

CCH 550-3II

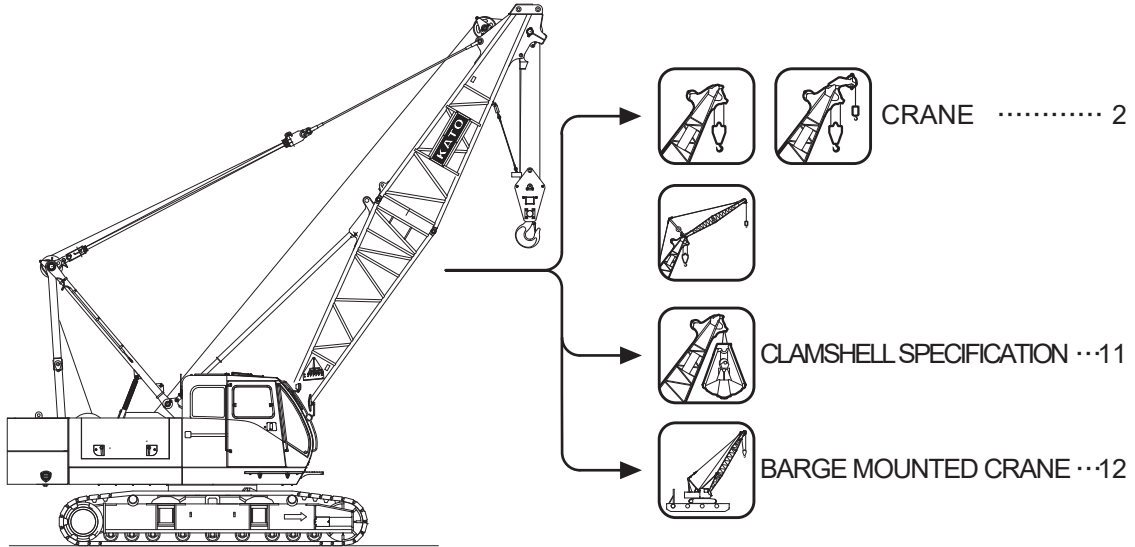
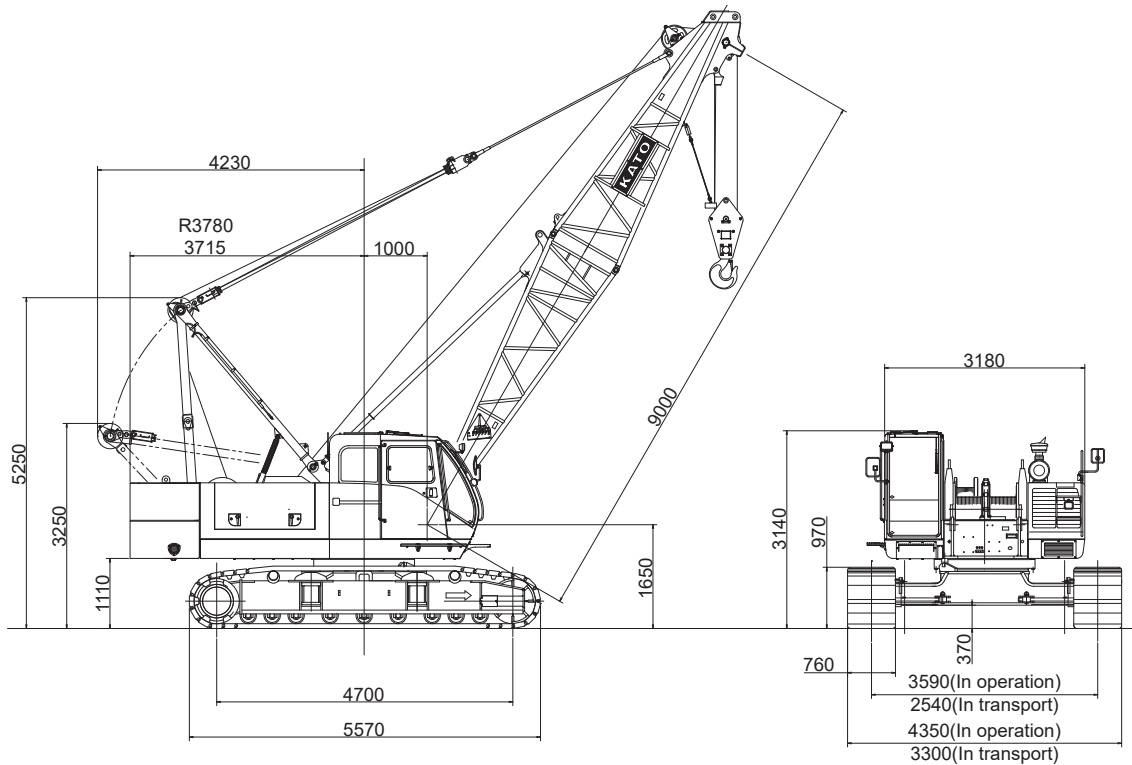


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Dimensions/Specifications



■ CCH550-3II Main Specifications

●Performance	
Slewing speed	3.5min ⁻¹
Travel speed	※1.6km/Hr
Gradeability	40% (22°)
●Engine	
Model	Cummins QSB6.7-3C
Rated output	149kW/2,100min ⁻¹
Total displacement	6.7L
Fuel tank capacity	240L
Battery	12V × 2pcs.
●Load hoist system (Main & Aux.)	
Hydraulic motor	Variable displacement axial piston type
Reduction gear	One-stage planetary gear and single stage spur gear
Hoist drum	Dual drums on inline individual shaft, independent hydraulic motor driven, with lebus grooved drum
Clutch	Internal expanding band type
Brake	External contracting type
Drum lock	Ratchet lock
●Boom hoist system	
Motor	Axial piston type
Reduction gear	Two stage planetary gear
Hoist drum	Lebus grooved drum
Brake	Automatic spring-loaded hydraulically released wet type multi-disc
Drum lock	Ratchet lock

Note)
The value marked with "※" will be changed according to the loads given

■ STANDARD EQUIPMENT

Safety Devices

●Moment Limiter (Over-load prevention device. Alarm at 90% , automatic stop at 100%.) ●Limit angle setting device (Include in moment limiter) ●Automatic stop for hook over-winding ●Automatic stop for boom over-hoisting ●Telescopic boom limit stop ●Swing lock ●Main and Auxiliary drum lock ●Boom hoisting drum lock ●Lever lock ●Automatic brake system ●Slewing warning Buzzer ●Travel warning Buzzer ●Engine start voice alarm ●Hydraulic circuit valves ●Winch mode select (Main and Aux.)

