

SCL10000

All Terrain Lattice Boom Crane 1000 Tons Lifting Capacity

Quality Changes the World



Max. Lifting Moment: 11000t·m

Max. Lifting Capacity: 1000t

Max. Boom + Jib Length: 171m+12m

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.



All Terrain Lattice Boom Crane Series SCL10000

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- HDB_CK (48) working condition
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- HJFJ_CK working condition



SCL10000
ALL TERRAIN LATTICE BOOM CRANE
1000 TONS LIFTING CAPACITY

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Main Features

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Product Specifications



Upper Works

Appearance

- The industrial modeling of the cab is designed by Porsche. It has a smooth, elegant and novel appearance, which is a significant breakthrough when compared with traditional engineering machinery and has excellent brand identification. The cab has a sliding door structure, which is suitable for the crawler crane and convenient for the operator. It is adopted with fully-sealed steel frame structure with a large area of high strength toughened glass installed on the front, side and top, transmitting more light. The interior space of the cab is spacious and bright, with a broader sight view.

Comfort

- It is adopted with shock absorption, noise reduction, suspended, multi-mode and multi-stage adjustable seat, thus providing the operator with the most comfortable driving experience. The famous USA RedDot air conditioner is adopted, ensuring more reasonable air outlet and efficient cooling. It takes no more than 20 min to cool the cab from 55°C to 27.5°C. The left and right armrest boxes and auxiliary control boxes are equipped with control handles, control buttons, ignition locks and other elements. The seats, control handles and control buttons are arranged according to ergonomic design, fully considering the driver's operation demands and habits. The control box can be adjusted to the most suitable position with the seat to ensure more comfortable operation. The cab can tilt up to 15° according to the work demands, and can also rotate to the front part of the rotating bed for the convenience of transport.

Engine

- WEICHAI WP17 (CHINA III).
- Rated power: 566 kW.
- Rated speed: 2100 rpm.
- Maximum output torque: 3000 N·m.
- Speed at the maximum output torque: 1200~1500 rpm.

Optional

- Cummins QSX15-C600 (Euro Tier III), optional Euro Tier IV.
- Rated power: 447 kW.
- Rated speed: 1800 rpm.
- Maximum output torque: 2542 N·m.
- Speed at the maximum output torque: 1400 rpm.

Load Hoist Winch Mechanism

- The planetary gear box driven by hydraulic motor of variable displacement is used to control the main load hoist I and main load hoist II to lift and lower the load. It provides good inching performance, and also ensures quick powered lifting of main load hoist winches.
- The multilayer winding of rope-folding drum ensures no rope disorder. The gear box is featured in low noise, high efficiency, long service life and easy access to oil change.

Main load hoist winch W1-1 (main load hoist winch 1)	Diameter of wire rope	28mm
	Rope length	1450m
	Rated line pull	17.2t
W1-2 (main load hoist winch 2)	Diameter of wire rope	28mm
	Rope length	600m
	Rated line pull	17.2t

Boom Hoist Winch Mechanism

- Components: Boom luffing mechanism, superlift luffing mechanism.
- All luffing winches adopt fold-line drums, which are driven by hydraulic motor through the planetary gear box and can realize a number of compound actions and good inching performance.

Boom luffing mechanism W3	Rated single line pull	24.6t
	Diameter of wire rope	28mm
Superlift luffing mechanism W5	Rated single line pull	26.6t
	Diameter of wire rope	32mm



Product Specifications

Slewing Mechanism

- The slewing hydraulic system adopts double motor to drive the spur gear through the planetary gear box, which can realize 360° rotation, slewing speed of 0~0.8 rpm, stepless speed regulation, no backlash at starting or stopping, stable operation and free slipping function at neutral position. Slewing ring: It is adopted with three-row roller type slewing bearing with external gears. The main unit can be separated from the lower structure through the adaptor ring.
- The operating equipment is made of high-strength steel tubes and high-strength steel plates, and the rolled welded pulleys are adopted on the boom head and hook.

Boom

- The boom is a spatial lattice structure of welded tubes with equal section areas of inserts and tapered sections for two ends. The boom top and root are strengthened with steel plates, which is easier for load transfer.
- The length of the boom is 24m (basic boom) to 171m (with superlift).
- Compositions: Boom base 10.5m×1, transition section 12m×1, insert of 6m×1, insert of 3m×1, connecting of 1.5m x1. CK-boom upper/ lower transition section 12m×2, CK-boom insert 12m×6, CK-boom insert 6m×1; power boom upper/ lower transition section 12m×2, power boom 12m×1, tapered insert 6m×1, boom tip 7.5m×1.
- The extension jib is installed on the boom top.

Fixed Jib

- The fixed jib is a spatial lattice structure of welded tubes with equal section areas of inserts and tapered sections for two ends. The jib top and root are strengthened with steel plates, which is easier for load transfer.
- The length of the fixed jib is 12m.
- Compositions: Jib base 6m×1, jib top 6m×1.

Superlift Device

- The superlift mast is a spatial lattice structure of welded tubes with equal section areas of inserts and tapered sections for two ends. The mast base and top are strengthened with steel plates, which is easier for load transfer.
- The length of the superlift mast is 48m.
- Compositions: Superlift base 12m×1, insert 6m×2, insert 12m×1, tip 12m×1.

Hook

- There are 3 types of hook available. The specific parameters are as follows:

Hook	Maximum lifting capacity	Quantity	Number of pulleys	Unit weight (t)
800t hook	800t	1	2×15	22.5
250t hook	250t	1	2×5	8.4
18t ball hook	18t	1	0	1

Note: The 800 t hook can be decomposed into 400 t hook.

Additional Device

- Portable hydraulic power pack.
- Quick connector ring (connecting the superstructure/lower structure).

Counterweight

- The counterweight includes the rear counterweight, superlift counterweight, and the specific parameters are as follows:

Name	Quantity	Length(m)	Width(m)	Height(m)	Unit weight(t)
Rear counterweight	22	2.85	2.40	0.45	10
Rear counterweight tray	2	3.30	2.64	2.08	6.7
Superlift counterweight	43	2.85	2.40	0.45	10
	8	2.85	2.40	0.26	5
Superlift counterweight tray	1	9.69	2.73	1.97	36

Hydraulic System

- Hydraulic system includes load hoist hydraulic system, traveling hydraulic system, slewing hydraulic system, boom hoist hydraulic system, servo hydraulic system, back-stop hydraulic system, cooling system, auxiliary hydraulic system. The main hydraulic components are original parts imported.
- Characteristics: The load hoisting, traveling, boom hoist and slewing hydraulic systems are of closed loop type, featuring energy saving, high efficiency, quick response, low heat radiation and long service life.
- The servo system adopts electrical proportional control components to facilitate the accurate and intelligent control.
- The back-stop hydraulic system adopts balance valve of external control and unloading, and it is mounted on the cylinder to make sure it is safe and reliable.
- The cooling system is characterized by higher power and quicker cooling.

Product Specifications



Undercarriage

Driver's Cab

- The cab is a new steel structure developed by Sany, with excellent shock absorption and sealing performance. It is equipped with pneumatic suspension driver's seat and co-driver's seat, adjustable steering wheel, large rearview mirror, comfortable headrest, demisting fan, air conditioner and stereo radio, etc. In addition, the control instruments and meters are well arranged to provide comfortable, safe and user friendly experience.

Carrier Frame

- Developed and manufactured by SANY, the frame is lightweight after being optimized to anti-torsion box structure welded by fine grain high-tensile steels. Front and rear towing devices available.

Chassis Engine

- WEICHAO WP15H660E61 six-cylinder diesel engine.
- Power: 485kW/1800rpm.
- Max. torque: 3200N·m/(900~1400)rpm.
- Emission: CHINA VI.
- Fuel reservoir capacity: approx. 600L.

Optional

- Mercedes-Benz 502 V-type eight-cylinder diesel engine.
- Power: 480kW / 1800rpm.
- Max. torque: 3200N·m / 1800rpm.
- Emission: E3B.
- Fuel reservoir capacity: Approx. 600L.

Transmission

- ZF AMT, with hydraulic torque converter and hydraulic retarder, reaches a wide range of speed ratios with 12 forward gears and 2 reversing gears, which is adaptable to slope climbing and high-speed traveling.

Axle

- Kessler axles with disc brake, all wheel steering, drive 16×10. Axle 1, 2, 4, and 6 are drive axles on highways, and axle 7 and 8 is driven hydraulically additionally on tough terrains. Axle 1, 2, 3, and 4 are steered mechanically with hydraulic booster; axle 5 to 8 are steered by hydraulic power, which features easy steering and flexible maneuverability.

Suspension System

- The whole system features height adjustable hydro-pneumatic.
- suspension devices with hydraulic locks, which can realize five modes incl. suspension, rigid locking, auto leveling, whole vehicle lifting and single point lifting. Its good passability applies to all kinds of rough jobsites and road surfaces, ensuring smoothness and lateral stability during driving.

Tire

- Radial tires -18.00R25 (505/95 R25).

Brake

- Dual circuit, air brake, disc brakes available.
- Service brake: Air servo brakes on all wheels, dual circuit, dual air chamber braking system, all wheels equipped with disc brakes.
- Parking brake: Actuated by pressure accumulators on axles 2 to 8.
- Assist brake: Engine brake and exhaust brake on the engine, transmission hydraulic retarder brake, fifth axle drive shaft equipped with eddy current retarder.

Steering

- Servo power steering, dual circuit hydraulic steering with emergency steering pump. The steering mode is adjusted according to the speed. Starting from 30km/h, the steering angle of the rear axles gradually converges, and by 60km/h, the auxiliary steering axles are all locked and stop steering.
- Six steering modes: 1) on-road driving (default); 2) all wheel steering; 3) crab steering; 4) reduced swing out steering; 5) independent rear axle steering; 6) independent front axle steering.

Outrigger

- X-type two-stage telescopic outriggers. The hydraulic system of outrigger telescoping adopts electric proportional control technology. The control panel can display load on outriggers, and has the function of auto leveling, featuring high precision and easy operation.

Electrical System

- 24V DC power supply with lighting system, chassis power cut-off available. The throttle and outrigger are controlled by electrical system, which makes the movements light and fast. The electrical system has strong detection, logic and calculation capabilities, with fault self-diagnosis, centralized display and self-protection functions.
- The chassis adopts CAN-Bus system, which is fast, stable and accurate. the centralized display system is multi-functional; the protection level is as high as IP65; the power consumption is small, which is only 5W at most; four function keys are provided in the user interface; LCD screen is with adjustable contrast.

Centralized Lubrication System

- The progressive centralized lubrication system is adopted to automatically filling oil to the upper and lower hinges of the suspension cylinder and the steering pitman arm, which prolongs the service life of the whole machine and makes it easy to maintain.

Safety Devices



Load Moment Indicator

- The proprietary load moment limiter independently -developed by SANY is adopted, which forms a network with other controllers through CAN bus line, so as to realize safe and reliable control. The load moment limiter can automatically detect the hoisting weight of the crane and the angle of the boom, and display the rated load capacity, actual load, working radius, and the allowable height of the hook.
- The load moment limiter system consists of a large-screen color display, a host computer, angle sensors, tension sensors, pressure sensors and other components.

Over-Hoist Protection of the Main and Auxiliary Hooks

- 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 start working, and hook will be automatically cut off from moving up by the control system. Meanwhile, the display and the buzzer will give alarms. At this moment, only hook lowering is allowed to prevent over-hoist action.

Over-Release Protection Device of the Main and Auxiliary Hook

- 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 start working, and the releasing of rope will be automatically stopped by the control system. Meanwhile, the display and the buzzer will give alarms. At this moment, only rope retraction is allowed to prevent over release action.

Boom Angle Limit

- When the elevation angle of the boom exceeds 85°, corresponding limit switch will be triggered, and the control system will automatically cut off the boom hoisting. Meanwhile, the display and the buzzer will give alarm. At this moment, boom luffing winch won't hoist but it can still lower down.
- When the boom down angle is less than 30°, the control system will automatically cut off the boom from further lowering. Meanwhile, the display and the buzzer will give alarms. At this moment, boom luffing winch won't be able to lower. This protection is automatically controlled by Load Moment Limiter.

Back-Stop Device

- The boom and the superlift mast are respectively equipped with a pair of back-stop cylinders. The high pressure of the cylinder shall be overcome when the boom tilts backwards, and high pressure oil will be supplemented automatically when the boom swings forwards to increase the tension and prevent the boom vibration and shaking back.
- The fixed jib mast is also equipped with a pair of back-stop cylinders.

Brake of Hoisting Mechanism

- All hoisting brakes are spring loaded normally closed disc brakes, which are featured with large braking force, maintenance-free, safe and reliable use, and long service life.

Closed Circuit Monitoring System

- It can be used to monitor the winding conditions of wire ropes of each hoisting mechanism, the conditions of superlift weight, and conditions around the equipment.
- Video recorder can store video as long as 76 hours.
- Machine operation can be recorded.

Failure Auto-Diagnosis System

- Failure code can help troubleshooting easily.

Black Box

- It is able to record the operation data and machine movement, and analyze the remaining running conditions and service life of machine based on the actual performance.

Pharos

- It is mounted on the top of the boom/jib and alerts in air during night.

Anemometer

- It is mounted on the top of the boom/jib to monitor the wind speed in real time and display relative data on the monitor.

Safety Devices



Electronic Level Indicator

- It displays the tilting angle of the crane on the monitor in real time and protects the safe operation of the crane.

Lightning Protection Device

- It includes the lightning protection device and the surge protection device, which can effectively protect the electric system elements and workers from lightning.

Hook Latch

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

Swing and Traveling Alarm

- During swing and traveling, the alarm horn will be blown per certain frequency to alert the personnel around the crane. The horn can be shut off through the display.

