IHI

Fully Hydraulic Crawler Crane

Lifting capacity (JIS) 50metric tons

CCH500-3

Lifting capacity (JIS) 40metric tons

CCH400-3

Lifting capacity (JIS) 35metric tons

CCH350-3

Ishikawajima Construction Machinery Co., Ltd.

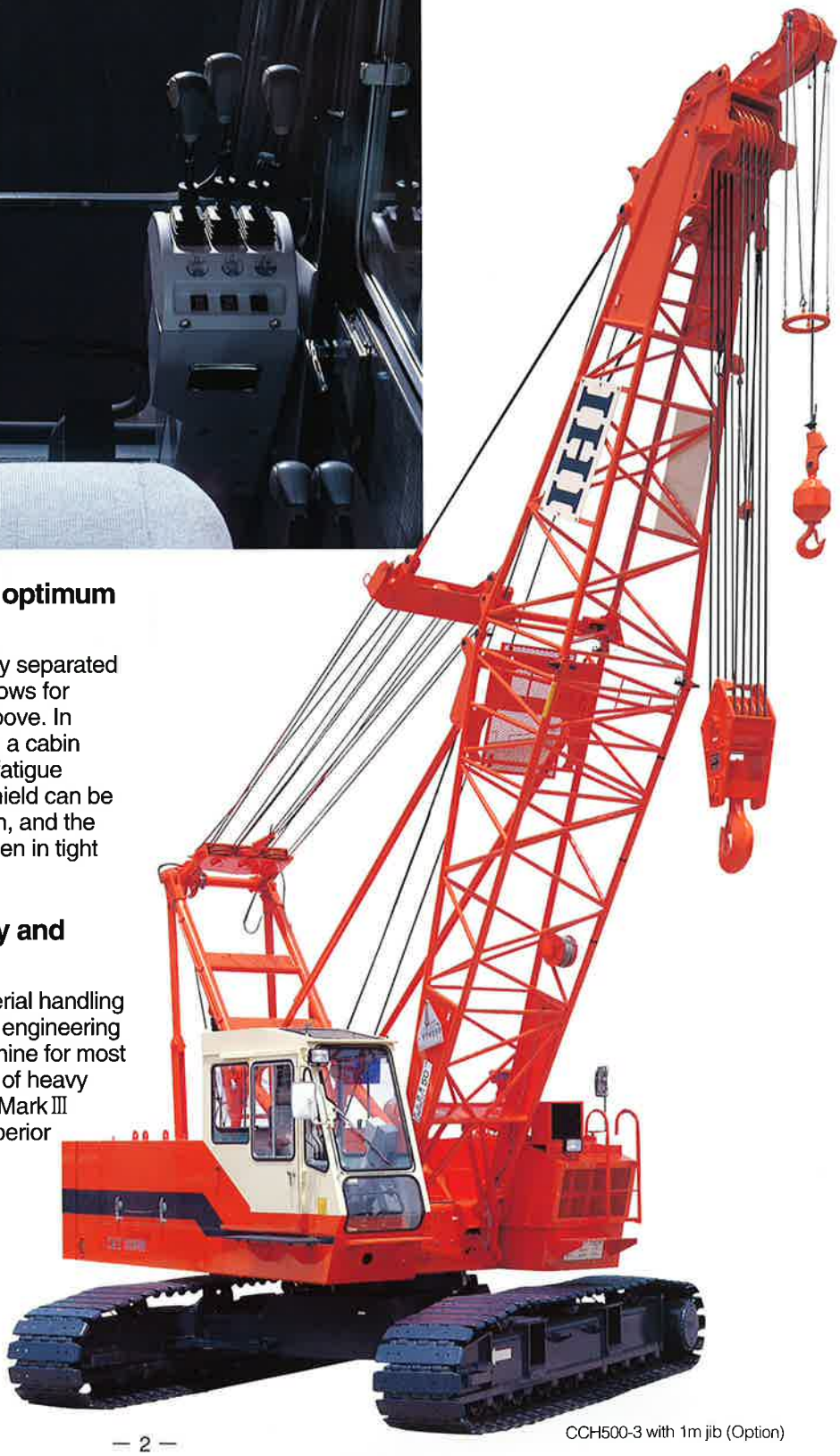
Dedicated to Outstanding Performance and Full Operator Comfort – Mark Ⅲ.

Convenience and comfort guarantee optimum performance.

In the Mark Ⅲ the operator's cabin is completely separated from the machine room and outfitted with windows for unobstructed views front, rear, right, left and above. In compliance with International Standards (ISO), a cabin width of 940mm guarantees minimal operator fatigue during continuous operations. The front windshield can be stored under the ceiling for improved ventilation, and the slide door means easy boarding and exiting even in tight places.

Enjoy greater power, precision, safety and comfort.

Power, speed, durability and safety. From material handling and erection work through the full range of civil engineering tasks, the Mark Ⅲ proves itself the perfect machine for most jobs. Operators working long hours in a variety of heavy operations will recognize the advantages. The Mark Ⅲ offers improved comfort, greater safety and superior handling.



