5	45.2	45.0	44.9	43.8										7
8	38.2	38.1	38.1	38.0	38.0	37.9	37.4	36.6	35.8								8
9	32.4	32.3	32.3	32.2	32.2	32.1	32.0	31.9	31.3	30.7	30.1						9
10	28.0	28.0	27.9	27.8	27.8	27.7	27.6	27.5	27.5	27.2	26.7	26.2	25.7				10
11	24.0	24.6	24.6	24.5	24.5	24.4	24.3	24.2	24.1	24.0	23.9	23.5	23.1	22.7			11
12		22	21.9	21.8	21.8	21.7	21.6	21.5	21.4	21.3	21.2	21.1	20.9	20.5	19.6	17.2	12
14		18.0	17.9	17.8	17.8	17.7	17.6	17.5	17.4	17.3	17.2	17.1	17.0	16.9	16.8	16.2	14
16			15.1	15.0	15.0	14.8	14.8	14.6	14.6	14.4	14.3	14.2	14.1	14.0	13.9	13.8	16
18				12.9	12.8	12.7	12.6	12.5	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.6	18
20					11.2	11.1	11.0	10.9	10.8	10.7	10.6	10.4	10.3	10.2	10.1	10.0	20
22					9.9	9.8	9.7	9.6	9.5	9.3	9.2	9.1	9.0	8.9	8.8	8.7	22
24						8.7	8.6	8.5	8.4	8.3	8.2	8.0	7.9	7.8	7.7	7.6	24
26							7.7	7.6	7.5	7.4	7.3	7.1	7.1	6.9	6.8	6.7	26
28								6.8	6.8	6.6	6.5	6.4	6.3	6.2	6.0	5.9	28
30									6.1	6.0	5.9	5.7	5.6	5.5	5.4	5.3	30
32										5.5	5.4	5.3	5.2	5.1	4.9	4.8	32
34											4.9	4.8	4.7	4.6	4.5	4.4	34
36												4.4	4.3	4.2	4.0	3.9	36
38													3.9	3.8	3.7	3.6	38
40														3.6	3.5	3.3	40
42															3.2	3.0	42
44																2.8	44
46																	46
48																	48
50																	50