Instrument

●Tachometer ●Hour meter ●Hydraulic pressure gauge for control circuit ●Fuel level gauge (indicated in OK monitor) ●Engine coolant temperature gauge (indicated in OK monitor) ●Engine diagnostic monitor

Auxiliary device

●Speed control for winch ●Pump power shift device ●Crawler expand cylinder

Lighting

●Work light ●Room light

Others

●Air conditioner ●Front windshield wiper ●Ceiling wiper ●Sun shade ●Sun visor ●Storage pouch ●Cabinet ●Reclining operator's seat ●Floor mat ●Radio ●Cigarette lighter (DC24V) ●Ashtray ●Rear view mirrors (on both sides) ●Warning horn ●Electric fuel pump ●"A" frame hoist cylinders ●Green tinted glass ●Foot rest ●Electric engine throttle control grip ●Engine throttle pedal ●Wire mesh boom walkway (for inner boom) ●Steps for operator's cab (folding type) ●Rope guide roller on the boom back (for outer boom)

■ OPTIONS

Base machine

●Third drum (Type A:with clutch and brake) ●Third drum (Type B:automatic brake) ●Hydraulic power take off (Type A:29.4MPa × 225L/min) ●Hydraulic power take off (Type B:20.6MPa × 125L/min) ●Reeving winch ●Tug line ●Monitor TV (for left/rear/drum view) ●Monitor TV (for the hook load) ●Mirror for drum ●Radio transmitter ●Fire extinguisher ●Operator cabin roof guard ●Loud speaker

Light and instrument

●Yellow rotary light ●Over load outside alarm light (red/yellow/green) ●Work light for drum ●Work light for boom ●Back light ●Level ●Anemometer

Step and guard

●Cat walk (for rear cab) ●Wire mesh for boom walkway(for insert boom and outer boom) ●Safety guard on cab ●Safety guard rope on main boom

Attachment

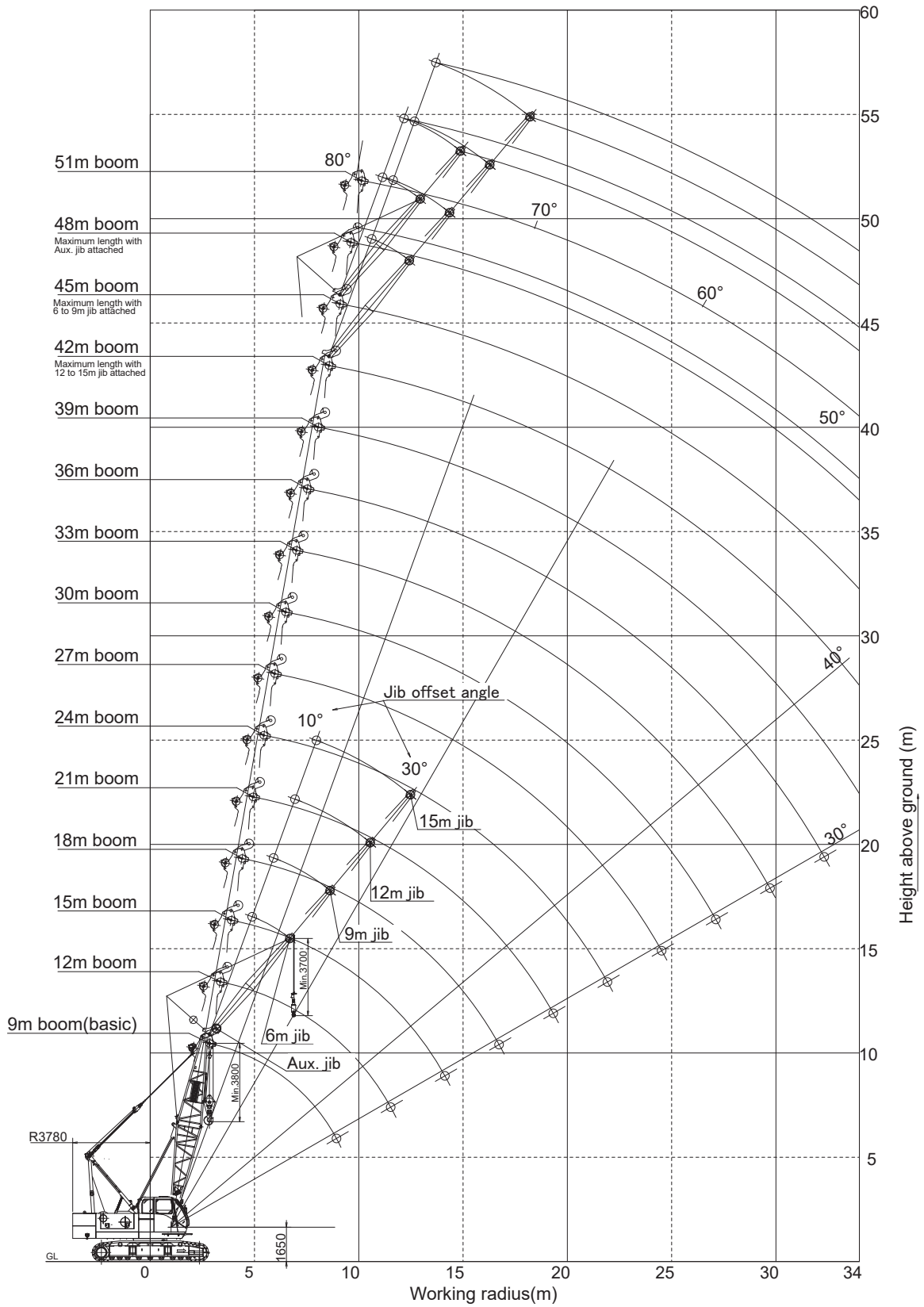
●3m, 6m, 9m insert boom (with pendant rope and guide roller) ●Guide roller (back of boom) ●1m auxiliary jib and accessories ●6m basic jib and accessories ●3m, 6m insert jib (with pendant rope) ●55t hook block (five sheaves) ●50t hook block (five sheaves) ●35t hook block (three sheaves) ●15t hook block (one sheave) ●5.8t hook block (for jib) ●5.8t swivel hook (for jib) ●Boom protection plate ●Capacity plate (for inner boom) ●Middle suspension

Others

●Name plate (outer boom or insert boom on both sides) ●Large size tool box (with caster) ●Sling wire rope (for lifting counterweight or crawler)



Working Ranges Diagram



■ CRANE

Attachment Arrangement

■ Crane Boom Arrangement

Boom length (m)	Standard boom arrangement	Boom length (m)	Standard boom arrangement
9.0		33.0	
12.0		36.0	
15.0		39.0	
18.0		42.0	
21.0		45.0	
24.0		48.0	
27.0		51.0	
30.0			

【Note】

An intermediate support system is required for the 39m boom and above.