CCH500-3 with 1m jib (Option)

■Specifications

Performance	
Swing speed	3.5 rpm
Travel speed	*1.6 km/h (1mph)
Gradeability	40% (Approx. 22°)
Engine	
Make	HINO MOTOR
Model	HO7CT(with turbo) diesel engine 4-cycle, water cooled, overhead valve
Type	Direct injection diesel engine
Total piston displacement	6.728 ℓ
Rated output	180 PS/2,100 rpm
Fuel tank capacity	225 ℓ
Battery	12v × 120 AH × 2 pcs.
Load hoist system (Main & Aux.)	
Hydraulic motor	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, lagging type with rebus 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	Rebus grooved drum
Brake	Automatic spring - loaded hydraulically released wet type multi-disk
Drum lock	Ratchet lock

* Travel speed changes depending on the load.

Standard equipment

- Instrument for crane
  Engine tachometer (Hour meter)
  Hydraulic oil pressure gauge (for control circuit)
  Fuel level gauge
  Engine coolant thermo indicator ┐ indicated
  Engine oil pressure indicator ├ bar graph
  Hydraulic oil thermo indicator ┘ in OK monitor
- Lighting for crane
  Work light 24 v x 80 w x 2
  Room light 24 v x 20 w x 1
- Safety device
  Automatic stop for hook overwinding
  Automatic stop for boom overwinding
  Telescopic boom limit stop
  Swing lock
  Main and Aux. drum lock
  Safety valve for hydraulic circuit
  Counter balance valve
  Control lever locking device
- Other standard accessories
  Windshield wiper
  Roof glass wiper
  Sunvisor
  Reclining operator's seat
  Floor mat
  Steps for operator's cab (foldable type)
  Radio
  Cigarette lighter
  Ash tray
  Rearview mirrors (R/L)
  Horn
  Swing warning flasher
  Travel warning flasher
  Low-noise cab
  Wire mesh boom walkway (for inner boom)
  Fuel filling pump
- "A" frame (High gantry) erecting device (CCH500-3)

Optional equipment

- Moment limiter (overload prevention)
- Yellow rotary light
- Wireless phone
- Bullhorn
- Combustion type heater
- Defroster
- Spark arrester
- Digging depth /Lift indicator (with bucket opening angle indicator)
- Electrical type level indicator
- Level vial
- Fire extinguisher
- Monitor TV (watching rear, left and drum)
- Drum rotation roller
  Drum mirror
- Catwalk
- Large size tool box (installed on car body)
- Third drum (with clutch and brake : type A)
- Third drum (automatic brake : type B)
- Auxiliary winch for reeling main rope
- Hydraulic power take off
  (A Spec.)300 kg/cm² x 225 ℓ /min
- Hydraulic power take off
  (B Spec.)210 kg/cm² x 125 ℓ /min
- Anemometer (for tower crane)
- Airplane warning lamp
- Boom point clearance lamp
- Drum light
- Work light on boom
- Work light for rear direction
- Rope guard for boom top surface
- 3 m, 6 m, 9 m, insert boom with pendant rope
- 1 m jib
- 35 ton hook block (3 sheaves) (CCH500-3)
- 25 ton hook block (3 sheaves)
- 15 ton hook block (1 sheave)
- 5.8 ton hook block (for jib)
- Drum barrel for 22 mm dia. rope
- Air conditioner

■Crane Specifications

MODEL		CCH350-3	CCH400-3	CCH500-3
Max. lifting capacity (metric ton) × working radius (m)		35 × 3.7	40 × 3.7	50 × 3.7
Max. boom length, main (main + jib boom) (m)		39(33+12)	45(39 + 15)	51(42 + 15)
Rope speed	Main drum hoist/lowering (m/min)	*100/70 · 50/35	*100/70 · 50/35	*100/70 · 50/35
	Aux. drum hoist/lowering (m/min)	*100/70 · 50/35	*100/70 · 50/35	*100/70 · 50/35
	Boom drum hoist/lowering (m/min)	*60	*60	*60
Part line	Hook block capacity (ton) × part line	35 × 7	40 × 8	50 × 10
	Hook block capacity (ton) × part line	5.8 × 1	5.8 × 1	5.8 × 1
	Boom drum hoist/lowering part line	12	12	12
Counterweight (ton)		11	12	16
Total operating weight (ton)		38.9	40.4	48.5
Boom length (m)		9	9	9
Hook block capacity (ton)		35	40	50
Average ground bearing pressure (kg/cm²)		0.58	0.57	0.62