Function Lock

- The operation will be locked by pulling up the function locking lever on the right side of the seat inside the driver's cab or when the operator left the seat, after which no operating handles will be working so that improper operation caused by the body collision when getting on and off the crane can be avoided.

Regulation of Engine Power Ultimate Load and Stalling Protection

- The controller can monitor the engine power so as to prevent stalling.

Remote Monitoring System

- It monitors and analyzes the operation data so as to realize remote diagnosis of faults and timely solution.

Proactive Safety Control Technology

- Swing speed can be automatically reduced based on boom length to make it safer.
- Flexible safety protection reduces the speed when the mechanism approaches to the safety limit position, which ensures reliability.
- Real-time monitor of hydraulic oil temperature allows limits on the action speed based on oil temperature, which protect the hydraulic components effectively.
- The protection can be set on man-machine interface as customer needs.



SCL10000
SANY ALL TERRAIN LATTICE BOOM CRANE
1000 TONS LIFTING CAPACITY

QUALITY CHANGES THE WORLD

Technical Parameters

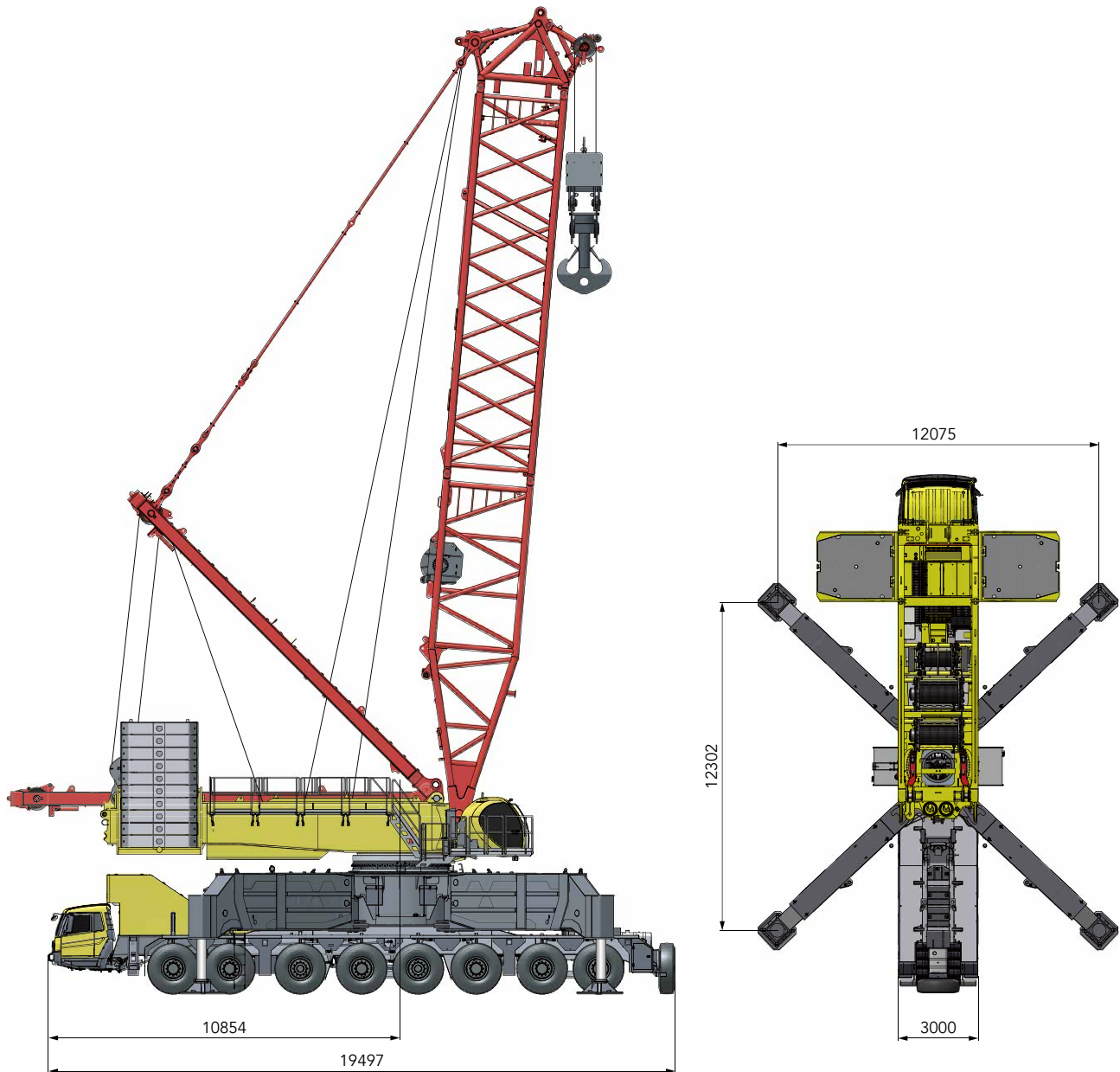
- Page 10 Main performance parameters
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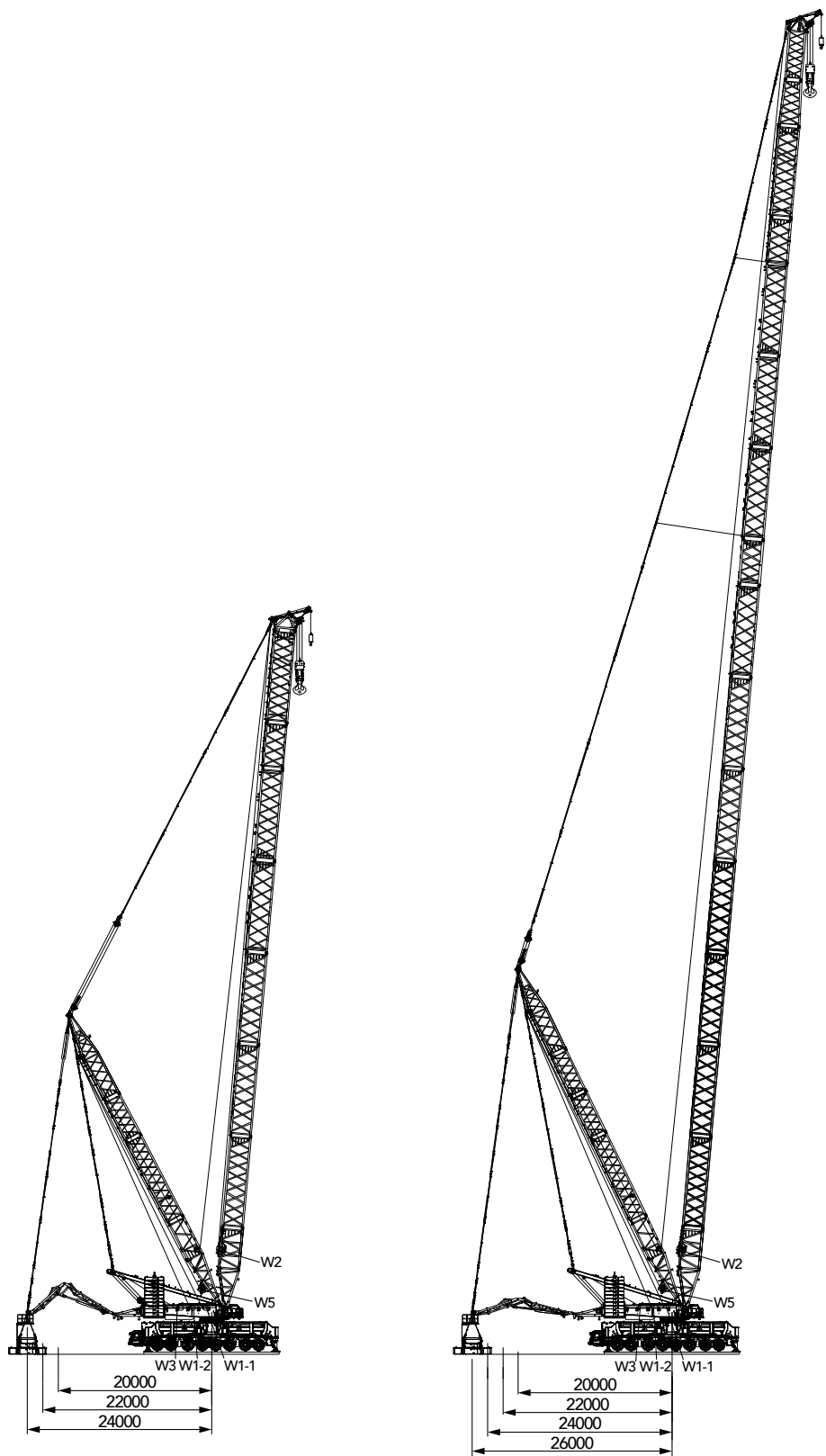
Main Performance Parameters

Major Performance & Specifications of Upper Works of SCL10000		
Performance Indicators	Unit	Parameter
Maximum rated lifting capacity (with superlift)	t	1000
Maximum rated lifting moment (with superlift)	t·m	11000
Boom length	m	24~108
Boom length (with superlift)	m	42~168
Short fixed jib length	m	12
Longest boom combination (HJFJDB_CK working condition)	m	171+12
Longest boom for wind energy configuration (without superlift)	m	111+12
Longest boom for wind energy configuration (with superlift)	m	171+12
Boom luffing angle	°	30~85
Maximum rope speed of single rope of main load hoist winch (outermost working layer)	m/min	172
Maximum rope speed of single rope of aux. load hoist winch (outermost working layer)	m/min	124
Maximum rope speed of single rope of boom hoist mechanism (outermost working layer)	m/min	60×2
Maximum rope speed of single rope of superlift luffing mechanism (outermost working layer)	m/min	130
Slewing speed (no load)	r/min	0.8
Rated output power of the engine	kW/r/min	566/2100
Machine weight (undercarriage, basic boom, 230t machine counterweight, with 800t hook)	t	566
Machine counterweight (including tray)	t	230
Superlift counterweight (including tray)	t	500
Additional rear counterweight (including tray with superlift CW)	t	200
Maximum transport dimensions of single piece (L×W×H)	mm	14600×3000×2955
Maximum transport weight of single piece	t	51