■ Crane Jib Arrangement

Jib length (m)	Jib arrangement
6.0	
9.0	
12.0	
15.0	

■ Boom and Jib Combination

Boom length (m)	Jib length (m)				
	Aux. jib	6.0	9.0	12.0	15.0
9.0	○	○	○	○	○
12.0	○	○	○	○	○
15.0	○	○	○	○	○
18.0	○	○	○	○	○
21.0	○	○	○	○	○
24.0	○	○	○	○	○
27.0	○	○	○	○	○
30.0	○	○	○	○	○
33.0	○	○	○	○	○
36.0	○	○	○	○	○
39.0	○	○	○	○	○
42.0	○	○	○	○	○
45.0	○	○	○	×	×
48.0	○	×	×	×	×
51.0	×	×	×	×	×

■ Crane Specifications

Maximum lifting capacity x Working radius	55t x 3.0m	
Maximum boom length with Jib boom	57.0m (42m boom+15m jib)	
Rope speed	Hoisting/Lowering	※100/70 · 50/35m/min
	Jib hoisting/Lowering	※100/70 · 50/35m/min
	Boom hoisting/Lowering	※60m/min
Rope part lines	50ton hook	10 part lines
	5.8ton hook	1 part line
	Boom hoist	12 part lines
Crane total weight (9m boom)	48.5t	
Standard counterweigh	16.0t	
Average ground bearing pressure	60.8kPa (0.62kgf/cm ²)	

Note)

The value marked with "※" will be changed according to the loads given.

■ Wire Rope

Purpose	Ropedia (mm)	Breaking Strength (kN)	Rope Type
Load hoisting	φ20	294	IWRC 6×Fi(29)
Boom hoisting	φ16	215	IWRC 6×P · WS(31)
Boom suspension	φ31.5	735	IWRC 6×Fi(29)
Jib load hoisting	φ20	294	IWRC 6×Fi(29)
Jib boom suspension	φ26	489	IWRC 6×Fi(29)
Jib strut suspension	φ26	489	IWRC 6×Fi(29)

Standard Boom Rated Lifting Loads (Standard counterweigh 16.0t)

unit (t) angle (°)

Boom length (m)	9.0		12.0		15.0		18.0		21.0		24.0		27.0		30.0		33.0		36.0		39.0		42.0		45.0		48.0		51.0			
	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle		
3.0	55.0	79.0	3.7m x50.0	78.5	3.9m x47.9	80.0																										
4.0	49.0	72.5	48.9	77.0	47.0	79.5	4.4m x41.6	80.0																								
4.5	40.4	69.0	40.3	74.5	40.2	77.5	40.1	79.5																								
5.0	33.9	65.5	33.8	72.0	33.7	75.5	33.6	78.0	33.5	80.0	5.5m x28.7	80.0	5.9m x25.6	80.0																		
6.0	25.6	58.0	25.5	66.5	25.4	71.5	25.3	75.0	25.2	77.0	25.1	78.5	25.0	80.0	6.5m x22.0	80.0																
7.0	20.5	50.0	20.4	61.5	20.3	67.5	20.2	71.5	20.1	74.0	20.0	76.0	19.9	78.0	19.8	79.0	19.7	80.0	7.6m x17.0	80.0												
8.0	17.1	41.0	17.0	55.5	16.9	63.5	16.8	68.0	16.7	71.5	16.6	73.5	16.5	75.5	16.4	77.0	16.3	78.0	16.2	79.0	8.1m x15.8	80.0	8.6m x14.4	80.0								
9.0	8.9m x14.8	30.5	14.5	49.5	14.4	58.5	14.3	64.5	14.2	68.5	14.1	71.0	14.0	73.5	13.9	75.0	13.8	76.5	13.7	77.5	13.6	78.5	13.5	79.5	9.1m x13.1	80.0	9.8m x10.4	80.0				
10.0			12.6	43.0	12.5	54.0	12.4	61.0	12.3	65.5	12.2	68.5	12.1	71.0	12.0	73.0	11.9	74.5	11.8	76.0	11.7	77.0	11.6	78.0	11.5	79.0	10.2	79.5	10.3m x8.3	80.0		
12.0			11.5m x10.5	30.5	9.9	44.0	9.8	53.0	9.7	59.0	9.6	63.5	9.5	66.5	9.4	69.0	9.3	71.0	9.2	72.5	9.1	74.0	9.0	75.0	8.9	76.0	8.8	77.0	7.3	78.0		
14.0					8.1	31.0	8.0	44.5	7.9	52.5	7.8	58.0	7.7	62.0	7.6	65.0	7.5	67.5	7.4	69.5	7.3	71.0	7.2	72.5	7.1	73.5	7.0	74.5	6.3	75.5		
16.0					14.1m x8.0	30.0	6.7	34.5	6.6	45.0	6.5	52.0	6.4	57.0	6.3	60.5	6.2	63.5	6.1	66.0	6.0	68.0	5.9	69.5	5.8	71.0	5.7	72.0	5.5	73.0		
18.0							16.7m x6.4	30.0	5.7	36.5	5.6	45.5	5.5	51.5	5.4	56.0	5.3	59.5	5.2	62.5	5.1	64.5	5.0	66.5	4.9	68.0	4.8	69.5	4.7	71.0		
20.0								19.3m x5.2	30.0	4.9	38.5	4.8	46.0	4.7	51.0	4.6	55.5	4.5	58.5	4.4	61.5	4.3	63.5	4.2	65.5	4.1	67.0	4.0	68.5			
22.0											21.9m x4.3	30.0	4.2	39.5	4.1	46.0	4.0	51.0	3.9	55.0	3.8	58.0	3.7	60.5	3.6	62.5	3.5	64.5	3.4	66.0		
24.0													3.7	32.0	3.6	40.5	3.5	46.5	3.4	50.5	3.3	54.5	3.2	57.0	3.1	59.5	3.0	61.5	2.9	63.5		
26.0														24.5m x3.5	30.0	3.1	34.0	3.0	41.0	3.0	46.5	2.9	50.5	2.8	54.0	2.7	56.5	2.6	59.0	2.5	61.0	
28.0															27.0m x2.9	30.5	2.7	35.5	2.6	42.0	2.5	46.5	2.4	50.5	2.3	53.5	2.2	56.0	2.1	58.5		
30.0																	29.7m x2.3	30.0	2.3	37.0	2.1	42.5	2.1	46.5	2.0	50.0	1.8	53.0	1.7	55.5		
32.0																				2.0	31.0	1.8	38.0	1.8	43.0	1.7	47.0	1.5	50.0	1.5	53.0	
34.0																					32.3m x2.0	30.0	1.6	32.5	1.5	38.5	1.4	43.0	1.3	47.0	1.2	50.0
No. of Part line	10		10		10		9		7		6		6		5		4		4		3		3		3		2		2			

(Note)

- All rated loads are based on the machine being operated on the firm, level, uniformly supporting surface ground, at any point of 360° around the machine within 75% of tipping load and applied load 1.25P+0.1F.
- The working radius refers to the horizontal distance from the center of swinging to the hook axis.
- For the operation, be sure to raise the A-frame.
- The actual lifting load is obtained by subtracting the mass of all lifting equipment such as the main hook, aux. hook, etc. from the values given in this table.
 55t hook...0.80t 35t hook...0.35t 5.8t hook...0.12t
 50t hook...0.49t 15t hook...0.31t 5.8t swivel hook...0.12t
- The rated load are limited according to the wire rope part line as shown below:

No. Of part lines	1	2	3	4	5	6	7	8	9	10
Weight to be deducted (t)	5.8	11.4	16.0	22.0	27.5	33.0	38.5	44.0	49.5	55.0

- The length of the jib which can be mounted to the boom is as shown below.