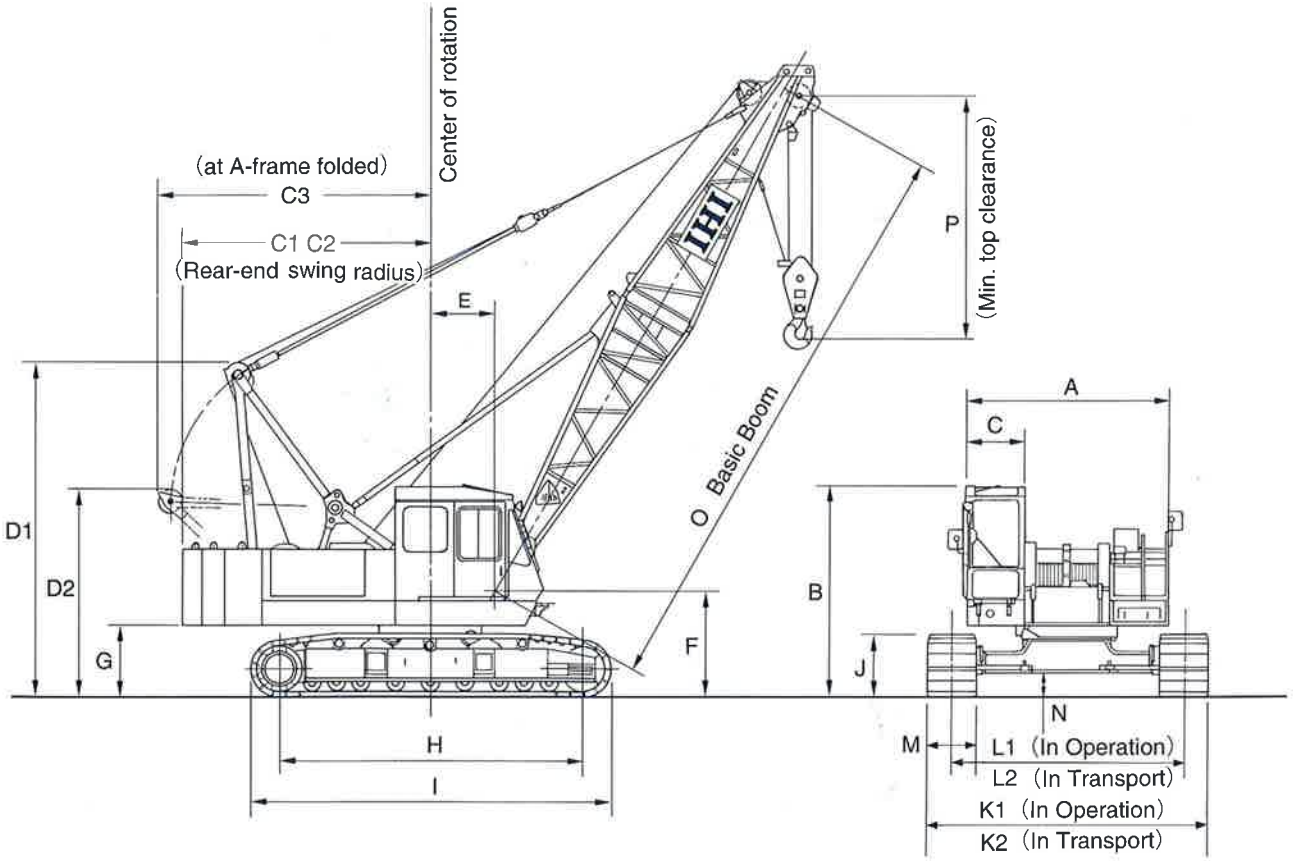
* : The rope speed changes depending on the load.

■Wire rope (Rope diameter (mm) / Guaranteed strength (ton))

Place of use	CCH350-3	CCH400-3	CCH500-3	Rope type
Main drum	20.0/30.0			A
Aux. drum	20.0/30.0			A
Boom hoist	16.0/21.9			B
Boom suspension	28.0/59.7	28.0/59.7	31.5/74.9	A
Jib boom suspension	26.0/49.9			A
Jib strut suspension	28.0/56.8			A

Rope type A : 6 × Fi (29) IWRC regular Z lay
B : T IWRC 6 × WS (31) regular Z lay
Length of wire rope to be decided according to the ordered boom length.

■General dimensions (with basic boom)



(Unit:mm)

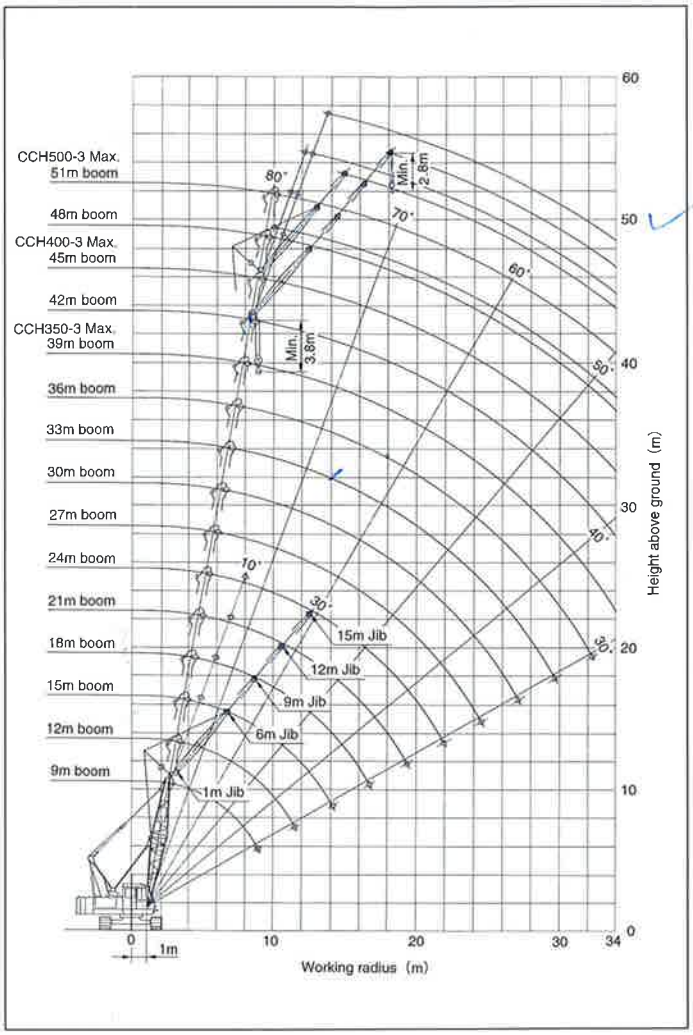
MODEL				CCH350-3	CCH400-3	CCH500-3
A	Cab width			3140	3140	3140
B	Cab height			3240	3240	3275
C	Rear end swing radius and distance	C_1	Cab rear end radius	3390	3470	3900
		C_2	Cab rear end distance	3330	3410	3835
		C_3	Distance "A" frame	3470	3930	4225
D	High "A" frame (High gantry) height	D_1	Extended (Sheave)	4555	5100	5210
		D_2	Folded (Sheave)	3245	3255	3250
E	Boom foot pin distance			1000	1000	1000
F	Boom foot pin height			1605	1605	1650
G	Rear end ground clearance			1075	1075	1110
H	Length center to center tumbler			4220	4420	4700
I	Overall crawler length			5095	5295	5570
J	Crawler height			990	990	970
K	Overall crawler width	K_1	In operation	4060	4160	4350
		K_2	In transport	3300	3300	3300
L	Crawler center distance	L_1	In operation	3300	3400	3590
		L_2	In transport	2540	2540	2540
M	Shoe width			760	760	760
N	Minimum ground clearance			415	415	370
O	Basic boom length			9000	9000	9000
P	Minimum top clearance			3800	3800	3800