Outline Dimension

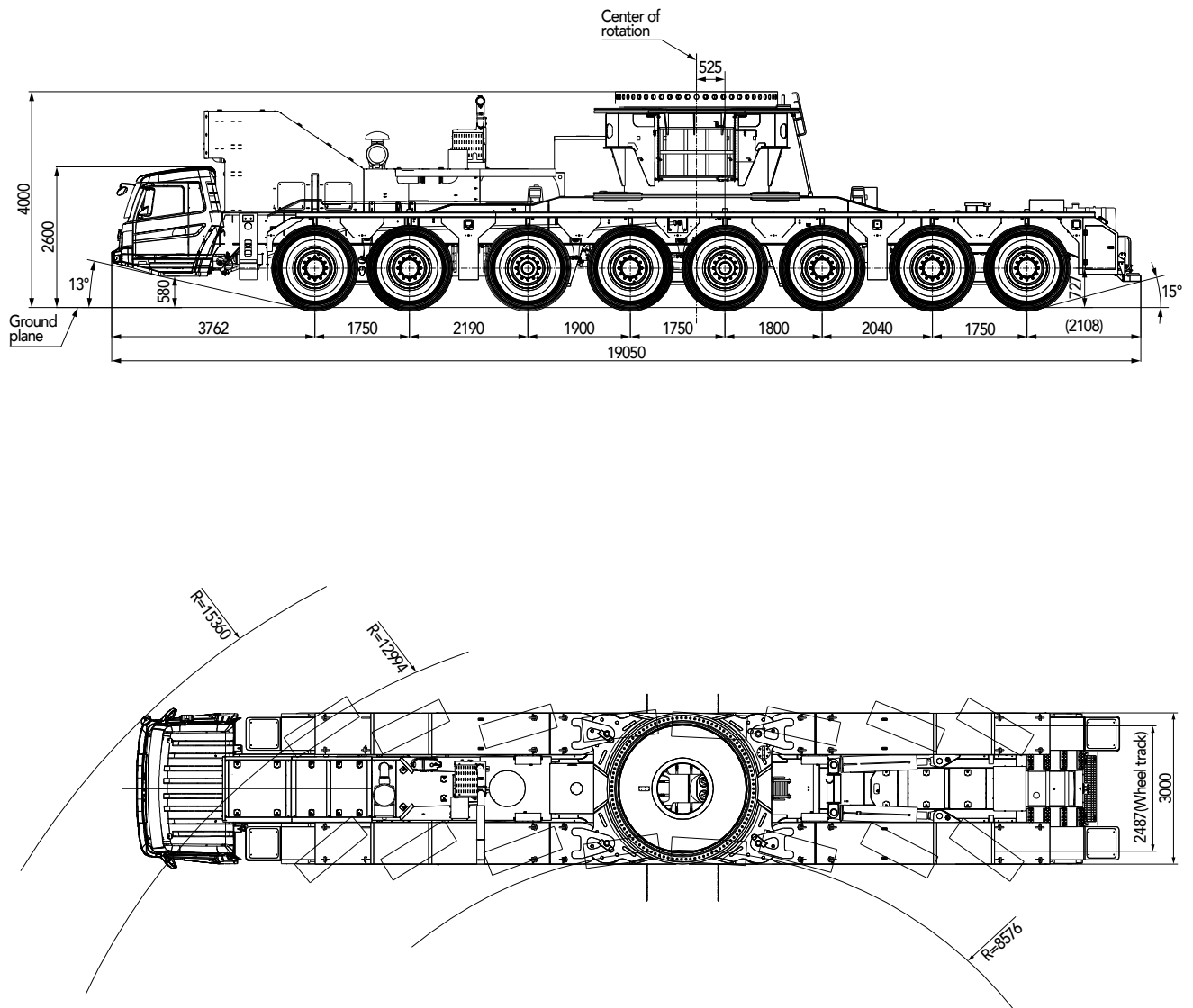


Outline Dimension



Chassis Overall

1. Overall Dimensions

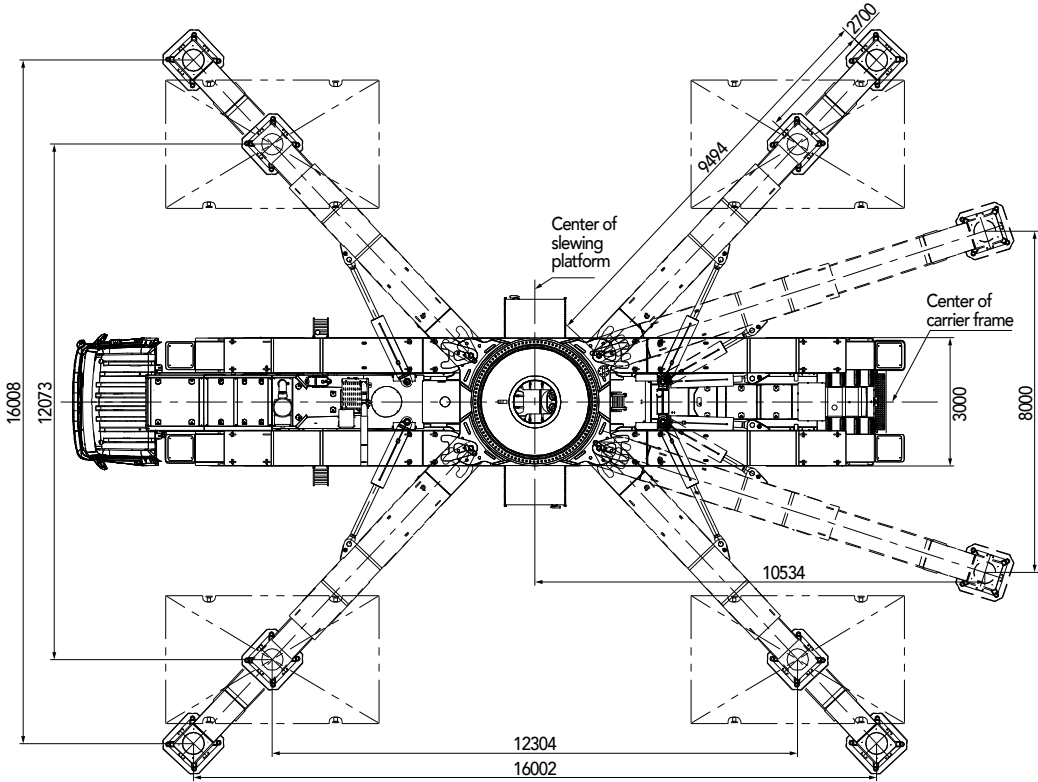
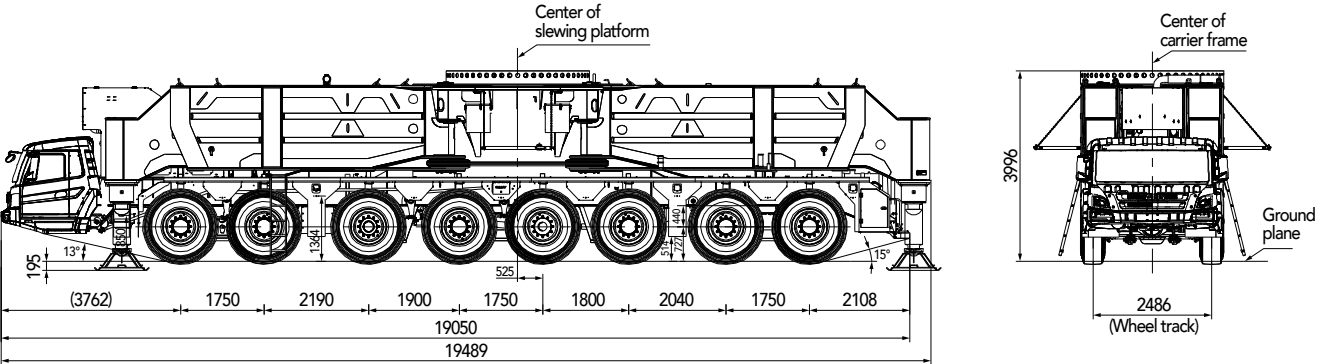


Axle load

Axle	1	2	3	4	5	6	7	8	Height of center of gravity
Weight/t	8.0	8.2	7.7	8.1	5.5	5.5	5.7	5.7	1.49m

Chassis Overall

2. Chassis Assembly

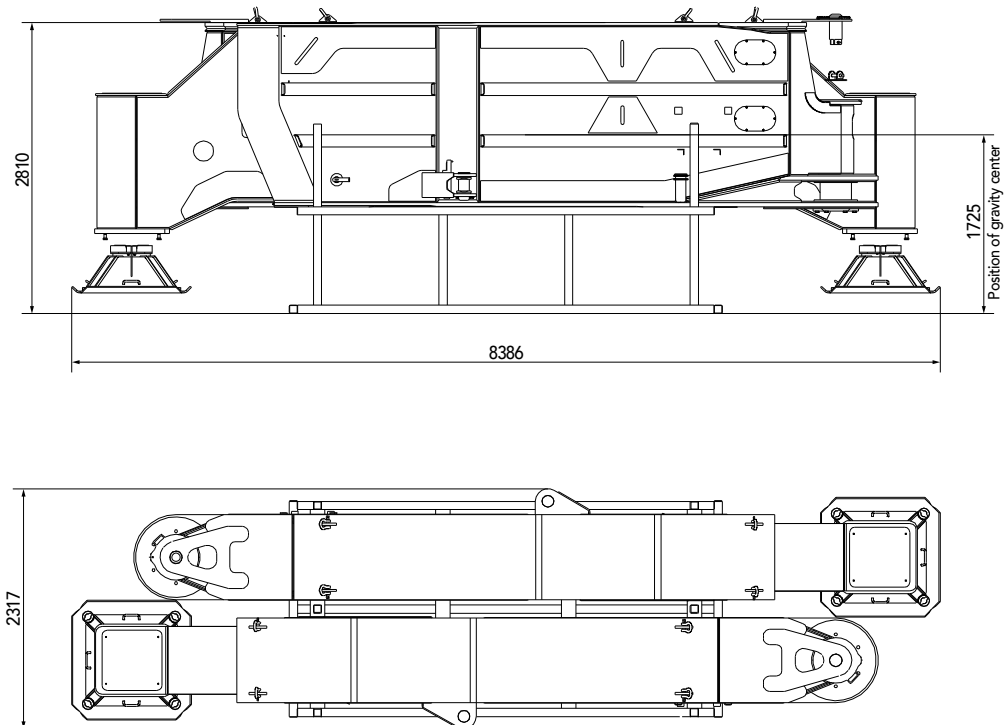


Axle load

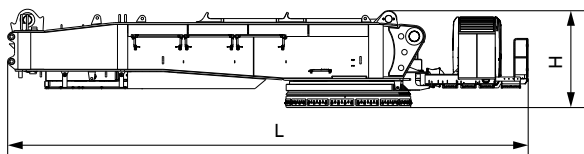
Axle	1	2	3	4	5	6	7	8	Height of center of gravity
Weight/t	14.0	14.1	13.6	14.1	12.9	12.9	13.1	13.0	1.81m

Chassis Overall

3. Transport Dimensions of Outriggers

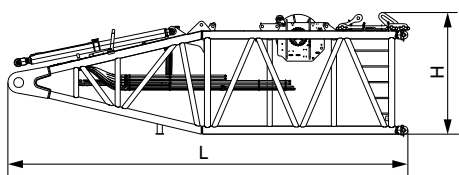


Transport Dimension



Basic Machine (with quick connector ring) ×1

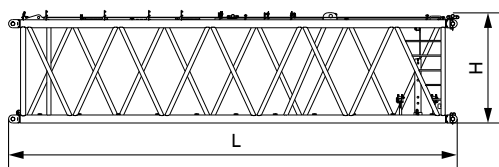
Length (L)	14.60m
Width (W)	3.00m
Height (H)	2.95m
Weight	51.0t



Boom Base (H2) (with aux. hoist) ×1

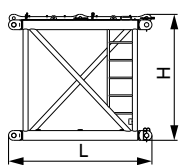
Length (L)	10.90m
Width (W)	3.00m
Height (H)	3.63m
Weight	23.2t

Note: aux. hoist winch 5.5t



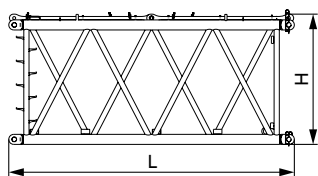
12m transition section (H4) ×1

Length(L)	12.24m
Width(W)	3.07m
Height(H)	3.08m
Weight	9.2t



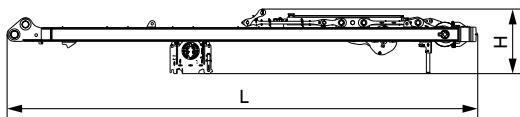
3m boom insert ×1

Length (L)	3.24m
Width (W)	3.07m
Height (H)	3.10m
Weight	2.9t



6m boom insert (H6) ×1

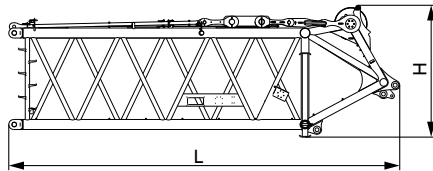
Length (L)	6.24m
Width (W)	3.07m
Height (H)	3.10m
Weight	5.1t



Boom hoist mast ×1

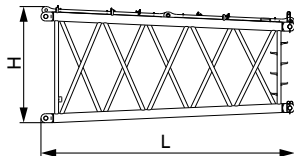
Length (L)	15.62m
Width (W)	2.41m
Height (H)	1.76m
Weight (including boom hoist winch)	22.1t

Transport Dimension



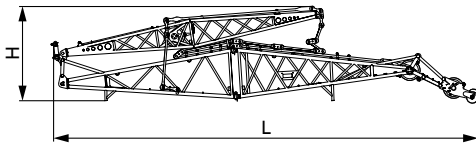
7.5m luffing jib top (LJ1) × 1

Length (L)	8.55m
Width (W)	2.64m
Height (H)	2.94m
Weight	7.5t



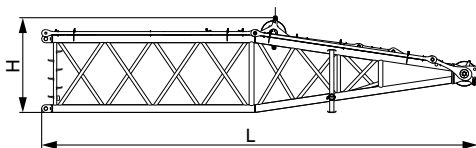
6m jib tapered insert (LJ4) × 1

Length (L)	6.24m
Width (W)	3.00m
Height (H)	3.03m
Weight	3.3t



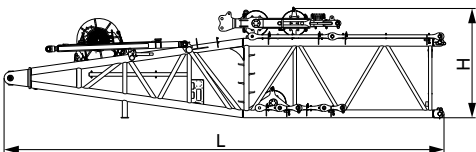
240t fixed jib assembly × 1

Length(L)	14.68m
Width(W)	2.48m
Height(H)	3.25m
Weight	7.0t



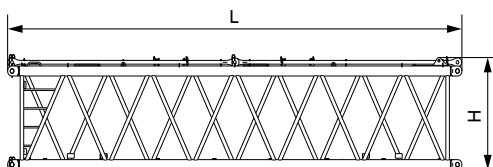
Superlift mast top (D1) × 1

Length (L)	12.51m
Width (W)	3.30m
Height (H)	2.77m
Weight	16.3t



Superlift mast base (D2) × 1

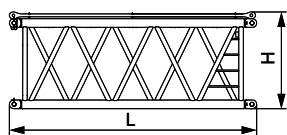
Length (L)	12.30m
Width (W)	3.18m
Height (H)	3.27m
Weight (with hoist winch)	31.6t



12m superlift mast insert (D6) × 1

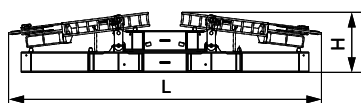
Length (L)	12.24m
Width (W)	2.93m
Height (H)	2.44m
Weight	8.6t

Transport Dimension



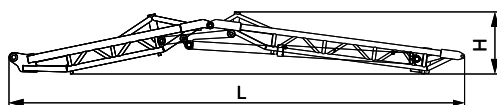
6m superlift mast insert (D4) × 2

Length (L)	6.24m
Width (W)	3.00m
Height (H)	2.44m
Weight	5.0t



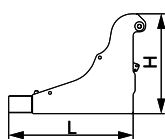
Superlift counterweight frame × 1

Length (L)	9.69m
Width (W)	2.73m
Height (H)	1.97m
Weight	36.0t



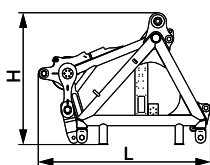
Superlift counterweight strut × 1

Length (L)	13.30m
Width (W)	3.00m
Height (H)	1.81m
Weight	7.6t



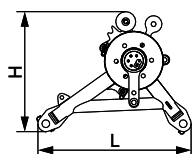
Carbody counterweight tray × 2

Length (L)	3.30m
Width (W)	2.64m
Height (H)	2.08m
Weight	6.7t



Connecting tip (H9) × 1

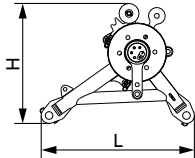
Length (L)	3.73m
Width (W)	2.99m
Height (H)	2.77m
Weight	6.8t



Pulley block (900t) × 2

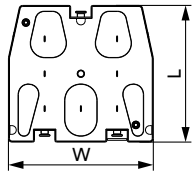
Length(L)	1.84m
Width(W)	1.67m
Height(H)	1.44m
Weight	2.6t

Transport Dimension



Pulley block (500t) × 2

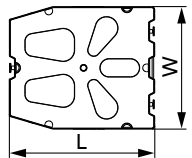
Length (L)	1.84m
Width (W)	1.67m
Height (H)	1.44m
Weight	1.8t



10t counterweight × 65

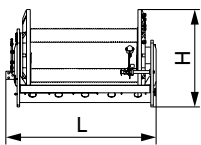
Length (L)	2.85m
Width (W)	2.40m
Height (H)	0.45m
Weight	10.0t

Notes: 22 blocks for machine rear counterweight,
43 blocks for superlift counterweight.