Jib boom length (m)	Aux. jib	6.0	9.0	12.0	15.0
Main jib length (m)	9.0 ~ 48.0	9.0 ~ 45.0	9.0 ~ 45.0	9.0 ~ 42.0	9.0 ~ 42.0

- When the main hook is mounted the load which can be lifted with the jib is given by subtracting the total mass of main and aux. Hooks from the value in this table.
- The rated load of the aux. Jib is obtained by subtracting 0.3t from the values given in this table corresponding to the length of the mounted boom.
 But the max. rated load is 5.8ton.
 The rated load with the jib of 6.0m to 15.0m long refers to the jib rated load table.
- When the jib is mounted, the rated load with the main hook is obtained by subtracting the value as shown below (including the mass of the aux. hook) from the values given in this table.

Jib boom length (m)	Aux. jib	6.0	9.0	12.0	15.0
Weight to be deducted (t)	0.30	0.75	0.95	1.2.0	1.45

Aux. Jib Rated Lifting Loads

unit (t)

Boom length (m) / Working radius (m)	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0	48.0
3.0	3.4m × 5.8													
4.0	5.8	5.8	4.4m × 5.8											
4.5	5.8	5.8	5.8											
5.0	5.8	5.8	5.8	5.8	5.5m × 5.8									
6.0	5.8	5.8	5.8	5.8	5.8	5.8	6.5m × 5.8							
7.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	7.6m × 5.8					
8.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	8.1m × 5.8	8.6m × 5.8			
9.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	9.1m × 5.8	9.7m × 5.8	
10.0	9.8m × 5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	10.2m × 5.8
12.0		5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
14.0		12.4m × 5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	15.8m × 5.8	15.6m × 5.8	15.4m × 5.8	15.3m × 5.8
16.0			15.0m × 5.8	17.3m × 5.8	17.1m × 5.8	16.6m × 5.8	16.6m × 5.8	16.4m × 5.8	16.2m × 5.8	5.8	5.7	5.6	5.5	5.4
18.0				17.6m × 5.7	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5
20.0					4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8
22.0					20.2m × 4.6	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2
24.0						22.8m × 3.8	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7
26.0							25.4m × 3.0	2.8	2.7	2.7	2.6	2.5	2.4	2.3
28.0								2.5	2.4	2.3	2.2	2.1	2.0	1.9
30.0									1.9	2.0	1.8	1.8	1.7	1.5
32.0									30.6m × 1.9	1.7	1.5	1.5	1.4	1.2
34.0										33.2m × 1.5	1.3	1.2	1.1	1.0

(Note)

- All rated loads are based on the machine being operated on the firm, level, uniformly supporting surface ground, at any point of 360° around the machine within 75% of tipping load and applied load 1.25P+0.1F.
- The working radius refers to the horizontal distance from the center of swinging to the hook axis.
- For the operation, be sure to raise the A-frame.
- The actual lifting load is obtained by subtracting the mass of all lifting equipment such as the main hook, aux. hook, etc. from the values given in this table.

55t hook···0.80t	35t hook···0.35t	5.8t hook···0.12t
50t hook···0.49t	15t hook···0.31t	5.8t swivel hook···0.12t

Crane Jib Rated Lifting Loads

■ Boom length 9.0m unit (t)

Boom length (m)		9.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)		10°	30°	10°	30°	10°	30°	10°	30°
5.0		5.0							
6.0		5.0	6.7m ×5.0	6.1m ×5.0					
7.0		5.0	5.0	5.0		4.0		7.4m ×2.6	
8.0		5.0	5.0	5.0	8.7m ×4.1	4.0		2.6	
9.0		5.0	5.0	5.0	4.1	4.0		2.6	
10.0		5.0	5.0	5.0	4.1	4.0	10.4m ×3.2	2.6	
12.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
16.0		15.0m ×5.0	15.4m ×5.0	5.0	4.1	4.0	3.2	2.6	2.3
18.0				17.8m ×5.0	4.1	4.0	3.2	2.6	2.3
20.0					18.4m ×4.1	4.0	3.2	2.6	2.3
22.0						20.6m ×4.0	21.4m ×3.2	2.6	2.3
24.0								23.2m ×2.6	2.3
26.0									24.4m ×2.3
28.0									

■ Boom length 12.0m unit (t)

Boom length (m)		12.0								
Jib length (m)		6.0		9.0		12.0		15.0		
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°	
Working radius (m)		10°	30°	10°	30°	10°	30°	10°	30°	
5.0		5.5m ×5.0								
6.0		5.0		6.6m ×5.0*						
7.0		5.0	7.3m ×5.0	5.0		7.4m ×4.0				
8.0		5.0	5.0	5.0		4.0				
9.0		5.0	5.0	5.0	9.2m ×4.1	4.0		2.6		
10.0		5.0	5.0	5.0	4.1	4.0	10.9m ×3.2	2.6		
12.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	12.4m ×2.3	
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3	
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3	
18.0		17.6m ×5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3	
20.0				5.0	4.1	4.0	3.2	2.6	2.3	
22.0						21.0m ×4.1	4.0	3.2	2.6	2.3
24.0							23.2m ×4.0*	3.2	2.6	2.3
26.0									25.9m ×2.6	2.3
28.0										27.0m ×2.3

■ Boom length 15.0m unit (t)

Boom length (m)		15.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)		10°	30°	10°	30°	10°	30°	10°	30°
5.0									
6.0		5.0							
7.0		5.0	7.8m ×5.0	7.1m ×5.0					
8.0		5.0	5.0	5.0		4.0		8.4m ×2.6	
9.0		5.0	5.0	5.0	9.7m ×4.1	4.0		2.6	
10.0		5.0	5.0	5.0	4.1	4.0	11.4m ×3.2	2.6	
12.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	12.9m ×2.3
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
18.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
20.0		5.0	20.2m ×5.0	20.2m ×5.0*	4.1	4.0	3.2	2.6	2.3
22.0		20.2m ×5.0	20.6m ×4.9	4.6	4.1	4.0	3.2	2.6	2.3
24.0				23.0m ×4.3	23.6m ×4.1	4.0	3.2	2.6	2.3
26.0						25.8m ×3.5	3.2	2.6	2.3
28.0							26.8m ×3.2	2.6	2.3
30.0								28.4m ×2.6	29.6m ×2.3
32.0									

■ Boom length 18.0m unit (t)

Boom length (m)		18.0								
Jib length (m)		6.0		9.0		12.0		15.0		
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°	
Working radius (m)		10°	30°	10°	30°	10°	30°	10°	30°	
5.0										
6.0		6.5m ×5.0								
7.0		5.0		7.6m ×5.0						
8.0		5.0	8.3m ×5.0	5.0		8.4m ×4.0				
9.0		5.0	5.0	5.0		4.0		2.6		
10.0		5.0	5.0	5.0	10.3m ×4.1	4.0		2.6		
12.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6		
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	13.4m ×2.3	
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3	
18.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3	
20.0		20.1m ×5.0	20.1m ×5.0	20.1m ×5.0	4.1	4.0	3.2	2.6	2.3	
22.0		4.4	4.4	4.5	23.2m ×4.1	23.6m ×4.0	3.2	2.6	2.3	
24.0		22.8m ×4.1	23.2m ×4.0	3.9	3.9	3.9	3.2	2.6	2.3	
26.0				25.7m ×3.4	3.4	3.4	26.9m ×3.2	2.6	2.3	
28.0						26.2m ×3.3	3.1	3.1	2.6	2.3
30.0							28.4m ×3.0	29.2m ×2.9	2.6	2.3
32.0									31m ×2.6	2.3

(Note)

- All rated loads are based on the machine being operated on the firm, level, uniformly supporting surface ground, at any point of 360° around the machine within 75% of tipping load and applied load 1.25P+0.1F.
- The working radius refers to the horizontal distance from the center of swinging to the hook axis.