■Combination of main boom and jib boom

Jib boom length (m)	Main boom length (m)													
	9	12	15	18	21	24	27	30	33	36	39	42	45	48
1	●	●	●	●	●	●	●	●	●	●	○	○	■	■
6	●	●	●	●	●	●	●	●	●	○	○	■	■	
9	●	●	●	●	●	●	●	●	●	○	○	■	■	
12	●	●	●	●	●	●	●	●	●	○	○	■		
15	○	○	○	○	○	○	○	○	○	○	○	■		

●: Applicable : CCH350-3, CCH400-3, CCH500-3
○: Applicable : CCH400-3, CCH500-3
■: Applicable : CCH500-3

■Working range



■Boom composition

(Unit:m)

	Boom Length	Boom composition		
		CCH350-3	CCH400-3	CCH500-3
Standard	9	5 (inner) + 4 (outer)	5 (inner) + 4 (outer)	5 (inner) + 4 (outer)
Option	12	5 + 3 + 4	5 + 3 + 4	5 + 3 + 4
Option	15	5 + 3 + 3 + 4	5 + 3 + 3 + 4	5 + 3 + 3 + 4
Option	18	5 + 3 + 6 + 4	5 + 3 + 6 + 4	5 + 3 + 6 + 4
Option	21	5 + 3 + 3 + 6 + 4	5 + 3 + 3 + 6 + 4	5 + 3 + 3 + 6 + 4
Option	24	5 + 3 + 6 + 6 + 4	5 + 3 + 6 + 6 + 4	5 + 3 + 6 + 6 + 4
Option	27	5 + 3 + 3 + 6 + 6 + 4	5 + 3 + 3 + 6 + 6 + 4	5 + 3 + 6 + 9 + 4
Option	30	5 + 3 + 6 + 6 + 6 + 4	5 + 3 + 6 + 6 + 6 + 4	5 + 3 + 3 + 6 + 9 + 4
Option	33	5+3+3+6+6+6+4	5+3+3+6+6+6+4	5 + 3 + 3 + 9 + 9 + 4
Option	36	5+3+6+6+6+6+4	5+3+6+6+6+6+4	5 + 3 + 6 + 9 + 9 + 4
Option	39	5+3+3+6+6+6+6+4	5+3+3+6+6+6+6+4	* 5+3+3+6+9+9+4
Option	42		5+3+6+6+6+6+6+4	* 5+3+3+9+9+9+4
Option	45		5+3+3+6+6+6+6+6+4	* 5+3+6+9+9+9+4
Option	48			* 5+3+3+6+9+9+9+4
Option	51			* 5+3+3+9+9+9+9+4

* : Required middle suspension for boom length 39m and longer. (CCH500-3)

■Jib Boom composition

(Unit:m)

Jib Boom Length	Jib Boom composition
6	3 (inner) + 3 (outer)
9	3 + 3 + 3
12	3 + 3 + 3 + 3
*15	3 + 6 + 3 + 3

* : Not applicable for CCH350-3

■Rated lifting loads (with 16 ton counterweight)

(Unit : metric ton)