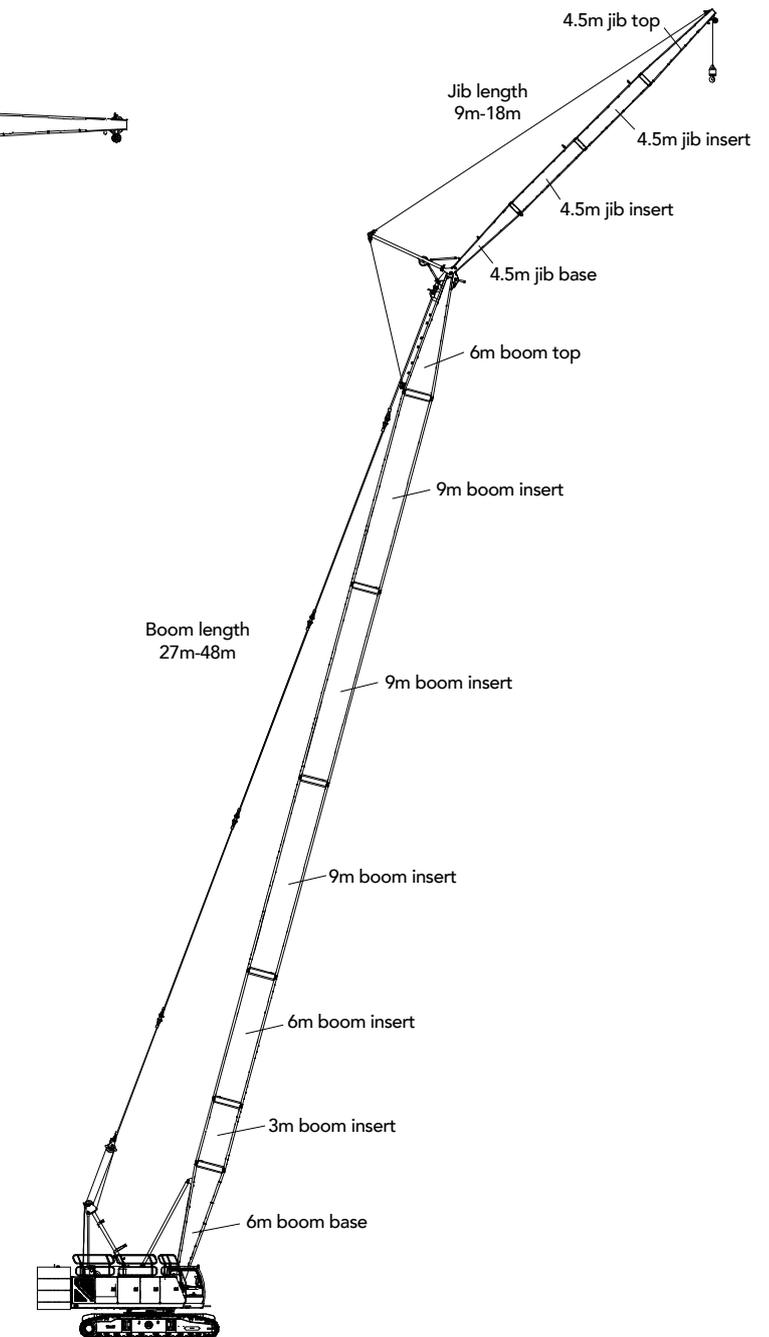
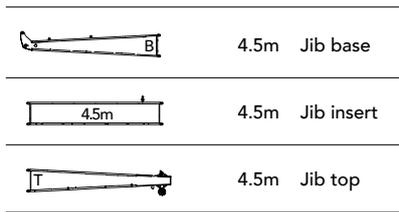
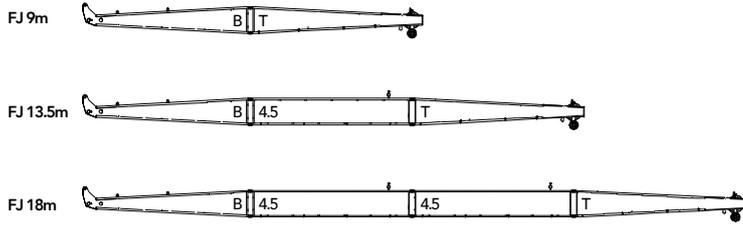
Load Chart of H Configuration

Load chart -H											
Boom length 12~39m, rear counterweight 5t, carbody counterweight 9.6t											
Radius (m)	12	15	18	21	24	27	30	33	36	39	Radius (m)
4	56.6										4
5	37.6	37.6	36.5								5
6	27.4	27.3	27.3	27.3	26.5						6
7	21.4	21.3	21.3	21.3	21.1	21.1	20.6				7
8	17.5	17.4	17.4	17.3	17.1	17.2	17.1	16.8	16.6		8
9	14.8	14.7	14.6	14.6	14.4	14.4	14.3	14	14.2	14	9
10	12.7	12.6	12.6	12.5	12.3	12.3	12.2	11.9	12.1	12	10
11	11.1	11	11	10.9	10.7	10.7	10.6	10.3	10.4	10.3	11
12		9.8	9.7	9.6	9.4	9.4	9.3	9.1	9.2	9.1	12
14		7.9	7.8	7.7	7.5	7.5	7.4	7.2	7.2	7.1	14
16			6.5	6.4	6.2	6.2	6.1	5.8	5.9	5.8	16
18				5.4	5.2	5.2	5.1	4.8	4.9	4.7	18
20					4.4	4.4	4.3	4	4.1	4	20
22					3.8	3.8	3.6	3.4	3.4	3.3	22
24						3.3	3.1	2.9	2.9	2.8	24
26							2.7	2.4	2.5	2.4	26
28								2.1	2.1	2	28
30									1.8	1.7	30
32									1.5	1.4	32
34										1.2	34