- For the operation, be sure to raise the A-frame.
- The actual lifting load is obtained by subtracting the mass of all lifting equipment such as the main hook, aux. hook, etc. from the values given in this table.

55t hook...0.80t 35t hook...0.35t 5.8t hook...0.12t
 50t hook...0.49t 15t hook...0.31t 5.8t swivel hook...0.12t

CRANE

Crane Jib Rated Lifting Loads

■ Boom length 21.0m

unit (t)

Boom length (m)		21.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0		7.1m ×5.0							
8.0		5.0	8.3m ×5.0	8.2m ×5.0					
9.0		5.0	5.0	5.0		4.0		9.5m ×2.6	
10.0		5.0	5.0	5.0	10.8m ×4.1	4.0		2.6	
12.0		5.0	5.0	5.0	4.1	4.0	12.5m ×3.2	2.6	
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
18.0		19.9m ×5.0	19.9m ×5.0	19.9m ×5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.9	4.9	4.9	4.1	4.0	3.2	2.6	2.3
22.0		4.3	4.3	4.3	23.0m ×4.1	23.4m ×4.0	3.2	2.6	2.3
24.0		3.7	3.8	3.8	3.9	3.9	3.2	2.6	2.3
26.0		25.4m ×3.4	25.8m ×3.3	3.3	3.3	3.3	26.4m ×3.2	2.6	2.3
28.0				3.0	3.0	3.0	3.0	2.6	2.3
30.0				28.2m ×2.9	28.8m ×2.8	2.7	2.7	30.3m ×2.6	2.3
32.0						31.0m ×2.5	31.8m ×2.3	2.4	32.4m ×2.3
34.0									2.0

■ Boom length 24.0m

unit (t)

Boom length (m)		24.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0		7.6m ×5.0							
8.0		5.0		8.7m ×5.0					
9.0		5.0	9.3m ×5.0	5.0		9.5m ×4.0			
10.0		5.0	5.0	5.0	11.3m ×4.1	4.0		2.6	
12.0		5.0	5.0	5.0	4.1	4.0	13.0m ×3.2	2.6	
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	14.5m ×2.3
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
18.0		19.4m ×5.0	19.4m ×5.0	19.4m ×5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.8	4.9	4.9	4.1	4.0	3.2	2.6	2.3
22.0		4.2	4.2	4.3	22.4m ×4.1	22.8m ×4.0	3.2	2.6	2.3
24.0		3.6	3.7	3.7	3.8	3.8	3.2	2.6	2.3
26.0		3.2	3.2	3.3	3.3	3.3	3.2	2.6	2.3
28.0		2.8	2.8	2.9	2.9	2.9	2.9	2.6	2.3
30.0			28.4m ×2.8	2.6	2.6	2.6	2.6	2.6	2.3
32.0				30.8m ×2.5	31.4m ×2.4	2.3	2.3	2.3	2.3
34.0						33.6m ×2.0	2.0	2.0	2.0

■ Boom length 27.0m

unit (t)

Boom length (m)		27.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0									
8.0		8.1m ×5.0							
9.0		5.0		9.2m ×5.0					
10.0		5.0	5.0	5.0	11.8m ×4.1	4.0		10.5m ×2.6	
12.0		5.0	5.0	5.0	4.1	4.0		2.6	
14.0		5.0	5.0	5.0	4.1	4.0	13.5m ×3.2	2.6	15.0m ×2.3
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
18.0		19.4m ×5.0	19.4m ×5.0	19.4m ×5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.7	4.8	4.8	4.1	4.0	3.2	2.6	2.3
22.0		4.1	4.2	4.2	22.4m ×4.1	22.8m ×4.0	3.2	2.6	2.3
24.0		3.6	3.6	3.6	3.7	3.7	25.7m ×3.2	2.6	2.3
26.0		3.1	3.2	3.2	3.2	3.2	3.1	2.6	2.3
28.0		2.7	2.8	2.8	2.9	2.9	2.9	29.4m ×2.6	2.3
30.0		2.4	2.4	2.5	2.5	2.5	2.5	2.5	31.3m ×2.3
32.0		30.6m ×2.3	31.0m ×2.3	2.2	2.2	2.2	2.2	2.2	2.2
34.0				33.4m ×1.9	1.9	1.9	1.9	1.9	1.9

■ Boom length 30.0m

unit (t)

Boom length (m)		30.0								
Jib length (m)		6.0		9.0		12.0		15.0		
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°	
Working radius (m)										
5.0										
6.0										
7.0										
8.0		8.6m ×5.0								
9.0		5.0		9.7m ×5.0						
10.0		5.0	10.4m ×5.0	5.0		10.5m ×4.0		11.0m ×2.6		
12.0		5.0	5.0	5.0	12.3m ×4.1	4.0		2.6		
14.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	15.5m ×2.3	
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3	
18.0		19.1m ×5.0	19.1m ×5.0	19.1m ×5.0	4.1	4.0	3.2	2.6	2.3	
20.0		4.6	4.7	4.7	4.1	4.0	3.2	2.6	2.3	
22.0		4.0	4.1	4.1	4.1	4.1	22.4m ×4.0	3.2	2.6	2.3
24.0		3.4	3.5	3.5	3.6	3.6	25.5m ×3.2	2.6	2.3	
26.0		3.0	3.1	3.1	3.1	3.1	3.1	2.6	2.3	
28.0		2.6	2.7	2.7	2.8	2.8	2.8	29.2m ×2.6	2.3	
30.0		2.3	2.3	2.4	2.5	2.5	2.5	2.5	30.9m ×2.3	
32.0		2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	
34.0		33.2m ×1.8	33.6m ×1.8	1.8	1.8	1.8	1.8	1.8	1.8	

Crane Jib Rated Lifting Loads

■ Boom length 33.0m

unit (t)