Working radius (m)	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
3.0	50.00														
3.7	50.00	50.00	3.9m× 47.90												
4.0	49.00	48.90	47.00	4.4m× 41.60											
4.5	40.40	40.30	40.20	40.10											
5.0	33.90	33.80	33.70	33.60	33.50	5.5m× 28.70	5.9m× 25.65								
6.0	25.60	25.50	25.40	25.30	25.20	25.10	25.00	6.5m× 22.05							
7.0	20.50	20.40	20.30	20.20	20.10	20.00	19.90	19.80	19.70	7.6m× 17.00					
8.0	17.10	17.00	16.90	16.80	16.70	16.60	16.50	16.40	16.30	16.20	8.1m× 15.80	8.6m× 14.40			
9.0	9.9m× 14.80	14.50	14.40	14.30	14.20	14.10	14.00	13.90	13.80	13.70	13.60	13.50	9.1m× 13.15	9.8m× 11.40	
10.0		12.60	12.50	12.40	12.30	12.20	12.10	12.00	11.90	11.80	11.70	11.60	11.50	11.20	10.3m× 8.50
12.0		11.5m× 10.50	9.90	9.80	9.70	9.60	9.50	9.40	9.30	9.20	9.10	9.00	8.90	8.80	8.50
14.0			8.10	8.00	7.90	7.80	7.70	7.60	7.50	7.40	7.30	7.20	7.10	7.00	6.90
16.0			14.1m× 8.00	6.70	6.60	6.50	6.40	6.30	6.20	6.10	6.00	5.90	5.80	5.70	5.60
18.0				16.7m× 6.35	5.70	5.60	5.50	5.40	5.30	5.20	5.10	5.00	4.90	4.80	4.70
20.0					19.3m× 5.20	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10	4.00
22.0						21.9m× 4.30	4.20	4.10	4.00	3.90	3.80	3.70	3.60	3.50	3.40
24.0							3.70	3.60	3.50	3.40	3.30	3.20	3.10	3.00	2.90
26.0							24.5m× 3.50	3.10	3.00	2.95	2.85	2.75	2.65	2.55	2.45
28.0								27.0m× 2.90	2.70	2.60	2.50	2.40	2.30	2.20	2.10
30.0									29.7m× 2.30	2.30	2.20	2.10	2.00	1.90	1.80
32.0										2.00	1.90	1.80	1.70	1.60	1.50
34.0										32.3m× 1.95	1.60	1.50	1.40	1.35	1.25
No.of Part line	10	10	10	9	7	6	6	5	4	4	3	3	3	2	2

NOTES

1. Above rated loads are based on firm level ground, within 78% of tipping load at any point 360° throughout and with front stability of 1.15 or more.
2. Working radius is horizontal distance from center of rotation to a vertical line through the centerline of gravity of the load.
3. The weight of the hook block and other lifting devices must be considered to be a part of the load.
   50 ton hook block ----- 0.49 ton 15 ton hook block ----- 0.31 ton
   25 ton hook block ----- 0.35 ton
4. Crawler frame and A frame (High gantry) should also be extended before working.
5. When jib boom is fitted actual loads that can be lifted with the main hook block should reduce following weights from the above chart (the weights include that of the auxiliary hook block).

Jib boom length (m)	1.0	6.0	9.0	12.0	15.0
Weight to be deducted (ton)	0.30	0.75	0.95	1.20	1.45

6. Depending on the number of part lines, rated lifting load is limited as follows:
   1-part line ----- up to 5.8 tons 6 -part line ----- up to 30.0 tons
   2-part line ----- up to 11.4 tons 7 -part line ----- up to 35.0 tons
   3-part line ----- up to 16.0 tons 8 -part line ----- up to 40.0 tons
   4-part line ----- up to 20.0 tons 9 -part line ----- up to 45.0 tons
   5-part line ----- up to 25.0 tons 10-part line ----- up to 50.0 tons
7. The hook block will not come down to ground level, if the rope part line is more than shown in above chart.

■Jib rated lifting loads (with 16 ton counterweight)

(Unit : metric ton)