Load Chart of H Configuration

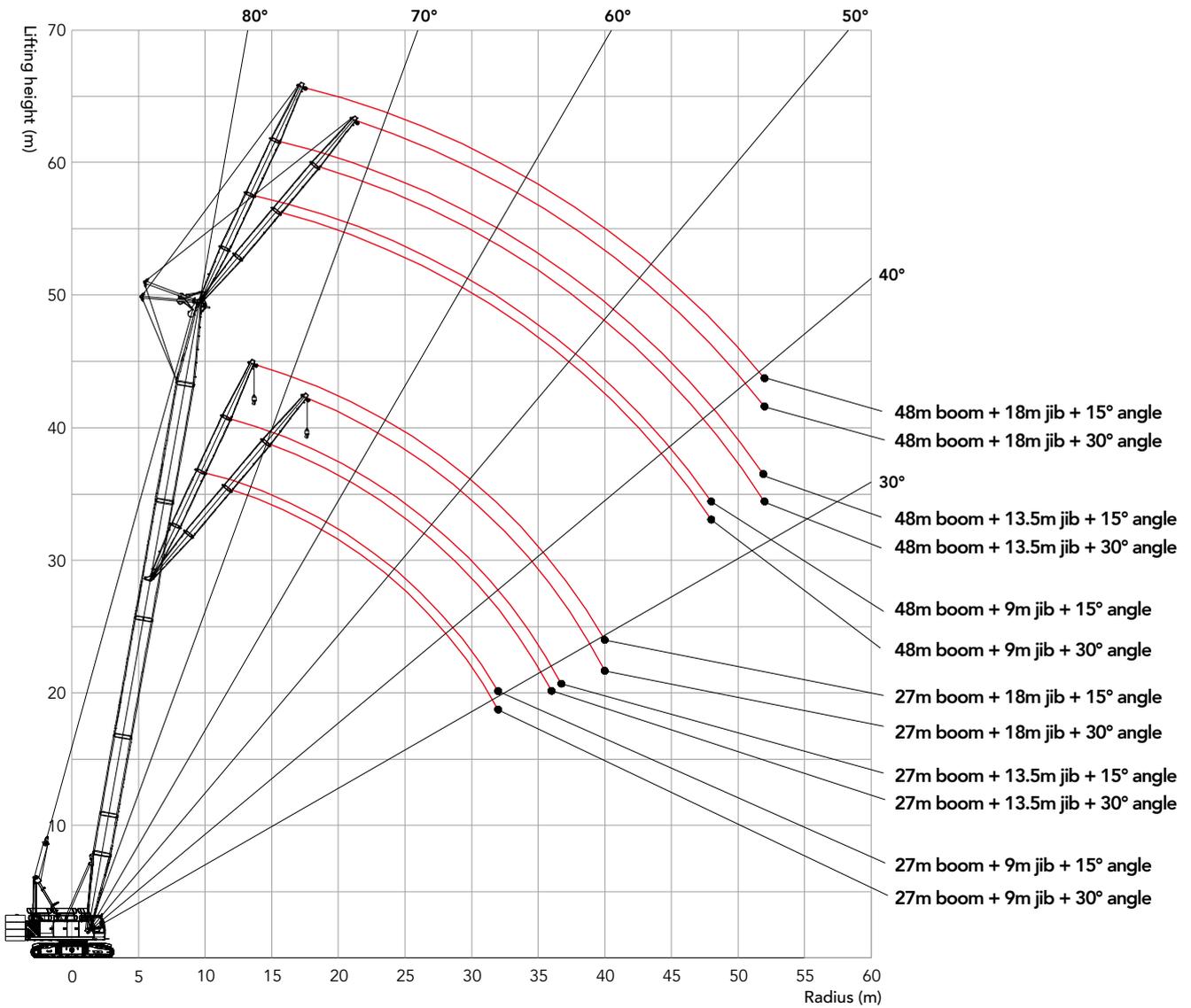
Load chart -H								
Boom length 12~30m, Rear counterweight 0t, Carbody counterweight 0t								
Radius (m)	12	15	18	21	24	27	30	Radius (m)
4	34.4							4
5	22.8	22.8	22					5
6	16.5	16.5	16.4	16.4	15.7			6
7	12.8	12.8	12.7	12.7	12.5	12.5	12	7
8	10.4	10.3	10.3	10.2	10	10.1	10	8
9	8.7	8.6	8.6	8.5	8.3	8.3	8.2	9
10	7.4	7.3	7.3	7.2	7	7	6.9	10
11	6.5	6.4	6.3	6.2	6	6	5.9	11
12		5.6	5.5	5.4	5.2	5.2	5.1	12
14		4.4	4.3	4.3	4.1	4.1	3.9	14
16			3.5	3.4	3.2	3.2	3.1	16
18				2.8	2.6	2.6	2.5	18
20					2.1	2.1	2	20
22					1.7	1.7	1.6	22
24						1.4	1.2	24
26							1	26

Boom Combination in FJ



FJ Configuration
(Longest boom + jib: 48m + 18m)

Working Range of FJ



Load Chart of FJ Configuration

Note:

The rated capacity in the load charts is calculated when the crane is parking on firm and level ground and lifting the load slowly and steadily. The rated capacity in the load charts includes the weight of lifting hook, etc.; therefore, the actual rated capacity is the value after deducting the weight of lifting tools (such as lifting hook), from the rated load in the load charts. The gray area in the load chart is determined by strength.