Boom length (m)		33.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0									
8.0									
9.0		9.1m x5.0							
10.0		5.0	10.9m x5.0	10.2m x5.0		11.0m x4.0		11.5m x2.6	
12.0		5.0	5.0	5.0	12.9m x4.1	4.0		2.6	
14.0		5.0	5.0	5.0	4.1	4.0	14.6m x3.2	2.6	
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
18.0		18.8m x5.0	18.8m x5.0	18.8m x5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.5	4.6	4.6	21.6m x4.1	4.0	3.2	2.6	2.3
22.0		3.9	4.0	4.0	4.0	4.0	3.2	2.6	2.3
24.0		3.4	3.4	3.5	3.5	3.5	25.1m x3.2	2.6	2.3
26.0		2.9	3.0	3.0	3.0	3.0	3.0	2.6	2.3
28.0		2.5	2.6	2.6	2.7	2.7	2.7	28.6m x2.6	2.3
30.0		2.2	2.2	2.3	2.4	2.4	2.4	2.4	2.3
32.0		1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.1
34.0		1.6	1.7	1.7	1.8	1.8	1.8	1.8	1.8

■ Boom length 36.0m

unit (t)

Boom length (m)		36.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0									
8.0									
9.0		9.7m x5.0							
10.0		5.0	11.4m x5.0	10.8m x5.0		11.6m x4.0			
12.0		5.0	5.0	5.0	13.4m x4.1	4.0		12.1m x2.6	
14.0		5.0	5.0	5.0	4.1	4.0	15.1m x3.2	2.6	
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	16.5m x2.3
18.0		18.5m x5.0	18.5m x5.0	18.5m x5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.5	4.5	4.5	21.3m x4.1	21.6m x4.0	3.2	2.6	2.3
22.0		3.8	3.9	3.9	3.9	3.9	3.2	2.6	2.3
24.0		3.3	3.4	3.4	3.4	3.4	24.8m x3.2	2.6	2.3
26.0		2.8	2.9	2.9	3.0	3.0	3.0	2.6	2.3
28.0		2.4	2.5	2.5	2.6	2.6	2.6	2.6	2.3
30.0		2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3
32.0		1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0
34.0		1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7

■ Boom length 39.0m

unit (t)

Boom length (m)		39.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0									
8.0									
9.0									
10.0		10.2m x5.0		11.3m x5.0					
12.0		5.0	5.0	5.0		12.1m x4.0		12.6m x2.6	
14.0		5.0	5.0	5.0	4.1	4.0	15.6m x3.2	2.6	
16.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	17.1m x2.3
18.0		18.2m x5.0	18.2m x5.0	18.2m x5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.3	4.4	4.4	20.9m x4.1	21.3m x4.0	3.2	2.6	2.3
22.0		3.7	3.8	3.8	3.8	3.8	3.2	2.6	2.3
24.0		3.1	3.2	3.2	3.3	3.3	24.4m x3.2	2.6	2.3
26.0		2.7	2.8	2.8	2.9	2.8	2.9	27.3m x2.6	2.3
28.0		2.3	2.3	2.4	2.5	2.4	2.5	2.5	29.3m x2.3
30.0		1.9	2.0	2.0	2.1	2.1	2.2	2.1	2.2
32.0		1.6	1.7	1.7	1.8	1.8	1.9	1.8	1.9
34.0		1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.6

■ Boom length 42.0m

unit (t)

Boom length (m)		42.0							
Jib length (m)		6.0		9.0		12.0		15.0	
Jib offset angle		10°	30°	10°	30°	10°	30°	10°	30°
Working radius (m)									
5.0									
6.0									
7.0									
8.0									
9.0									
10.0		10.7m x5.0		11.8m x5.0					
12.0		5.0	12.5m x5.0	5.0		12.6m x4.0		13.1m x2.6	
14.0		5.0	5.0	5.0	14.4m x4.1	4.0		2.6	
16.0		5.0	5.0	5.0	4.1	4.0	16.1m x3.2	2.6	7.6m x2.3
18.0		5.0	5.0	5.0	4.1	4.0	3.2	2.6	2.3
20.0		4.2	4.3	4.3	20.6m x4.1	20.9m x4.0	3.2	2.6	2.3
22.0		3.6	3.7	3.7	3.7	3.7	3.2	2.6	2.3
24.0		3.0	3.1	3.1	3.1	3.1	3.1	3.2	2.6
26.0		2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.6
28.0		2.2	2.3	2.3	2.4	2.3	2.4	2.4	2.4
30.0		1.8	1.9	1.9	2.1	2.0	2.1	2.1	2.1
32.0		1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8
34.0		1.2	1.3	1.4	1.5	1.4	1.5	1.5	1.5

■ CRANE

Crane Jib Rated Lifting Loads

■ Boom length 45.0m

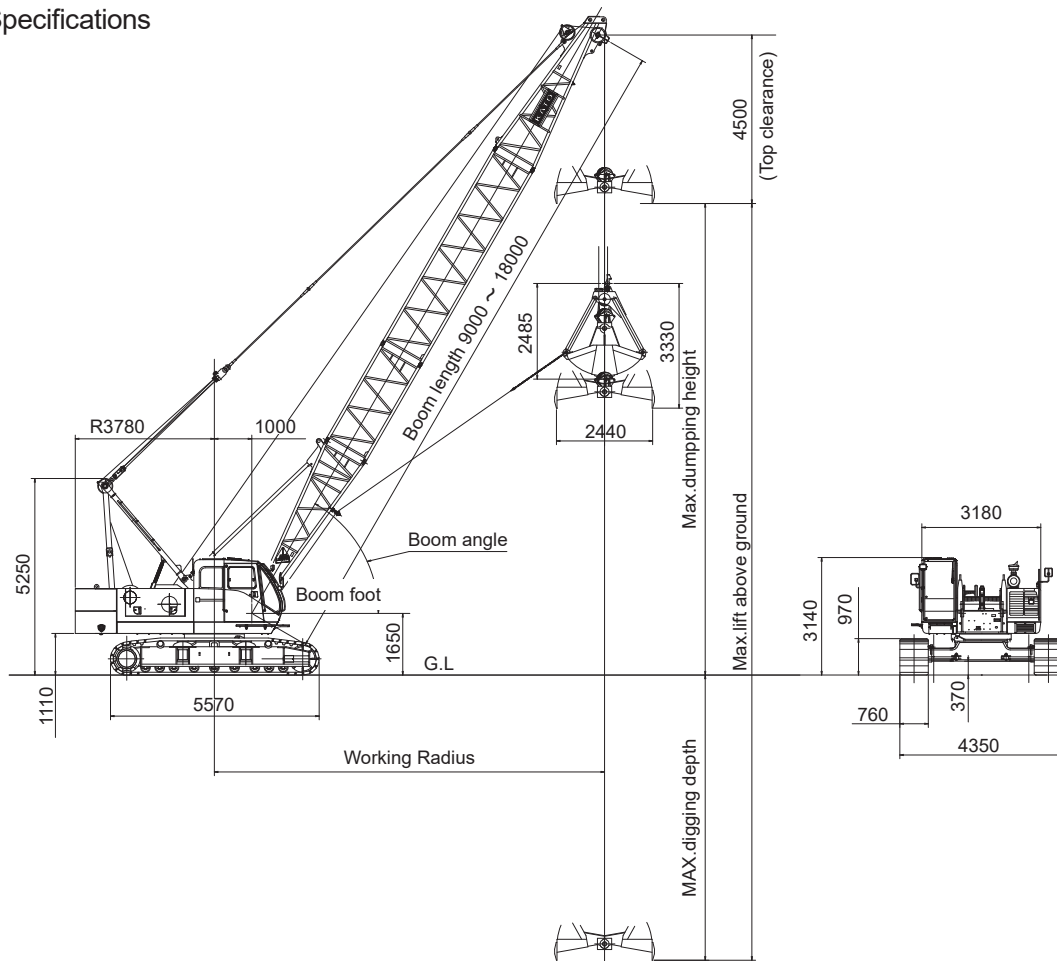
unit (t)