Boom length (m)	9.0									12.0										15.0										18.0									
Jib length (m)	1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0			1.0	6.0		9.0		12.0		15.0			1.0	6.0		9.0		12.0		15.0		
Offset angle / Working radius (m)	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°		~	10°	30°	10°	30°	10°	30°	10°	30°		~	10°	30°	10°	30°	10°	30°	10°	30°	
3.0	3.4m× 5.80																																							
4.0	5.80									5.80										4.4m× 5.80																				
4.5	5.80									5.80										5.80																				
5.0	5.80	5.00								5.80	5.5m× 5.00									5.80										5.80										
6.0	5.80	5.00	6.7m× 5.00	6.1m× 5.00						5.80	5.00		6.6m× 5.00							5.80	5.00									5.80	6.5m× 5.00								
7.0	5.80	5.00	5.00	5.00		4.00		7.4m× 2.60		5.80	5.00	7.3m× 5.00	5.00		7.4m× 4.00					5.80	5.00	7.8m× 5.00	7.1m× 5.00							5.80	5.00		7.6m× 5.00						
8.0	5.80	5.00	5.00	5.00	6.7m× 4.10	4.00		2.60		5.80	5.00	5.00	5.00		4.00					5.80	5.00	5.00	5.00		4.00		8.4m× 2.60			5.80	5.00	8.3m× 5.00	5.00		8.4m× 4.00				
9.0	5.80	5.00	5.00	5.00	4.10	4.00		2.60		5.80	5.00	5.00	5.00	9.2m× 4.10	4.00		2.60			5.80	5.00	5.00	5.00	9.7m× 4.10	4.00		2.60			5.80	5.00	5.00	5.00		4.00		2.60		
10.0	9.8m× 5.80	5.00	5.00	5.00	4.10	4.00	10.4m× 3.20	2.60		5.80	5.00	5.00	5.00	4.10	4.00	10.9m× 3.20	2.60			5.80	5.00	5.00	5.00	4.10	4.00	11.4m× 3.20	2.60			5.80	5.00	5.00	5.00	10.0m× 4.10	4.00		2.60		
12.0		5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	12.4m× 2.30		5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	12.9m× 2.30		5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60		
14.0		5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	12.4m× 5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30		5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30		5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	13.4m× 2.30	
16.0		15.0m× 5.00	15.4m× 5.00	5.00	4.10	4.00	3.20	2.60	2.30		5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30		15.0m× 5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30		5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	
18.0				17.8m× 5.00	4.10	4.00	3.20	2.60	2.30		17.6m× 5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30			5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30		17.6m× 5.70	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	
20.0				18.4m× 4.10	4.00	3.20	2.60	2.30					5.00	4.10	4.00	3.20	2.60	2.30			5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30			5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	
22.0					20.6m× 4.00	21.4m× 3.20	2.60	2.30						21.0m× 4.10	4.00	3.20	2.60	2.30			20.2m× 5.00	20.6m× 4.90	5.00	4.10	4.00	3.20	2.60	2.30			4.45	4.45	4.45	4.10	4.00	3.20	2.60	2.30	
24.0						23.2m× 2.60	24.4m× 2.30								23.2m× 4.00	3.20	2.60	2.30					23.0m× 4.25	23.6m× 4.10	4.00	3.20	2.60	2.30			22.8m× 4.20	23.2m× 4.05	3.90	3.90	3.90	3.20	2.60	2.30	
26.0																25.8m× 2.60	2.30							25.8m× 3.50	3.20	2.60	2.30				25.7m× 3.40	3.35	3.35	3.20	2.60	2.30	
28.0																	27.0m× 2.30								26.6m× 3.20	2.60	2.30					26.2m× 3.30	3.05	3.05	2.60	2.30	
30.0																										28.4m× 2.60	29.6m× 2.30						28.4m× 2.95	29.2m× 2.80	2.60	2.30	
32.0																																			31.0m× 2.55	2.30	
34.0																																						

■Jib rated lifting loads (with 16 ton counterweight)

(Unit : metric ton)

Boom length (m)	21.0									24.0									27.0									30.0								
Jib length (m)	1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0	
Working radius (m) \ Offset angle	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°
5.0	5.5m× 5.80																																			
6.0	5.80									5.80									8.5m× 5.80																	
7.0	5.80	7.1m× 5.00								5.80	7.6m× 5.00								5.80									5.80									
8.0	5.80	5.00	8.3m× 5.00	8.2m× 5.00						5.80	5.00		8.7m× 5.00						5.80	8.1m× 5.00								5.80	8.6m× 5.00							
9.0	5.80	5.00	5.00	5.00		4.00		9.5m× 2.60		5.80	5.00	9.3m× 5.00	5.00		9.5m× 4.00				5.80	5.00		9.2m× 5.00						5.80	5.00		9.7m× 5.00					
10.0	5.80	5.00	5.00	5.00	10.8m× 4.10	4.00		2.60		5.80	5.00	5.00	5.00	11.3m× 4.10	4.00		2.60		5.80	5.00	5.00	5.00	11.8m× 4.10	4.00		10.5m× 2.60		5.80	5.00	10.4m× 5.00	5.00		10.5m× 4.00		11.0m× 2.60	
12.0	5.80	5.00	5.00	5.00	4.10	4.00	12.5m× 3.20	2.60		5.80	5.00	5.00	5.00	4.10	4.00	13.0m× 3.20	2.60		5.80	5.00	5.00	5.00	4.10	4.00		2.60		5.80	5.00	5.00	5.00	12.9m× 4.10	4.00		2.60	
14.0	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	14.5m× 2.30	5.80	5.00	5.00	5.00	4.10	4.00	13.5m× 3.20	2.60	15.0m× 2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	15.5m× 2.30
16.0	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30
18.0	5.40	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.30	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.20	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.10	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30
20.0	4.70	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	4.60	4.90	4.90	4.90	4.10	4.00	3.20	2.60	2.30	4.50	4.80	4.80	4.80	4.10	4.00	3.20	2.60	2.30	4.40	4.70	4.70	4.70	4.10	4.00	3.20	2.60	2.30
22.0	20.2m× 4.65	4.35	4.35	4.35	4.10	4.00	3.20	2.60	2.30	4.00	4.30	4.30	4.30	4.10	4.00	3.20	2.60	2.30	3.90	4.20	4.20	4.20	4.10	4.00	3.20	2.60	2.30	3.80	4.10	4.10	4.10	4.10	4.00	3.20	2.60	2.30
24.0		3.85	3.85	3.85	3.85	3.85	3.20	2.60	2.30	22.8m× 3.80	3.75	3.75	3.75	3.75	3.75	3.20	2.60	2.30	3.40	3.70	3.70	3.70	3.70	3.70	3.20	2.60	2.30	3.30	3.60	3.60	3.60	3.60	3.60	3.20	2.60	2.30
26.0		25.4m× 3.40	25.8m× 3.30	3.30	3.30	3.30	3.20	2.60	2.30		3.25	3.25	3.25	3.25	3.25	3.20	2.60	2.30	25.4m× 2.95	3.15	3.15	3.15	3.15	3.15	3.15	2.60	2.30	2.80	3.10	3.10	3.10	3.10	3.10	3.10	2.60	2.30
28.0				2.95	2.95	2.95	2.95	2.60	2.30		2.90	2.90	2.90	2.90	2.90	2.90	2.60	2.30		2.85	2.85	2.85	2.85	2.85	2.85	2.60	2.30	2.50	2.80	2.80	2.80	2.80	2.80	2.80	2.60	2.30
30.0				28.2m× 2.90	28.6m× 2.80	2.65	2.65	2.60	2.30			28.4m× 2.85	2.60	2.60	2.60	2.60	2.60	2.30		2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.30		2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.30
32.0						31.6m× 2.50	31.8m× 2.30	2.35	2.30				33.8m× 2.45	31.4m× 2.35	2.25	2.25	2.25	2.25		33.6m× 2.40	31.0m× 2.35	2.20	2.20	2.20	2.20	2.20	2.20		2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
34.0								33.6m× 2.25	2.00						33.6m× 2.00	1.95	1.95	1.95				33.4m× 1.90	1.85	1.85	1.85	1.85	1.85		33.2m× 1.90	33.6m× 1.85	1.80	1.80	1.80	1.80	1.80	1.80