Load chart - FJ (Rear counterweight 27.5t, Carbody counterweight 9.6t) 1/4

Boom length (m)	27						30						Boom length (m)
Jib length (m)	9		13.5		18		9		13.5		18		Jib length (m)
Boom angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom angle
12	8						8						12
14	8	8	8				8	8	8				14
16	8	8	8	7	7.8		8	8	8		8		16
18	8	8	8	6.6	7.1		8	8	8	6.7	7.3		18
20	8	8	7.9	6.2	6.5	4.8	8	8	8	6.4	6.8	4.9	20
22	8	8	7.3	5.9	6	4.5	8	8	7.7	6	6.3	4.6	22
24	7.4	7.5	6.9	5.6	5.6	4.3	7.3	7.4	7.2	5.8	5.9	4.4	24
26	6.6	6.7	6.4	5.4	5.3	4.1	6.5	6.6	6.6	5.5	5.5	4.2	26
28	6	6	6.1	5.2	4.9	3.9	5.8	5.9	5.9	5.3	5.2	4	28
30	5.4	5.4	5.5	5	4.7	3.7	5.2	5.3	5.4	5.1	4.9	3.8	30
32	4.9	4.9	5	4.8	4.4	3.6	4.7	4.8	4.9	5	4.6	3.7	32
34			4.6	4.6	4.2	3.4	4.3	4.3	4.4	4.5	4.4	3.6	34
36			4.2	4.2	4	3.3		3.9	4	4.1	4.1	3.4	36
38				3.8	3.9	3.2			3.7	3.7	3.8	3.3	38
40					3.5	3.1			3.3	3.4	3.5	3.2	40
44											2.8	2.9	44

Load chart - FJ (Rear counterweight 27.5t, Carbody counterweight 9.6t) 2/4

Boom length (m)	33						36						Boom length (m)
Jib length (m)	9		13.5		18		9		13.5		18		Jib length (m)
Boom angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom angle
14	8	8	8				8						14
16	8	8	8		8		8	8	8				16
18	8	8	8	6.8	7.5		8	8	8	6.9	7.8		18
20	8	8	8	6.5	7	5	8	8	8	6.6	7.2		20
22	8	8	8	6.2	6.5	4.7	8	8	8	6.3	6.7	4.8	22
24	7.2	7.3	7.3	5.9	6	4.5	7.1	7.2	7.2	6	6.3	4.5	24
26	6.4	6.5	6.5	5.7	5.7	4.3	6.3	6.4	6.4	5.8	5.9	4.3	26
28	5.7	5.8	5.8	5.5	5.4	4.1	5.6	5.7	5.7	5.6	5.5	4.2	28
30	5.1	5.2	5.3	5.3	5.1	3.9	5	5.1	5.2	5.3	5.1	4	30
32	4.6	4.7	4.8	4.9	4.8	3.8	4.5	4.6	4.7	4.8	4.7	3.9	32
34	4.2	4.3	4.3	4.4	4.4	3.6	4.1	4.2	4.2	4.3	4.3	3.7	34
36	3.8	3.8	3.9	4	4	3.5	3.7	3.8	3.8	3.9	3.9	3.6	36
38	3.5	3.5	3.6	3.6	3.7	3.4	3.4	3.4	3.5	3.6	3.6	3.5	38
40			3.2	3.3	3.4	3.3	3	3	3.1	3.2	3.3	3.4	40
44					2.8	2.9			2.6	2.6	2.7	2.8	44
48											2.2	2.3	48

Load Chart of FJ Configuration**Load chart - FJ (Rear counterweight 27.5t, Carbody counterweight 9.6t) 3/4**