Boom length (m)	45.0							
Jib length (m)	6.0				9.0			
Jib offset angle	10°	30°	10°	30°				
Working radius (m)								
5.0								
6.0								
7.0								
8.0								
9.0								
10.0	11.2m x 5.0							
12.0	5.0	13.0m x 5.0	12.4m x 5.0					
14.0	5.0	5.0	5.0	15.0m x 4.1				
16.0	17.7m x 5.0	17.7m x 5.0	17.7m x 5.0	4.1				
18.0	4.9	4.9	4.9	4.1				
20.0	4.2	4.2	4.2	20.3m x 4.1				
22.0	3.5	3.6	3.6	3.6				
24.0	2.9	3.1	3.1	3.1				
26.0	2.5	2.6	2.6	2.7				
28.0	2.1	2.2	2.2	2.3				
30.0	1.7	1.8	1.8	2.0				
32.0	1.4	1.5	1.5	1.7				
34.0	1.1	1.2	1.3	1.4				



CLAMSHELL SPECIFICATION

Dimensions/Specifications



Clamshell Specifications(Special Specifications)

Max. dumping height	13.3m(18m boom+1.0m ³ bucket)	
Rope speed	Bucket closing	※100/70 · 50/35m/min
	Bucket holding	※100/70 · 50/35m/min
	Boom hoisting/lowering	※60m/min
Rope part lines	Bucket closing	6 part lines (for all types bucket)
	Bucket holding	1 part line (for all types bucket)
	Boom hoist	12 part lines
Crane total weight (18m boom+1.0m ³ bucket)	51.3t	
Standard counterweigh	16.0t	
Average ground bearing pressure (18m boom+1.0m ³ bucket)	63.7kPa (0.65kgf/cm ²)	

Note)
The value marked with "※" will be changed according to the loads given.

Clamshell Bucket Specification

Classifications	Type	Capacity (m ³)	Weight (t)	Use
Option	HD	0.6	3.00	Civil engineering / Construction work
Option	GP	0.8	2.22	Heavy digging
Standard	GP	1.0	2.50	Heavy digging
Option	WR	1.0	2.00	Medium duty
Option	WR	1.25	1.60	Medium duty

Wire Rope

Purpose	Rope dia(mm)	Breaking Strength(kN)	Rope Type
Bucket closing	φ 20	294	IWRC 6×Fi(29)
Bucket suspension	φ 20	294	IWRC 6×Fi(29)
Boom hoist	φ 16	215	IWRC 6×P · WS(31)
Boom suspension	φ 31.5	735	IWRC 6×Fi(29)
Hydraulic tugline	φ 10	54	6×(19)

Clamshell Working Radius And Rated Loads

Boom length (m)	9.0				12.0				15.0				18.0			
	35°	45°	55°	65°	35°	45°	55°	65°	35°	45°	55°	65°	35°	45°	55°	65°
Working radius (m)	8.7	7.7	6.9	5.2	11.1	9.8	8.3	6.5	13.6	12.0	10.0	7.7	16.1	14.1	11.7	9.0
Rated lifting loads (t)	5.0				5.0				5.0				5.0			
Boom point height (m)	26.0	26.0	26.0	26.0	23.0	23.0	23.0	23.0	20.0	20.0	20.0	20.0	17.0	17.0	17.0	17.0
Max. dumping height (m)	2.5	3.3	4.3	5.1	3.8	5.4	6.8	7.9	5.5	7.5	9.2	10.6	7.2	9.6	11.7	13.3
Max. digging depth (m)	23.5	22.7	21.7	20.9	19.2	17.6	16.2	15.1	14.5	12.5	10.8	9.4	9.8	7.4	5.3	3.7

Notes

- The rated lifting load indicates the maximum lifting weight of a bucket and its content. Select an appropriate bucket depending on content, so as not to exceed the rated lifting load.
- The values in the above table are for a 1.0m³ standard bucket.
- The above table shows the values for the standard wire rope length for clamshell.
Opening and closing ropes.....65m Support ropes.....53m

Barge Mounted Crane Rated Lifting Loads (full turn)

unit (t) angle (°)

Boom length (m)	9.0		12.0		15.0		18.0		21.0		24.0	
Working radius (m)	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle	Load	Angle
3.0	35.0	80.0	$\frac{3.4m}{\times 35.0}$	80.0								
3.7	35.0	74.5	35.0	78.5	$\frac{3.9m}{\times 30.0}$	80.0						
4.0	35.0	72.5	35.0	77.0	30.0	79.5	$\frac{4.4m}{\times 25.0}$	80.0				
4.5	$\frac{4.8m}{\times 35.0}$	69.0	$\frac{4.8m}{\times 35.0}$	74.5	30.0	77.5	25.0	79.5				
5.0	33.9	65.5	33.8	72.0	$\frac{5.3m}{\times 30.0}$	75.5	25.0	78.0	25.0	80.0	$\frac{5.5m}{\times 25.0}$	80.0
6.0	25.6	58.0	25.5	66.5	25.4	71.5	$\frac{6.1m}{\times 25.0}$	75.0	25.0	77.0	25.0	78.5
7.0	20.5	50.0	20.4	61.5	20.3	67.5	20.2	71.5	20.1	74.0	20.0	76.0
8.0	17.1	41.0	17.0	55.5	16.9	63.5	16.8	68.0	16.7	71.5	16.6	73.5
9.0	$\frac{8.9m}{\times 14.8}$	30.5	14.5	49.5	14.4	58.5	14.3	64.5	14.2	68.5	14.1	71.0
10.0			12.6	43.0	12.5	54.0	12.4	61.0	12.3	65.5	12.2	68.5
12.0			$\frac{11.5m}{\times 10.5}$	30.5	9.9	44.0	9.8	53.0	9.7	59.0	9.6	63.5
14.0					8.1	31.0	8.0	44.5	7.9	52.5	7.8	58.0
16.0					$\frac{14.1m}{\times 8.0}$	30.0	6.7	34.5	6.6	45.0	6.5	52.0
18.0							$\frac{16.7m}{\times 6.4}$	30.0	5.7	36.5	5.6	45.5
20.0									$\frac{19.3m}{\times 5.2}$	30.0	4.9	38.5
22.0											$\frac{21.9m}{\times 4.3}$	30.0
No. of Part line	7		7		6		5		5		5	