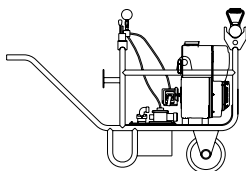
5t counterweight (500t) × 8

Length (L)	2.85m
Width (W)	2.40m
Height (H)	0.26m
Weight	5.0t



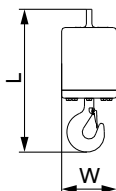
Main load hoist winch × 2

Length (L)	2.00m
Width (W)	1.28m
Height (H)	1.30m
Weight	8.3t



Portable power pack × 1

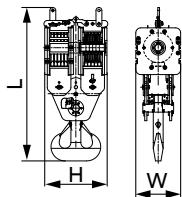
Length (L)	1.55m
Width (W)	0.70m
Height (H)	1.09m
Weight	0.2t



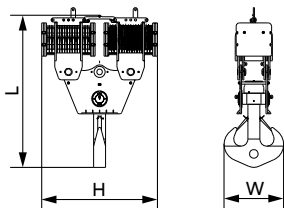
18t ball hook × 1

Length(L)	1.30m
Width(W)	0.50m
Height(H)	0.50m
Weight	1.0t

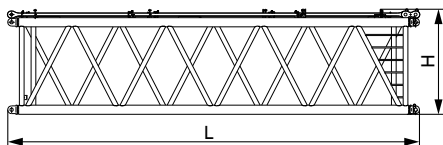
Transport Dimension



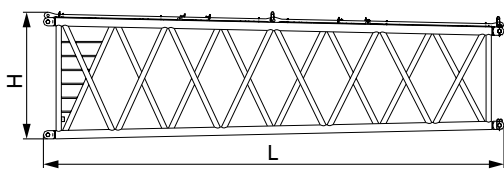
250t hook	×1
Length(L)	3.43m
Width(W)	1.07m
Height(H)	1.52m
Weight	8.4t



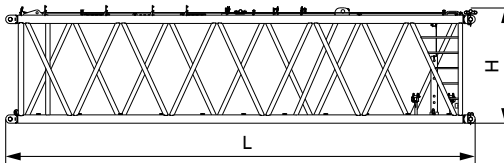
800t hook	×1
Length(L)	4.82m
Width(W)	1.90m
Height(H)	3.66m
Weight	22.5t



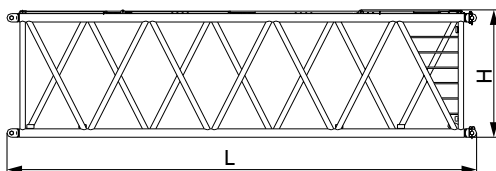
12m power boom lower transition section (ZH4A)	×1
Length(L)	12.23m
Width(W)	3.49m
Height(H)	3.10m
Weight	14.4t



12m upper transition section (ZH4B)	×1
Length(L)	12.24m
Width(W)	3.49m
Height(H)	3.10m
Weight	9.2t

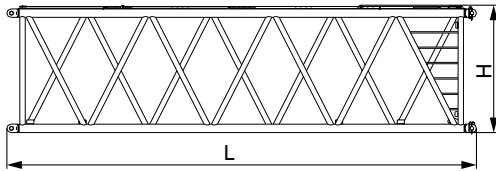


12m power boom insert D (ZH8D)	×1
Length(L)	12.24m
Width(W)	3.49m
Height(H)	3.10m
Weight	9.2t



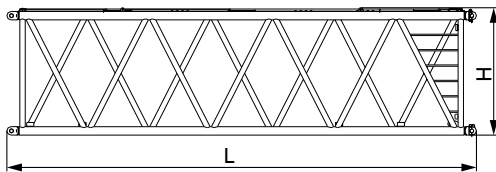
12m CK-boom lower transition section (CK4A)	×1
Length(L)	12.24m
Width(W)	4.50m
Height(H)	3.10m
Weight	15.0t

Transport Dimension



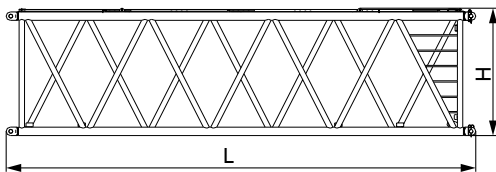
12m CK-boom insert A (CK8A) × 2

Length(L)	12.24m
Width(W)	4.50m
Height(H)	3.10m
Weight	14.7t



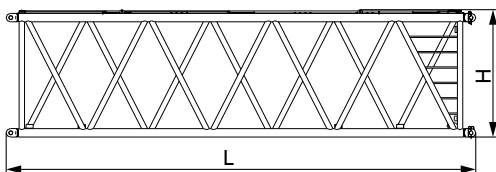
12m CK-boom insert AA (CK8AA) × 2

Length(L)	12.23m
Width(W)	4.47m
Height(H)	3.12m
Weight	15.3t



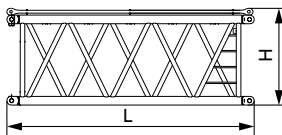
12m CK-boom insert B (CK8B) × 1

Length(L)	12.24m
Width(W)	4.50m
Height(H)	3.10m
Weight	14.2t



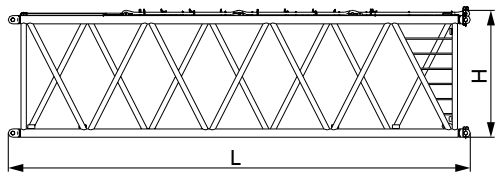
12m CK-boom insert C (CK8C) × 1

Length(L)	12.24m
Width(W)	4.50m
Height(H)	3.10m
Weight	12.5t



6m CK-boom insert (CK6A) × 1

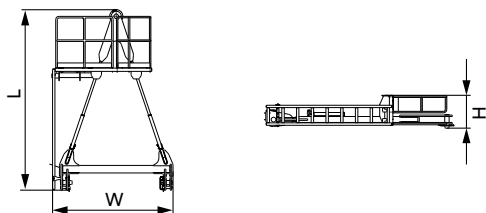
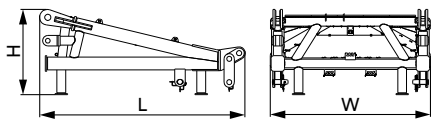
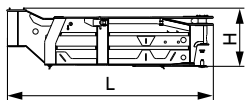
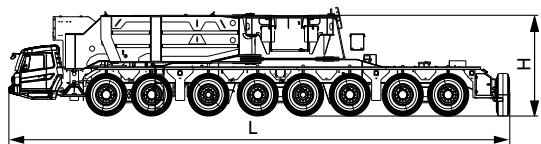
Length(L)	6.24m
Width(W)	4.50m
Height(H)	3.10m
Weight	6.2t



12m CK-boom upper transition section (CK4B) × 1

Length(L)	12.24m
Width(W)	4.50m
Height(H)	3.10m
Weight	12.5t

Transport Dimension



- Note:
- 1.The transport dimensions of each part are schematic, may not be 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 slightly.
 - 3.The dimensions and weight of each part may upgrade along the time. The final values are subject to the new product.

Undercarriage	×1
Length(L)	19.05m
Width(W)	3.00m
Height(H)	4.00m
Weight	82.0t

Outrigger	×2
Length(L)	7.55m
Width(W)	1.07m
Height(H)	2.09m
Weight	11.6t

Additional rear counterweight lifting mechanism	×1
Length(L)	4.00m
Width(W)	3.10m
Height(H)	1.65m
Weight	3.9t

Additional rear counterweight frame	×2
Length(L)	2.00m
Width(W)	2.56m
Height(H)	0.68m
Weight	0.6t



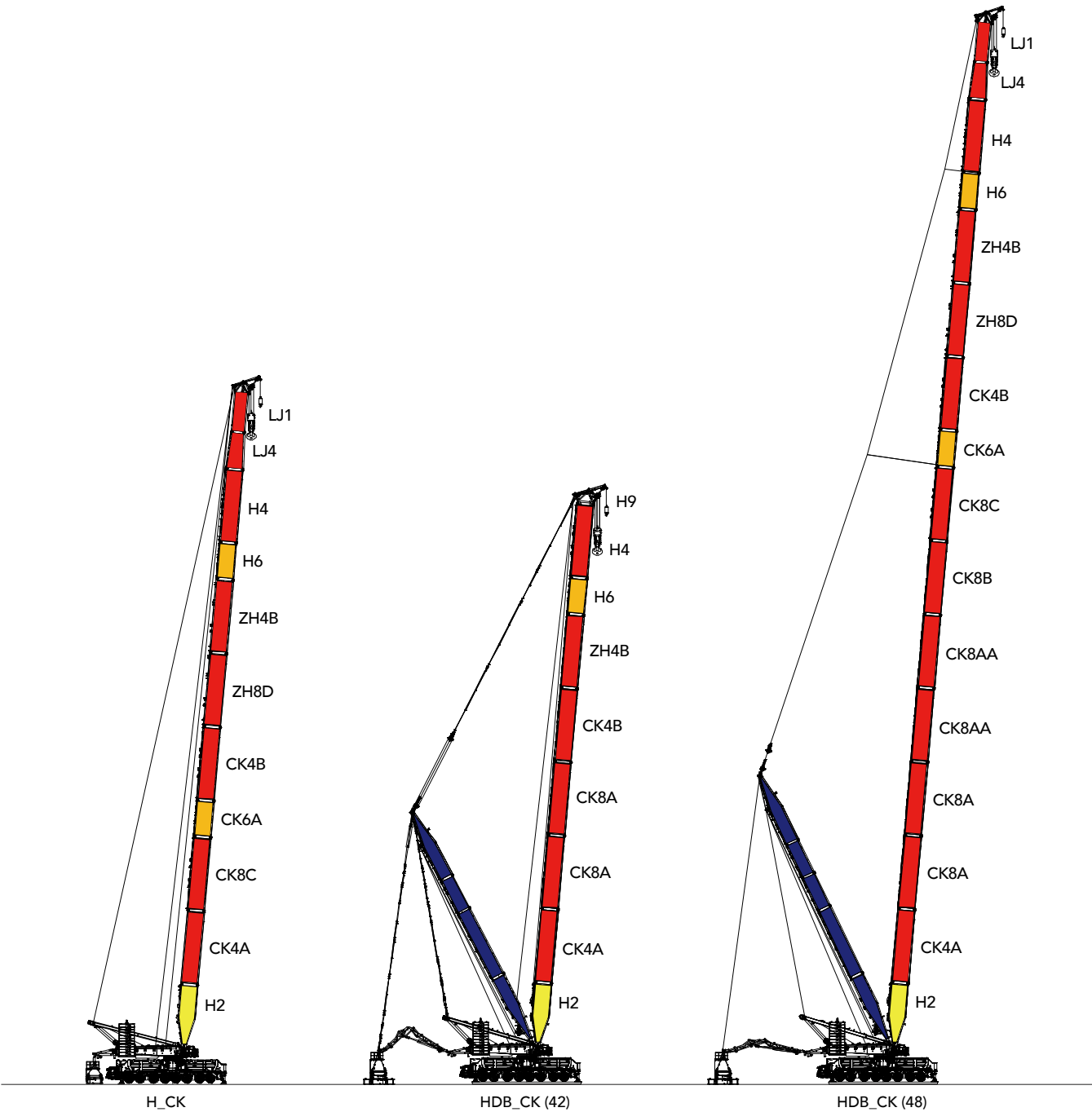
SCL10000 **SANY ALL TERRAIN LATTICE BOOM CRANE** **1000 TONS LIFTING CAPACITY**

QUALITY CHANGES THE WORLD

Configurations

- Page 24 Boom combinations
- Page 26 H_CK working condition
- Page 29 HDB_CK (42) working condition
- Page 32 HDB_CK (48) working condition
- Page 35 HJFJDB_CK working condition
- Page 38 HJFJ_CK working condition