Boom length (m)	39						42						Boom length (m)
Jib length (m)	9		13.5		18		9		13.5		18		Jib length (m)
Boom angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom angle
14	8						8						14
16	8	8	8				8	8	8				16
18	8	8	8		8		8	8	8		8		18
20	8	8	8	6.7	7.4		8	8	8	6.8	7.6		20
22	7.9	8	8	6.4	6.9	4.9	7.8	8	7.8	6.5	7	5	22
24	6.9	7.1	7.1	6.1	6.4	4.7	6.8	7	7	6.3	6.3	4.7	24
26	6.1	6.3	6.3	5.9	5.9	4.5	6	6.2	6.2	6	5.7	4.5	26
28	5.5	5.6	5.6	5.7	5.4	4.3	5.4	5.5	5.5	5.7	5.3	4.3	28
30	4.9	5	5	5.2	5	4.1	4.8	4.9	4.9	5.1	4.9	4.2	30
32	4.4	4.5	4.5	4.7	4.6	4	4.3	4.4	4.4	4.6	4.5	4	32
34	4	4	4.1	4.2	4.2	3.8	3.8	3.9	4	4.1	4.1	3.9	34
36	3.6	3.6	3.7	3.8	3.8	3.7	3.4	3.5	3.6	3.7	3.7	3.8	36
38	3.2	3.2	3.3	3.4	3.4	3.6	3.1	3.1	3.2	3.3	3.3	3.5	38
40	2.8	2.9	3	3.1	3.1	3.3	2.7	2.8	2.9	3	3	3.2	40
44			2.4	2.5	2.5	2.7	2.1	2.2	2.3	2.4	2.4	2.6	44
48			1.9	1.9	2	2.1			1.8	1.8	1.9	2	48
52					1.6	1.7					1.5	1.6	52

Load chart - FJ (Rear counterweight 27.5t, Carbody counterweight 9.6t) 4/4

Boom length (m)	45						48						Boom length (m)
Jib length (m)	9		13.5		18		9		13.5		18		Jib length (m)
Boom angle	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	Boom angle
16	8						8						16
18	8	8	8				8	8	8				18
20	8	8	8	7	7.5		8	8	8	7	7.3		20
22	7.6	7.9	7.7	6.6	6.9		7.6	7.8	7.6	6.7	6.7		22
24	6.7	6.9	6.9	6.4	6.2	4.8	6.6	6.8	6.8	6.5	6.1	4.8	24
26	5.9	6.1	6.1	6.2	5.6	4.6	5.8	6	6	6	5.5	4.7	26
28	5.2	5.4	5.4	5.6	5.2	4.4	5.2	5.3	5.3	5.5	5.1	4.5	28
30	4.7	4.8	4.8	5	4.8	4.3	4.6	4.8	4.7	5	4.7	4.3	30
32	4.2	4.3	4.3	4.5	4.4	4.1	4.1	4.2	4.2	4.4	4.3	4.1	32
34	3.7	3.8	3.9	4	4	3.9	3.6	3.8	3.8	4	3.9	3.8	34
36	3.3	3.4	3.4	3.6	3.6	3.6	3.2	3.3	3.4	3.6	3.5	3.6	36
38	2.9	3	3.1	3.2	3.2	3.4	2.9	3	3	3.2	3.1	3.3	38
40	2.6	2.7	2.7	2.9	2.9	3.1	2.5	2.6	2.7	2.8	2.8	3	40
44	2	2.1	2.2	2.3	2.3	2.5	1.9	2	2.1	2.2	2.2	2.4	44
48	1.5	1.6	1.7	1.7	1.8	1.9	1.5	1.5	1.6	1.7	1.7	1.9	48
52			1.3	1.3	1.4	1.5				1.2	1.2	1.3	52



Zhejiang Sany Equipment Co.,LTD

SANY Crawler Crane Industrial Park, No. 2188 Daishan Road, Wuxing District, Huzhou City,
Zhejiang Province, P. R. China Zip 313028
Consulting sanycrane@sanygroup.com (Crane BU) / crd@sany.com.cn (IHQ)
After-sales Service 0086-400 6098 318

Reminder:

Any change in the technical parameters and configuration due to product modification or upgrade may occur without prior notice.
The machine in the picture may include additional equipment. This brochure is for reference only, and goods in kind shall prevail.
Copyright at SANY. No part of this brochure may be copied or used for any purpose without written approval from SANY.

© Edited in November 2023