Boom length (m)	33.0									36.0									39.0									42.0								
Jib length (m)	1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0		1.0	6.0		9.0		12.0		15.0	
Working radius (m) \ Offset angle	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°	~	10°	30°	10°	30°	10°	30°	10°	30°
7.0	7.6m× 5.80																																			
8.0	5.80									8.1m× 5.80									8.6m× 5.80																	
9.0	5.80	9.1m× 5.00								5.80	9.7m× 5.00								5.80									9.1m× 5.80								
10.0	5.80	5.00	10.9m× 5.00	10.2m× 5.00		11.0m× 4.00		11.5m× 2.60		5.80	5.00	11.4m× 5.00	10.6m× 5.00		11.6m× 4.00				5.80	10.2m× 5.00		11.3m× 5.00						5.80	10.7m× 5.00		11.8m× 5.00					
12.0	5.80	5.00	5.00	5.00	12.9m× 4.10	4.00		2.60		5.80	5.00	5.00	5.00	13.4m× 4.10	4.00		12.1m× 2.60		5.80	5.00	5.00	5.00		12.1m× 4.00		12.6m× 2.60		5.80	5.00	12.5m× 5.00	5.00		12.6m× 4.00		13.1m× 2.60	
14.0	5.80	5.00	5.00	5.00	4.10	4.00	14.6m× 3.20	2.60		5.80	5.00	5.00	5.00	4.10	4.00	15.1m× 3.20	2.60		5.80	5.00	5.00	5.00	4.10	4.00	15.6m× 3.20	2.60		5.80	5.00	5.00	5.00	14.4m× 4.10	4.00		2.60	
16.0	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	5.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	16.5m× 2.30	5.70	5.00	5.00	5.00	4.10	4.00	3.20	2.60	17.1m× 2.30	5.60	5.00	5.00	5.00	4.10	4.00	18.1m× 3.20	2.60	17.6m× 2.30
18.0	5.00	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	4.90	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	4.80	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30	4.70	5.00	5.00	5.00	4.10	4.00	3.20	2.60	2.30
20.0	4.30	4.60	4.60	4.60	4.10	4.00	3.20	2.60	2.30	4.20	4.50	4.50	4.50	4.10	4.00	3.20	2.60	2.30	4.10	4.40	4.40	4.40	4.10	4.00	3.20	2.60	2.30	4.00	4.30	4.30	4.30	4.10	4.00	3.20	2.60	2.30
22.0	3.70	4.00	4.00	4.00	4.00	4.00	3.20	2.60	2.30	3.60	3.90	3.90	3.90	3.90	3.90	3.20	2.60	2.30	3.50	3.80	3.80	3.80	3.80	3.80	3.20	2.60	2.30	3.40	3.70	3.70	3.70	3.70	3.70	3.20	2.60	2.30
24.0	3.20	3.50	3.50	3.50	3.50	3.50	3.20	2.60	2.30	3.10	3.40	3.40	3.40	3.40	3.40	3.20	2.60	2.30	3.00	3.30	3.30	3.30	3.30	3.30	3.20	2.60	2.30	2.90	3.10	3.10	3.10	3.10	3.10	3.20	2.60	2.30
26.0	2.70	3.00	3.00	3.00	3.00	3.00	3.00	2.60	2.30	2.65	2.95	2.95	2.95	2.95	2.95	2.95	2.60	2.30	2.55	2.85	2.85	2.85	2.85	2.85	2.85	2.60	2.30	2.45	2.75	2.75	2.75	2.75	2.75	2.75	2.60	2.30
28.0	2.40	2.70	2.70	2.70	2.70	2.70	2.70	2.60	2.30	2.30	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.30	2.20	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.30	2.10	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.30
30.0	2.05	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.30	2.00	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	1.90	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	1.80	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
32.0	30.6m× 1.90	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	1.70	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.60	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.50	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
34.0		1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	33.2m× 1.50	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.30	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.20	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50