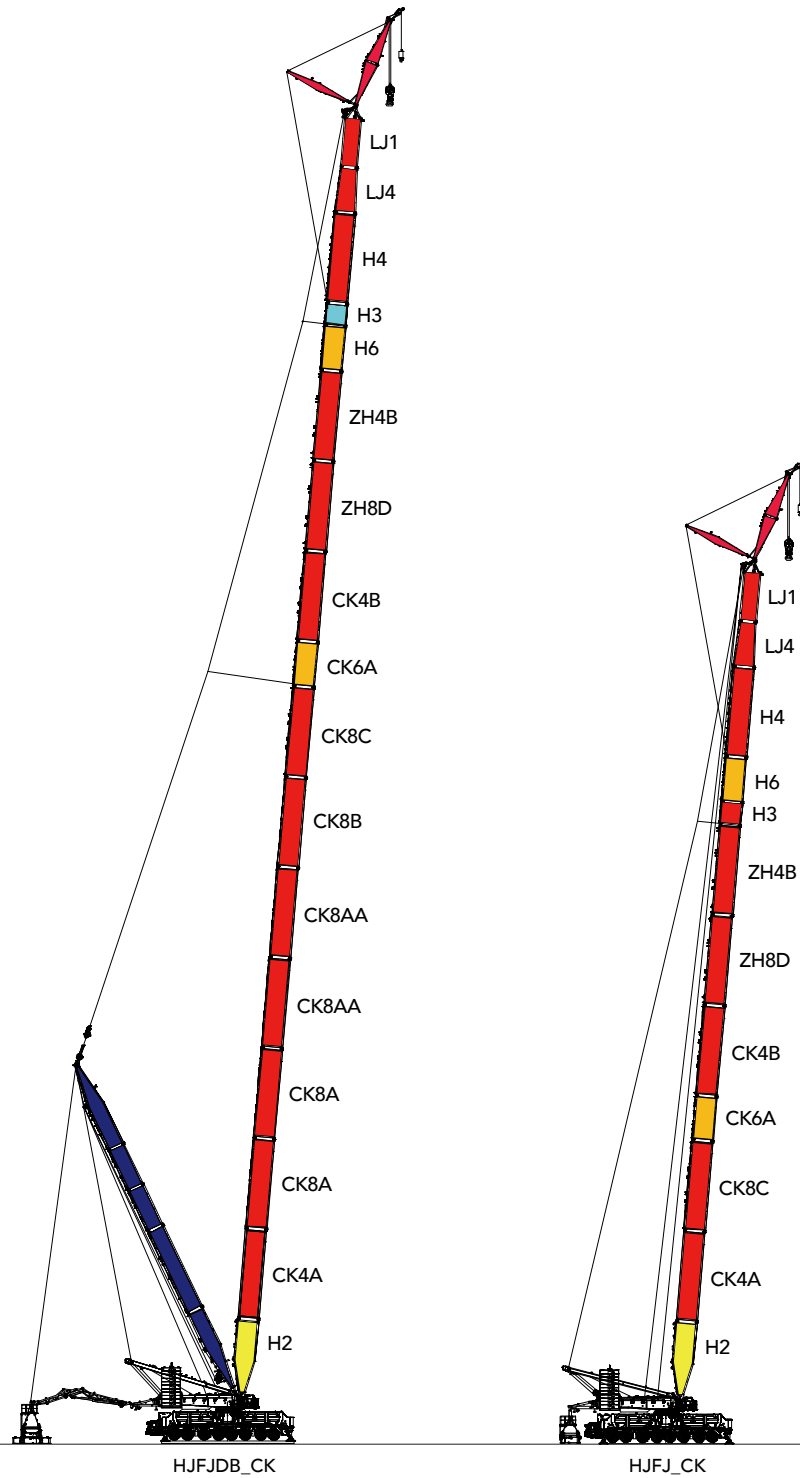
Boom and Jib Combination



Configuration	Boom combination	Boom length
H_CK	Boom+wide boom	24m~108m
HDB_CK (42)	Boom+CK+42m superlift mast+superlift CW	42m~90m
HDB_CK (48)	Boom+CK+48m superlift mast+superlift CW	96m~168m

Note: The schematics above are reference for loading only.

Boom and Jib Combination



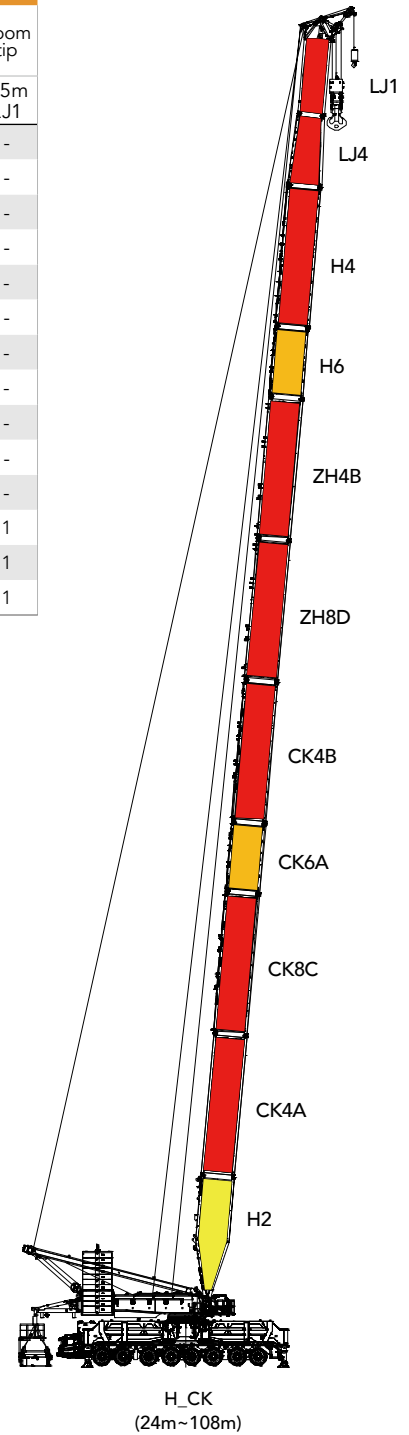
Configuration	Boom combination	Boom length
HJFJDB_CK	Mixed boom+fixed jib+wide boom+superlift mast+superlift counterweight	(102m+12m)~(171m+12m)
HJFJ_CK	Mixed boom+fixed jib+wide boom	(93m+12m)~(111m+12m)

Note: The schematics above are reference for loading only.

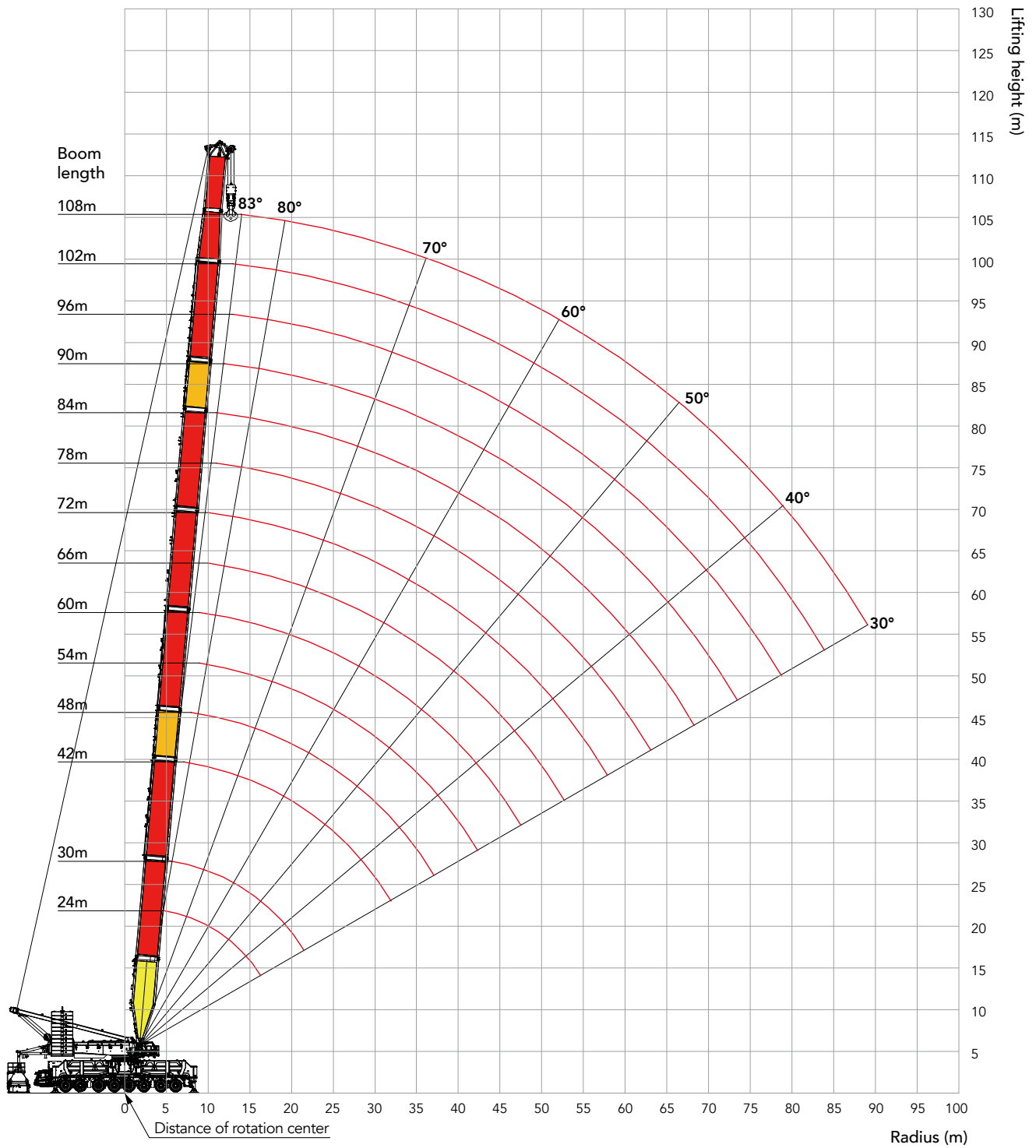
Boom Combination in H_CK

Boom combination in H_CK													
Boom length (m)	CK-boom transition section		CK-boom		Power boom transition section		Power boom	Boom insert	Transition section	Tapered section	Connecting section	Boom tip	
	12m CK4A	12m CK4B	12m CK8C	6m CK6A	12m ZH4A	12m ZH4B	12m ZH8D	6m H6	12m H4	6m LJ4	1.5m H9	7.5m LJ1	
24	-	-	-	-	-	-	-	-	1	-	1	-	
30	-	-	-	-	-	-	-	1	1	-	1	-	
42	-	-	-	-	1	1	-	1	-	-	1	-	
48	-	-	-	-	1	1	-	-	1	-	1	-	
54	-	-	-	-	1	1	-	1	1	-	1	-	
60	1	1	-	-	-	1	-	-	1	-	1	-	
66	1	1	-	-	-	1	-	1	1	-	1	-	
72	1	1	1	-	-	1	-	-	1	-	1	-	
78	1	1	1	-	-	1	-	1	1	-	1	-	
84	1	1	1	-	-	1	1	-	1	-	1	-	
90	1	1	1	-	-	1	1	1	1	-	1	-	
96	1	1	1	-	-	1	1	-	1	1	-	1	
102	1	1	1	-	-	1	1	1	1	1	-	1	
108	1	1	1	1	-	1	1	1	1	1	-	1	

Note: The 10.5 m boom base is must



Working Radius in H_CK



Load Chart of H_CK Configuration

Note:

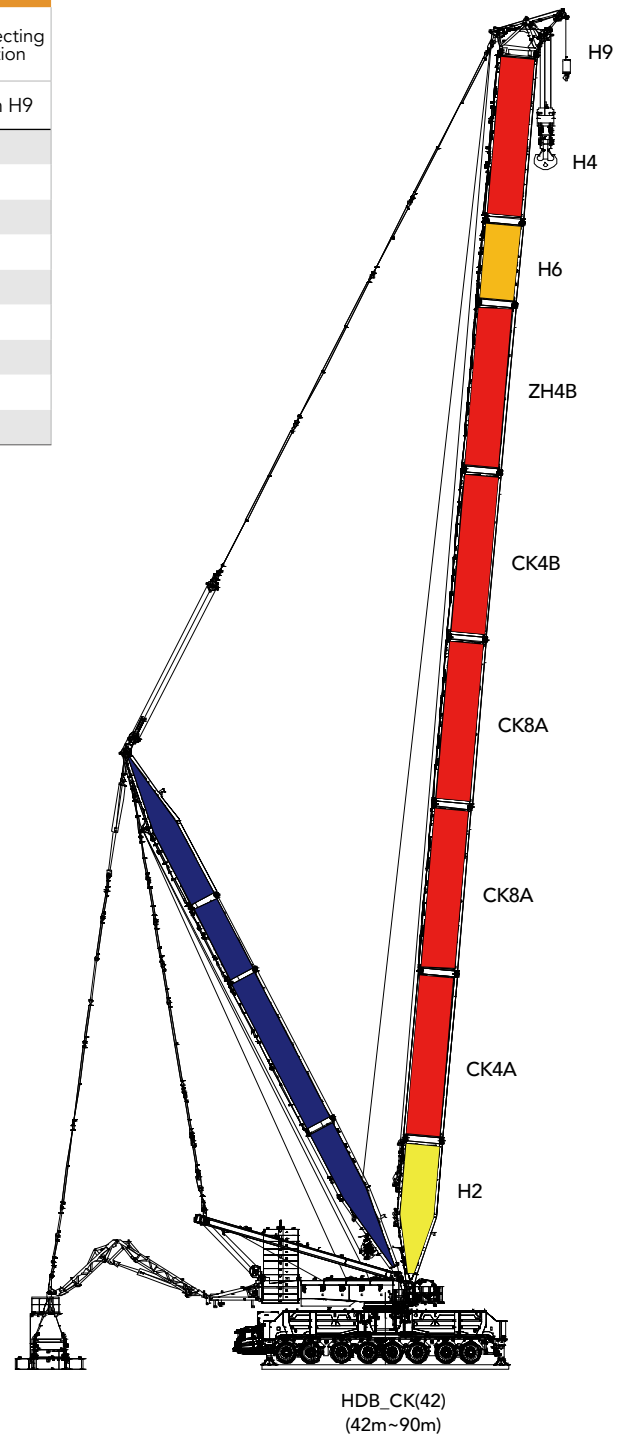
1. Meeting the ISO 4305 standard.
2. The rated load in the chart includes the weight of the hook, wire rope and other spreaders, the rated load minus the sum of the weights of the above items is the weight to be lifted.