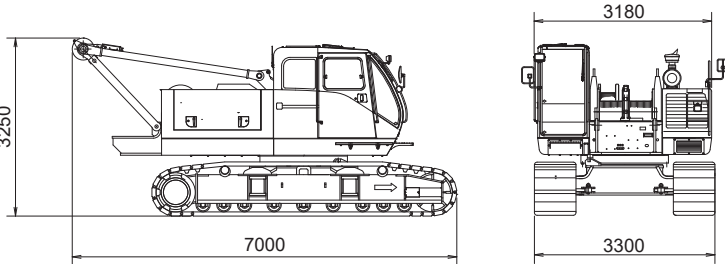
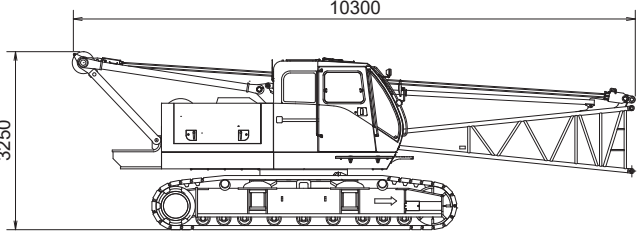
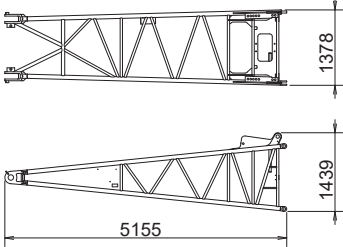
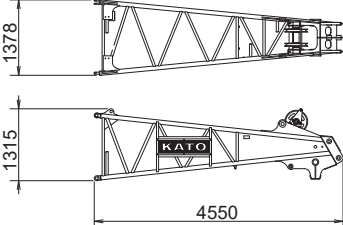
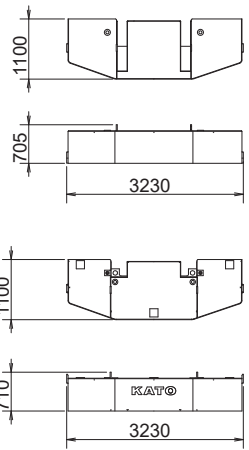
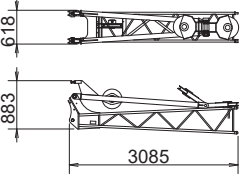
(Note)

- The working radius refers to the horizontal distance from the center of swinging to the hook axis.
- For the operation, be sure to extend the crawler and raise the A-frame.
- The actual lifting load is obtained by subtracting the mass of all lifting equipment such as the main hook, aux. hook, etc. from the values given in this table.
 55t hook...0.80t 35t hook...0.35t 5.8t hook...0.12t
 50t hook...0.49t 15t hook...0.31t 5.8t swivel hook...0.12t
- The barge's tilt angle should be within 3° under load.
- The rated load are limited according to the wire rope part line as shown below :
 1 part of line ... up to 5.8t 2 parts of line ... up to 11.4t 3 parts of line ... up to 16.0t
 4 parts of line ... up to 22.0t 5 parts of line ... up to 27.5t 6 parts of line ... up to 33.0t
 7 parts of line ... up to 38.5t
- When the aux.jib is mounted, rated load with the main hook is obtained by subtracting 0.3t (including the mass of the aux. hook) from the values given in this table.
- The rated load of the aux. jib is obtained by subtracting 0.3t from the values given in this table corresponding to the length of the mounted boom. But the max. rated load is 5.8t.
- Use the auxiliary jib for crane operations only. It cannot be used for bucket operation.
- The maximum boom length for clamshell and other bucketing operations is 18m. Booms over 21m cannot be used.
- The total load rating for bucket operation is 5.0t. The total mass of the bucket plus the amount of material grabbed must not exceed this value.
- When using the machine as a barge mounted crane, use the following dimensions as a guide for the barge.

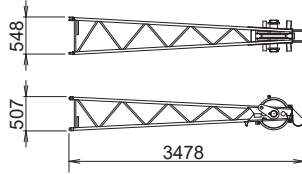
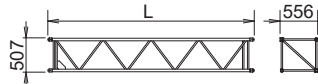
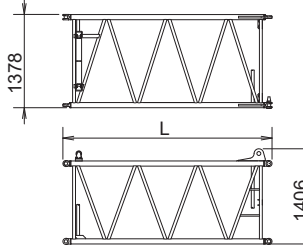
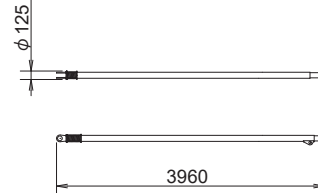
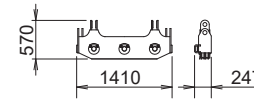
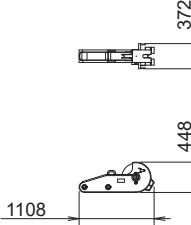
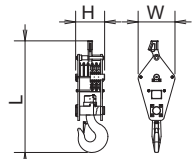
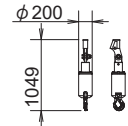
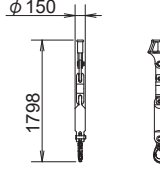
Length 26m × Width 11m × Height 2.2m

Distance from the bow to the center of rotation: 4.5m

■ Transport Dimensions and Weights

Name	Dimension (mm)	Weight (t)
Base Machine Main Boom Hoist Wire A-frame		30.3
Base Machine Main Boom Hoist Wire A-frame Equalizer Inner Boom		31.4
Crane Inner Boom		0.7
Outer Boom		0.7
Counterweight (2 stage piling)	 <p style="text-align: right;">Weight, upper</p> <p style="text-align: right;">Weight, lower</p>	8.0 8.0
Crane Inner Jib		0.35

Transport Dimensions and Weights

Name	Dimension (mm)	Weight (t)
Crane Outer Jib		0.15
Crane Insert Jib (3m) Crane Insert Jib (6m)	 <p>3m Insert Jib L=3050</p> <p>6m Insert Jib L=6050</p>	0.06 0.1
Insert Boom (3m) Insert Boom (6m) Insert Boom (9m)	 <p>3m Insert Boom L=3090</p> <p>6m Insert Boom L=6090</p> <p>9m Insert Boom L=9090</p>	0.2 0.4 0.6
Boom stop		0.15 for two.
Equalizer		0.25
Aux. Jib		0.12
 <p>55t Hook H512xW642xL1847 Weight 0.80t</p> <p>50t Hook H428xW544xL1649 Weight 0.49t</p> <p>35t Hook H299xW516xL1487 Weight 0.35t</p> <p>15t Hook H260xW520xL1335 Weight 0.31t</p>	 <p>5.8ton Hook Weight 0.12t</p>  <p>5.8ton Swivel Hook Weight 0.12t</p>	

*Specifications are subject to change without notice due to improvements or modifications.

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