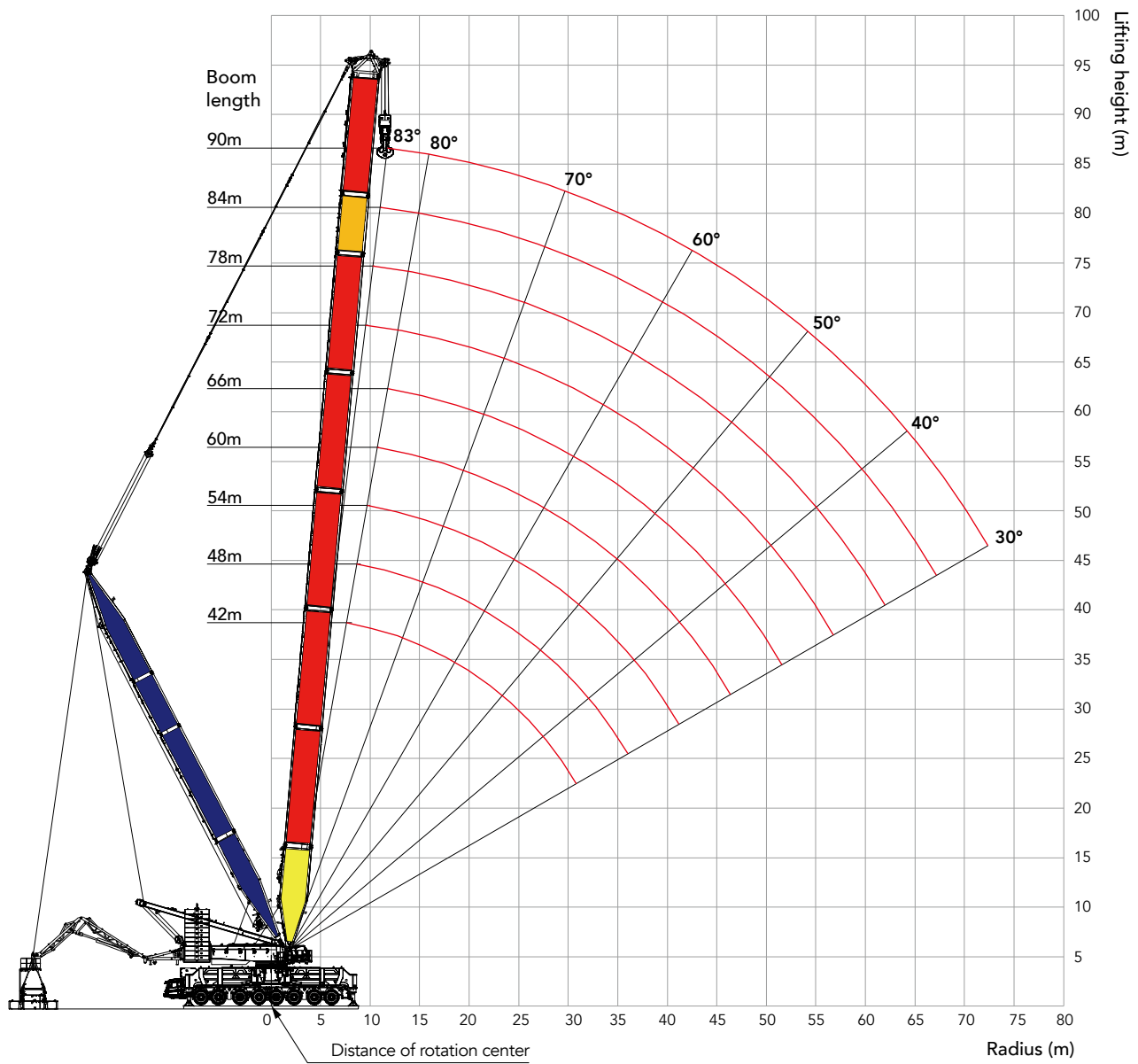
Load Chart of H_CK configuration															
Boom length 24~108m, Rear counterweight 230t, Additional rear CW 100t															
Boom length Radius (m)	24	30	42	48	54	60	66	72	78	84	90	96	102	108	Boom length Radius (m)
6	700														6
6.5	675	675													6.5
7	650	650													7
8	617	615	608	607											8
9	569	567	561	559	557	548									9
10	527	526	519	518	515	495	474	453							10
11	475	475	471	471	469	467	432	414	398	384					11
12	431	431	427	426	425	422	421	381	367	353	341	340			12
13	394	394	390	389	388	385	383	354	340	328	316	315	305	294	13
14	362	362	358	357	356	353	352	349	318	306	295	294	284	274	14
15	335	335	331	330	329	326	324	322	317	287	277	276	267	257	15
16	312	311	307	307	305	302	301	298	296	288	261	260	251	242	16
17	291	290	287	286	284	281	280	277	275	273	247	246	237	229	17
18	272	272	268	267	266	263	261	259	257	256	249	248	225	217	18
19	256	256	252	251	250	247	245	242	241	240	237	236	214	206	19
20	241	241	237	236	235	232	230	228	226	225	223	225	218	196	20
22	216	216	212	211	210	207	205	202	201	200	198	201	199	192	22
24		195	191	190	189	186	184	181	180	179	177	180	178	175	24
26		177	174	173	171	168	167	164	162	161	159	162	160	158	26
28		162	159	158	156	153	152	149	147	146	144	147	145	143	28
30			145	145	143	140	139	136	134	133	131	134	132	130	30
32			134	133	132	129	127	124	123	121	120	123	121	118	32
34			124	123	122	119	117	114	113	111	110	113	111	108	34
36			115	114	113	110	108	105	104	103	101	104	102	99.8	36
38			107	107	105	102	101	98	96.3	95.1	93.3	96.4	94.5	91.9	38
40				99.8	98.4	95.5	93.9	90.9	89.2	88	86.2	89.3	87.4	84.8	40
44				87.3	86	83.2	81.6	78.6	76.9	75.7	73.9	77.1	75.2	72.5	44
48					75.6	72.9	71.3	68.4	66.7	65.5	63.7	66.9	65	62.3	48
52						64.1	62.6	59.7	58	56.9	55	58.3	56.4	53.7	52
56							55.1	52.3	50.6	49.5	47.6	51	49	46.4	56
60								45.8	44.2	43	41.2	44.6	42.6	40	60
64								40	38.5	37.4	35.6	39	37	34.4	64
68									33.4	32.4	30.6	34	32.1	29.5	68
72										27.9	26.1	29.6	27.7	25.1	72
76											22.1	25.7	23.8	21.1	76
80											18.5	22.1	20.2	17.5	80
84												18.8	17	12.8	84
88													13.3	8	88
92														3.8	92

Boom Combination in HDB_CK(42)

Boom combination in HDB_CK(42)								
Boom length (m)	CK-boom transition section		CK-boom	Power boom transition section		Boom insert	Transition section	Connecting section
	12m CK4A	12m CK4B		12m ZH4A	12m ZH4B			
42	-	-	-	1	1	1	-	1
48	-	-	-	1	1	-	1	1
54	-	-	-	1	1	1	1	1
60	1	1	-	-	1	-	1	1
66	1	1	-	-	1	1	1	1
72	1	1	1	-	1	-	1	1
78	1	1	1	-	1	1	1	1
84	1	1	2	-	1	-	1	1
90	1	1	2	-	1	1	1	1

Note: The 10.5 m boom base is must



Working Radius in HDB_CK(42)

Load Chart of HDB_CK(42) Configuration

Note:

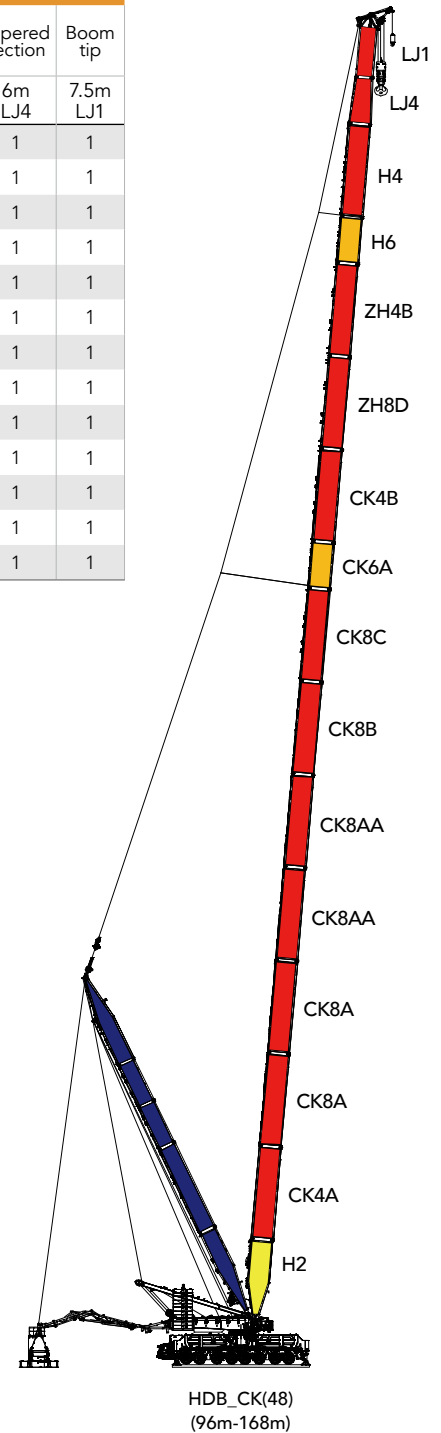
1. Meeting the ISO 4305 standard.
2. The rated load in the chart includes the weight of the hook, wire rope and other spreaders, the rated load minus the sum of the weights of the above items is the weight to be lifted.

Load chart of HDB_CK(42) configuration										
Superlift radius 24m, Superlift counterweight 500t, Rear counterweight 230t										
Boom length Radius (m)	42	48	54	60	66	72	78	84	90	Boom length Radius (m)
7.5	1000									7.5
8	890	751								8
9	797	751	666	608						9
10	772	751	666	608	550	521				10
11	719	719	666	608	550	521	462	432		11
12	692	691	694	608	550	521	462	432	402	12
13	666	665	666	608	550	521	462	432	402	13
14	640	639	639	608	550	521	462	432	402	14
15	626	625	625	608	550	521	462	432	402	15
16	613	612	611	592	579	521	491	432	402	16
17	584	583	582	571	563	521	491	432	402	17
18	555	555	553	550	548	521	491	432	402	18
19	531	531	529	526	524	520	491	432	402	19
20	507	507	505	502	500	496	491	432	402	20
22	497	496	491	491	489	485	483	462	402	22
24	459	458	457	454	452	448	446	442	432	24
26	423	423	423	422	420	416	414	410	408	26
28	392	392	392	392	392	390	388	383	381	28
30	366	366	366	366	366	366	366	366	366	30
32	343	343	343	343	343	343	343	343	343	32
34	323	323	323	323	323	323	323	323	323	34
36	305	305	305	305	305	305	305	305	305	36
38	289	289	289	289	289	289	289	289	289	38
40		274	274	274	274	274	274	274	274	40
44		249	249	249	249	249	249	249	249	44
48			229	229	229	229	229	229	229	48
52				211	211	211	211	211	211	52
56					196	196	196	196	196	56
60						183	183	183	183	60
64						171	171	171	171	64
68							161	161	161	68
72								152	152	72
76									143	76
80									133	80

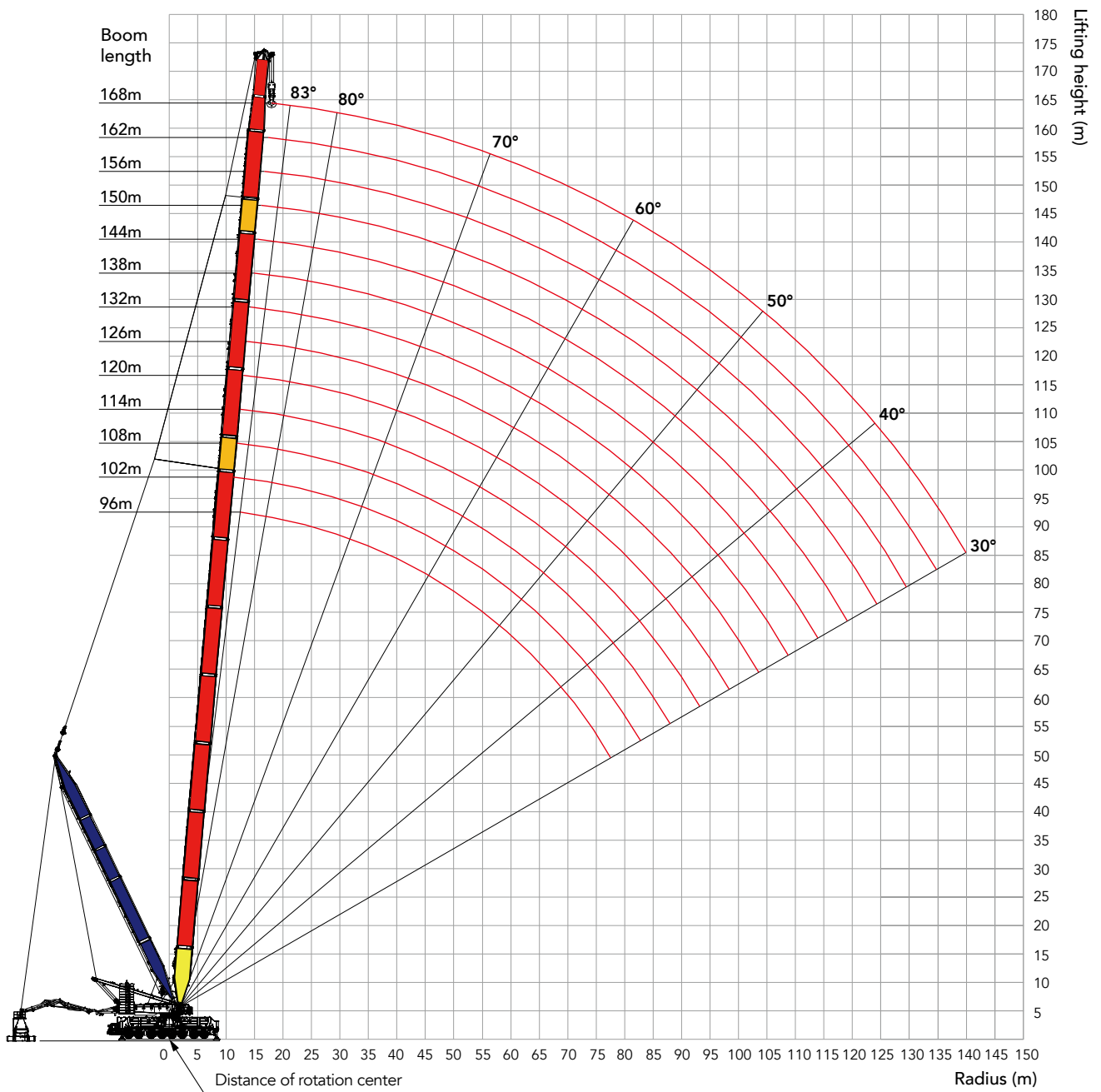
Boom Combination in HDB_CK(48)

Boom combination in HDB_CK(48)													
Boom length (m)	CK-boom transition section		CK-boom					Power boom transition section	Power boom	Boom insert	Transition section	Tapered section	Boom tip
	12m CK4A	12m CK4B	12m CK8A	12m CK8AA	12m CK8B	12m CK8C	6m CK6A	12m ZH4B	12m ZH8D	6m H6	12m H4	6m LJ4	7.5m LJ1
96	1	1	2	-	-	-	-	1	-	-	1	1	1
102	1	1	2	-	1	-	-	1	-	1	1	1	1
108	1	1	2	-	1	-	-	1	-	-	1	1	1
114	1	1	2	-	1	-	-	1	-	1	1	1	1
120	1	1	2	-	1	1	-	1	-	-	1	1	1
126	1	1	2	-	1	1	-	1	-	1	1	1	1
132	1	1	2	1	1	1	-	1	-	-	1	1	1
138	1	1	2	1	1	1	-	1	-	1	1	1	1
144	1	1	2	2	1	1	-	1	-	-	1	1	1
150	1	1	2	2	1	1	-	1	-	1	1	1	1
156	1	1	2	2	1	1	-	1	1	-	1	1	1
162	1	1	2	2	1	1	-	1	1	1	1	1	1
168	1	1	2	2	1	1	1	1	1	1	1	1	1

Note: The 10.5 m boom base is must



Working Radius in HDB_CK(48)



Load Chart of HDB_CK(48) Configuration

Note:

1. Meeting the ISO 4305 standard.
2. The rated load in the chart includes the weight of the hook, wire rope and other spreaders, the rated load minus the sum of the weights of the above items is the weight to be lifted.

Load chart of HDB_CK(48) configuration

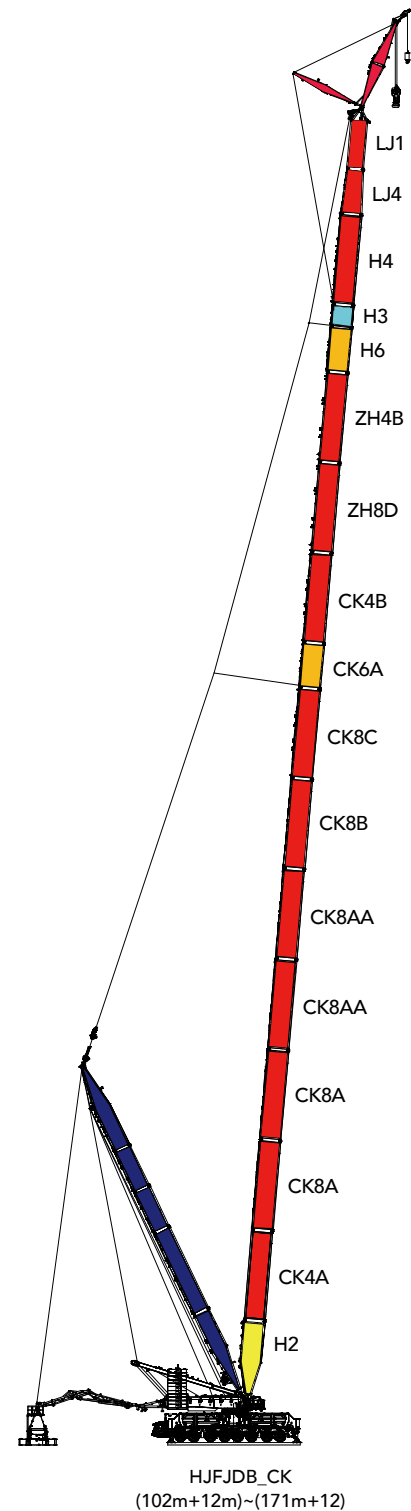
Superlift radius 26m, Superlift counterweight 500t, Rear counterweight 230t

Boom length (m) Radius (m)	96	102	108	114	120	126	132	138	144	150	156	162	168	Boom length (m) Radius (m)
12	372													12
13	372	342	342											13
14	372	342	342	311	311									14
15	372	342	342	311	311	281	281							15
16	372	372	342	311	311	281	281	250	250					16
17	372	372	342	311	311	281	281	250	250	220	220			17
18	372	372	342	311	311	281	281	250	250	220	220	220	189	18
19	372	372	342	311	311	281	281	250	250	220	220	220	220	19
20	372	372	342	311	311	281	281	250	250	220	220	220	220	20
22	372	372	342	311	311	281	281	250	250	220	220	220	220	22
24	372	372	342	311	311	281	281	250	250	220	220	220	220	24
26	402	372	342	311	311	281	281	250	250	220	220	220	220	26
28	402	372	342	311	311	281	281	250	250	250	220	220	220	28
30	402	372	342	311	311	281	281	250	250	250	220	220	220	30
32	402	372	342	311	311	281	281	250	250	250	220	220	220	32
34	380	372	342	342	311	281	281	250	250	250	220	220	220	34
36	359	357	342	342	311	281	281	250	250	250	220	220	220	36
38	340	338	334	332	311	281	281	250	250	250	220	220	220	38
40	323	321	317	315	311	281	281	250	250	250	220	220	220	40
44	292	291	287	285	282	280	276	274	250	250	220	220	220	44
48	267	265	261	259	256	254	250	248	244	242	220	220	220	48
52	245	243	239	237	234	232	228	226	222	220	219	217	214	52
56	225	224	220	218	215	213	209	207	203	201	200	198	195	56
60	209	207	203	202	198	197	192	191	186	184	183	182	179	60
64	194	192	188	187	184	182	178	176	171	170	169	167	164	64
68	181	179	175	174	171	169	165	163	158	157	156	154	151	68
72	169	167	163	162	159	157	153	151	147	145	144	142	139	72
76	158	157	153	151	148	147	142	141	136	134	133	132	129	76
80	148	147	143	142	139	137	133	131	126	125	123	122	119	80
84	139	137	134	132	129	127	123	121	117	115	114	112	109	84
88		129	125	123	120	119	114	113	108	107	106	104	101	88
92			117	115	112	111	106	105	100	99.1	98.1	96.4	93.6	92
96			110	108	104	104	99.6	98	93.4	91.8	90.9	89.2	86.4	96
100				100	92.3	97.3	92.9	91.3	86.7	85.2	84.2	82.5	79.7	100
104					81.2	91	86.7	85.1	80.5	79	78	76.3	73.5	104
108						85.3	80.9	79.3	74.8	73.2	72.3	70.6	67.8	108
112							75.5	74	69.4	67.9	66.9	65.3	62.5	112
116							70.5	69	64.5	62.9	62	60.3	57.5	116
120								64.3	59.8	58.3	57.3	55.7	52.9	120
124									55.3	53.9	53	51.3	48.5	124
128										49.7	48.9	47.2	44.4	128
132										45.7	44.9	43.3	40.6	132
136											41.1	39.6	36.9	136
140												36	33.3	140
144													30	144
148													26.8	148

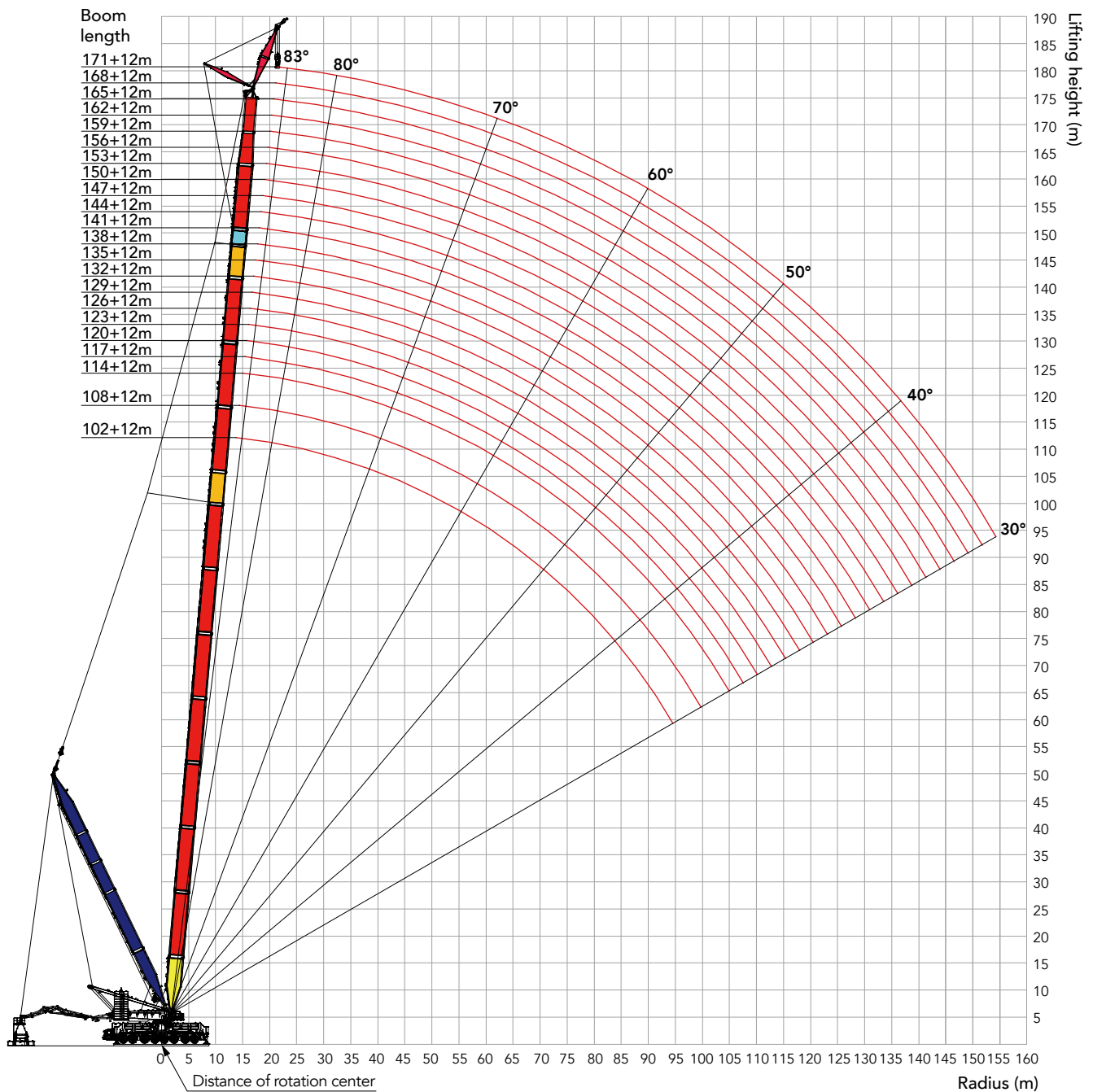
Boom Combination in HJFJDB_CK

Boom combination in HJFJDB_CK								
Boom length (m)	4.5m CK-boom					Power boom	Boom insert	
	12m CK8A	12m CK8AA	12m CK8B	12m CK8C	6m CK6A	12m ZH8D	6m H6	3m H3
102	2	-	-	-	-	-	1	-
108	2	-	1	-	-	-	-	-
114	2	-	1	-	-	-	1	-
117	2	-	1	-	-	-	1	1
120	2	-	1	1	-	-	-	-
123	2	-	1	1	-	-	-	1
126	2	-	1	1	-	-	1	-
129	2	-	1	1	-	-	1	1
132	2	1	1	1	-	-	-	-
135	2	1	1	1	-	-	-	1
138	2	1	1	1	-	-	1	-
141	2	1	1	1	-	-	1	1
144	2	2	1	1	-	-	-	-
147	2	2	1	1	-	-	-	1
150	2	2	1	1	-	-	1	-
153	2	2	1	1	-	-	1	1
156	2	2	1	1	-	1	-	-
159	2	2	1	1	-	1	-	1
162	2	2	1	1	-	1	1	-
165	2	2	1	1	-	1	1	1
168	2	2	1	1	1	1	1	-
171	2	2	1	1	1	1	1	1

Note: The 10.5 m boom base, 12m CK-boom upper transition, 12m CK-boom lower transition, 12m power boom upper transition, 6m tapered section, 7.5m jib top are must.



Working Radius in HJFJDB_CK



Load Chart of HJFJDB_CK Configuration

Note:

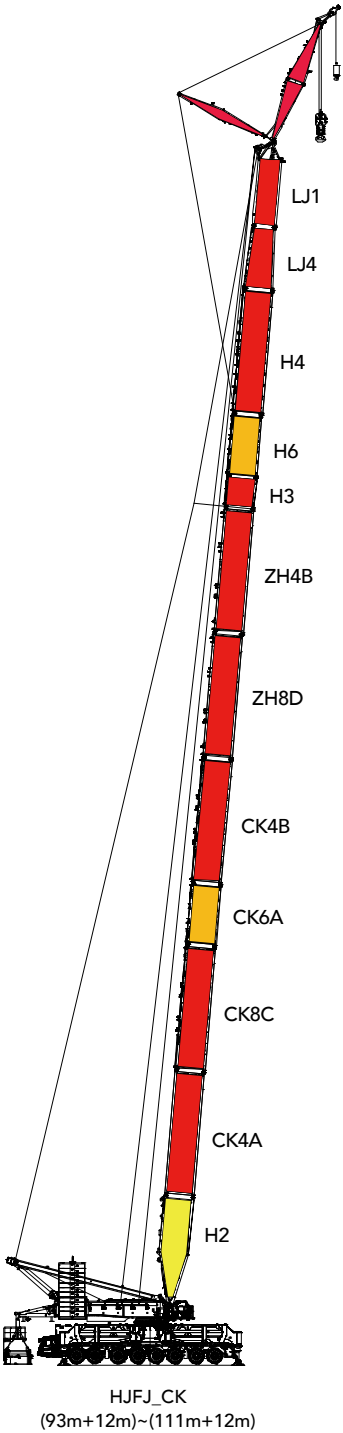
1. Meeting the ISO 4305 standard.
2. The rated load in the chart includes the weight of the hook, wire rope and other spreaders, the rated load minus the sum of the weights of the above items is the weight to be lifted.

Load chart of HJFJDB_CK configuration																								
Jib length 12m, Boom to jib angle 15° , Superlift radius 26m, Superlift counterweight 500t, Rear counterweight 230t																								
Boom length Radius (m)	102	108	114	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159	162	165	168	171	Boom length Radius (m)	
16	240																						16	
17	240	240	240																				17	
18	240	240	240	240	240	240	240																18	
19	240	240	240	240	240	240	240	240	240	240													19	
20	240	240	240	240	240	240	240	240	240	240	220	220	220	220									20	
22	240	240	240	240	240	240	240	240	240	240	220	220	220	220	220	212	208	189	189	181	178	170	22	
24	240	240	240	240	238	233	240	240	240	240	220	220	220	220	220	213	208	189	189	182	179	171	24	
26	238	240	240	232	230	223	240	240	240	240	220	220	220	220	220	213	209	189	189	182	179	170	26	
28	231	235	238	225	222	215	240	240	240	239	220	220	220	220	218	213	208	189	189	182	179	171	28	
30	224	228	232	217	213	209	239	240	240	234	229	220	220	218	212	207	209	189	189	183	179	171	30	
32	217	222	225	211	207	201	233	234	233	228	224	220	220	211	206	203	210	189	189	183	179	170	32	
34	211	216	220	204	200	195	227	228	227	224	218	220	220	206	201	197	210	189	189	183	180	171	34	
36	206	210	214	197	193	190	221	223	223	218	213	220	220	200	196	192	210	189	189	183	180	171	36	
38	200	205	209	191	188	183	216	218	218	213	207	220	220	195	191	187	210	189	189	183	181	171	38	
40	195	200	204	185	183	178	211	213	214	207	201	220	220	189	186	182	210	189	189	183	180	171	40	
44	186	190	194	175	172	169	202	204	203	197	191	211	212	180	177	174	206	199	189	184	180	171	44	
48	178	182	186	167	163	159	194	195	194	187	181	202	204	172	168	165	197	192	186	181	180	170	48	
52	170	174	178	159	155	151	186	188	185	179	174	195	196	164	161	158	190	184	178	174	179	167	52	
56	163	167	172	151	148	145	179	181	177	171	166	188	189	157	154	150	181	176	172	168	170	161	56	
60	157	161	165	145	142	139	173	174	170	164	159	181	183	151	148	144	174	170	165	161	163	155	60	
64	151	156	159	140	137	134	167	167	163	158	154	175	174	145	143	139	169	163	160	155	155	149	64	
68	146	150	154	135	132	129	161	161	158	153	148	164	160	141	138	135	158	156	154	150	149	144	68	
72	142	146	149	131	128	125	156	156	153	147	143	152	148	136	133	131	146	145	144	143	141	140	72	
76	137	141	145	127	124	121	148	147	144	143	139	141	138	132	129	126	135	134	133	132	131	130	76	
80	133	137	141	124	121	118	138	137	134	133	132	131	128	127	125	123	125	124	124	123	121	120	80	
84	130	133	134	121	118	115	129	128	125	124	123	122	119	118	117	116	116	115	114	113	112	111	84	
88	127	127	125	119	116	112	120	119	116	115	115	114	110	109	109	108	108	106	106	105	103	102	88	
92	122	118	117	116	114	110	112	111	108	107	107	105	102	101	101	100	100	98.9	98.2	97.2	95.5	94.5	92	
96	115	111	110	109	107	106	105	104	101	100	99.6	98.6	95.3	94.3	93.7	92.7	92.6	91.6	90.9	89.8	88.2	87.1	96	
100	108	104	103	102	100	99.2	98.6	97.6	94.5	93.5	92.8	91.8	88.5	87.5	86.9	85.9	85.8	84.8	84.1	83.1	81.4	80.3	100	
104		98.4	96.9	95.9	93.9	93	92.3	91.3	88.2	87.2	86.6	85.6	82.2	81.3	80.6	79.6	79.6	78.5	77.9	76.8	75.1	74.1	104	
108			91	90.1	88.1	87.1	86.5	85.5	82.4	81.4	80.8	79.8	76.4	75.4	74.8	73.8	73.8	72.7	72.1	71	69.4	68.3	108	
112			85.6	84.6	82.7	81.7	81.1	80.1	76.9	76	75.3	74.3	71	70	69.4	68.4	68.4	67.3	66.7	65.6	64	62.9	112	
116					77.6	76.6	76	75	71.9	70.9	70.3	69.3	66	65	64.4	63.4	63.4	62.3	61.7	60.6	58.9	57.9	116	
120						71.9	71.3	70.3	67.2	66.2	65.6	64.6	61.3	60.3	59.7	58.7	58.6	57.6	57	55.9	54.2	53.2	120	
124								65.8	62.7	61.7	61.1	60.2	56.8	55.9	55.3	54.3	54.2	53.2	52.5	51.5	49.8	48.8	124	
128									58.5	57.5	57	56	52.7	51.7	51.1	50.1	50.1	49.1	48.4	47.4	45.7	44.6	128	
132											52.9	52	48.7	47.8	47.2	46.2	46.2	45.2	44.5	43.5	41.8	40.7	132	
136												48.2	44.9	44	43.4	42.5	42.5	41.5	40.8	39.8	38.1	37.1	136	
140														40.3	39.8	38.9	38.9	37.9	37.3	36.3	34.6	33.6	140	
144															36.4	35.4	35.5	34.5	33.9	32.9	31.2	30.2	144	
148																	32.2	31.3	30.7	29.7	28	27	148	
152																		28.2	27.6	26.6	25	24	152	
156																				23.7	22.1	21.1	156	
160																						18.3	160	

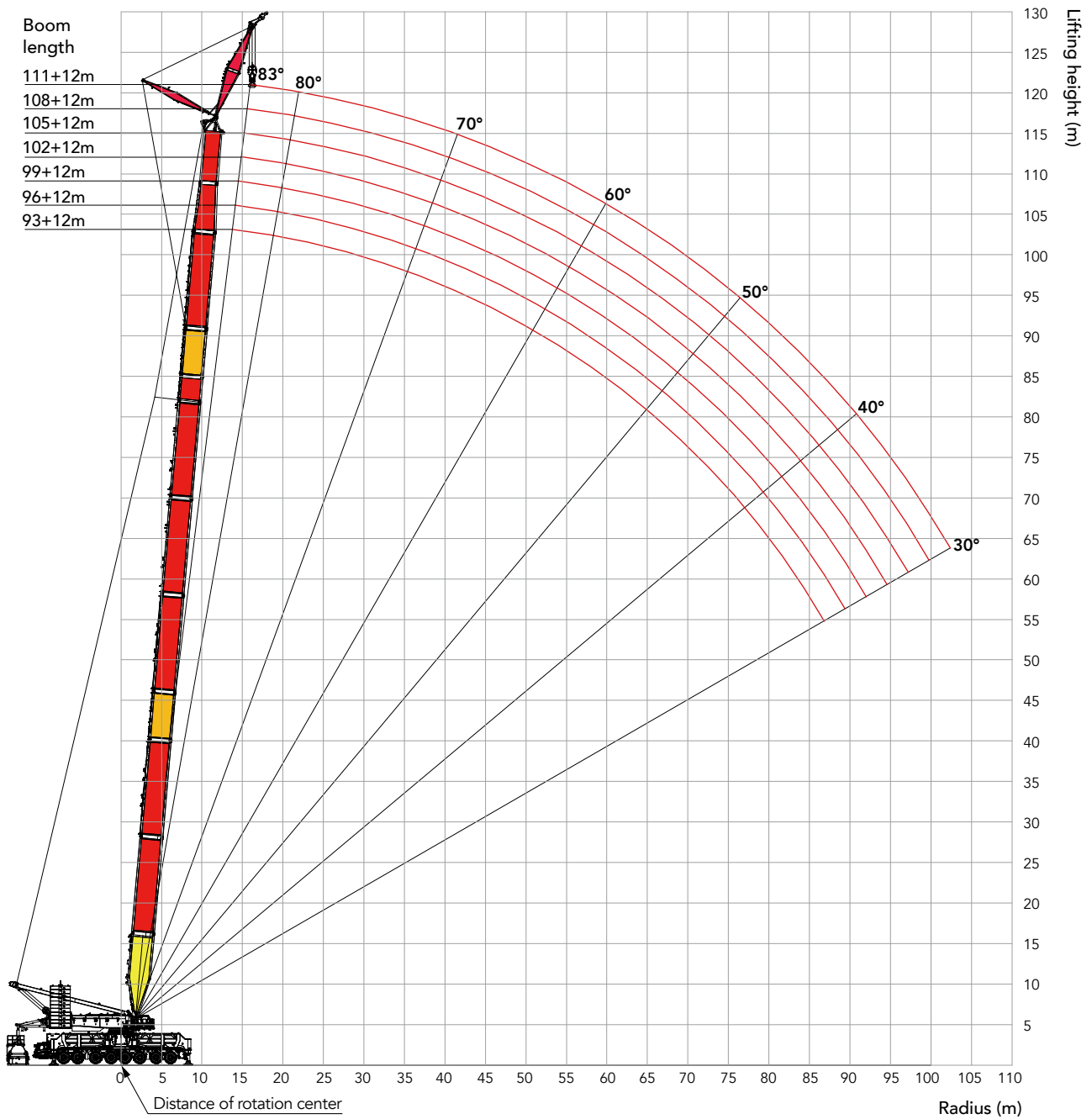
Boom Combination in HJFJ_CK

Boom combination in HJFJ_CK					
Boom length (m)	CK-boomm		Power boom	Boom insert	
	12m CK8C	6m CK6A	12m ZH8D	6m H6	3m H3
93	1	-	-	1	1
96	1	-	1	-	-
99	1	-	1	-	1
102	1	-	1	1	-
105	1	-	1	1	1
108	1	1	1	1	-
111	1	1	1	1	1

Note: The 10.5 m boom base, 12m CK-boom upper transition, 12m CK-boom lower transition, 12m power boom upper transition section, 6m tapered insert and 7.5m jib top are must.



Working Radius in HJFJ_CK



Load Chart of HJFJ_CK Configuration

Note:

1. Meeting the ISO 4305 standard.
2. The rated load in the chart includes the weight of the hook, wire rope and other spreaders, the rated load minus the sum of the weights of the above items is the weight to be lifted.

Load chart of HJFJ_CK configuration

Jib length 12m, Boom to jib angle 15° , Rear counterweight 230t, Additional rear CW 100t

Boom length Radius (m)	93	96	99	102	105	108	111	Boom length Radius (m)
16	234	232	229	229				16
17	224	222	220	218	217	213	209	17
18	214	212	210	208	206	202	199	18
19	206	204	202	200	196	193	189	19
20	198	196	194	191	187	184	181	20
22	181	180	178	175	172	169	166	22
24	168	167	165	162	159	156	153	24
26	156	155	153	150	155	151	142	26
28	145	144	141	139	144	140	139	28
30	135	134	131	130	134	131	129	30
32	126	125	123	121	124	122	121	32
34	116	116	115	113	113	112	111	34
36	107	107	106	105	104	103	102	36
38	99.7	99.4	98.4	97.6	96.6	95.2	94.1	38
40	92.5	92.2	91.1	90.3	89.3	87.9	86.8	40
44	80	79.6	78.6	77.8	76.8	75.4	74.3	44
48	69.5	69.2	68.1	67.4	66.3	64.9	63.8	48
52	60.7	60.4	59.3	58.6	57.5	56.1	55	52
56	53.2	52.9	51.8	51	49.9	48.5	47.4	56
60	46.7	46.3	45.2	44.5	43.4	42	40.9	60
64	40.9	40.6	39.5	38.7	37.7	36.2	35.1	64
68	35.9	35.6	34.5	33.7	32.6	31.2	30.1	68
72	31.4	31.1	30	29.2	28.1	26.7	25.5	72
76	27.3	27	25.9	25.1	24.1	22.6	21.5	76
80	23.7	23.4	22.3	21.5	20.4	19	17.9	80
84	20.3	20	19	18.2	17.1	15.7	14.6	84
88	17.3	17	15.9	15.2	14.1	12.7	11.5	88
92	14.5	14.2	13.1	12.4	11.3	9.9	8.8	92
96		11.6	10.6	9.8	8.8	7.3	6.2	96
100			8.2	7.4	6.4	5	3.9	100
104					4.2	2.8	1.7	104



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