Boom length (m)	45.0									48.0								
Jib length (m)	1.0	6.0		9.0						1.0								
Working radius (m) \ Offset angle	~	10°	30°	10°	30°					~								
9.0	9.7m× 5.80																	
10.0	5.80	11.2m× 5.00								10.2m× 5.80								
12.0	5.80	5.00	13.0m× 5.00	12.4m× 5.00						5.80								
14.0	5.80	5.00	5.00	5.00	15.0m× 4.10					5.80								
16.0	5.50	5.00	5.00	5.00	4.10					5.40								
18.0	4.60	4.90	4.90	4.90	4.10					4.50								
20.0	3.90	4.20	4.20	4.20	4.10					3.80								
22.0	3.30	3.60	3.60	3.60	3.60					3.20								
24.0	2.80	3.10	3.10	3.10	3.10					2.70								
26.0	2.35	2.65	2.65	2.65	2.65					2.25								
28.0	2.00	2.30	2.30	2.30	2.30					1.90								
30.0	1.70	2.00	2.00	2.00	2.00					1.60								
32.0	1.40	1.70	1.70	1.70	1.70					1.30								
34.0	1.10	1.40	1.40	1.40	1.40					1.05								

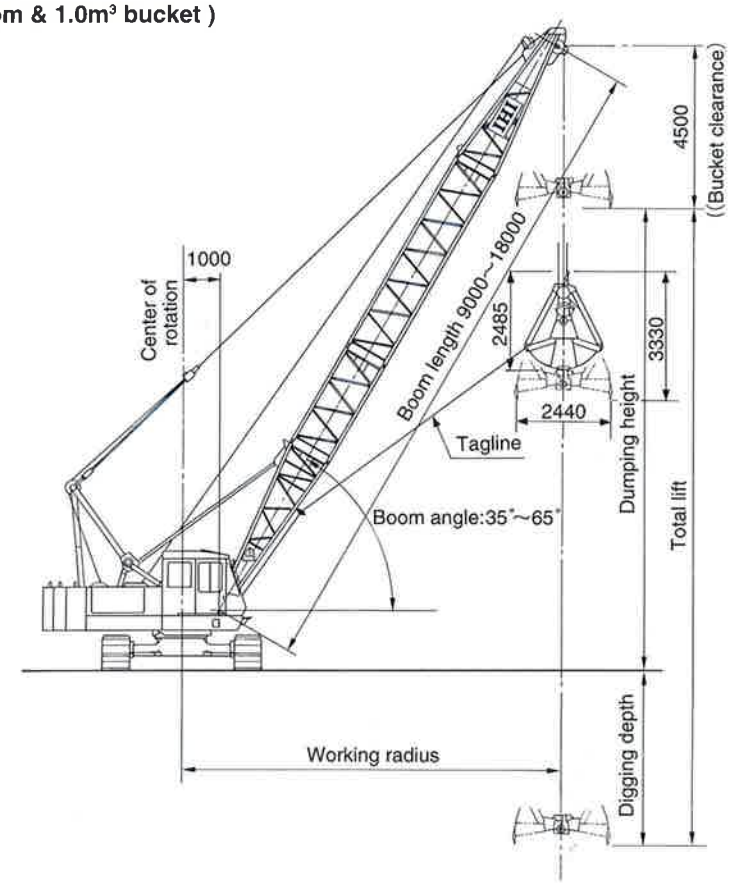
NOTES for JIB BOOM works

1. One part line for jib hook lifting. Rated load is limited to 5.8 tons.
   The weight of the hook block and other lifting devices must be considered to be a part of the load.
   5.8 ton hook block ----- 0.21 ton
2. Crawler frame and A frame (High gantry) should also be extended before working.
3. Jib boom can be used only for crane operations.
   Do not use for bucket operations.
4. Main boom can only be used for crane works when installed with 6.0m ~ 15.0m jib boom.
5. All rated loads are based on structural strength factor.
   Make sure to prevent overloading.

Clamshell

CCH350-3 CCH400-3 CCH500-3

■Working range (with 18m boom & 1.0m³ bucket)
(Unit : mm)



■Clamshell Specifications

Max. lift above ground (m)		13.3 (18m boom + 1.0m³ bucket)		
Rope speed	Bucket closing (m/min)	*100/70 · 50/35		
	Bucket holding (m/min)	*100/70 · 50/35		
	Boom hoist and lowering (m/min)	*60		
Part line	Bucket closing	6 (for all types bucket)		
	Bucket holding	1 (for all types bucket)		
	Boom hoist	12		
Rated lifting load (Bucket + load) (ton)		5		
		CCH350-3	CCH400-3	CCH500-3
Counterweight (ton)		11	12	16
Total operating weight (ton) (Boom length 18m) (Bucket capacity 1.0m³)		41.8	43.3	51.3
Average ground bearing pressure (kg/cm²) (Boom length 18m) (Bucket capacity 1.0m³)		0.62	0.61	0.65

* : The rope speed changes depending on the load.

■Clamshell bucket specifications

Classification	Type	Capacity (m³)	Weight (ton)
Option	HD	0.6	3.0
Option	GP	0.8	2.22
Standard	GP	1.0	2.5
Option	WR	1.0	2.0
Option	WR	1.25	1.6

Bucket type (purpose)
HD : Heavyduty (civil engineering, construction)
GP : General purpose (heavy load handling)
WR : Wide rehandling (medium load rehandling)

■Wire rope (Rope diameter (mm) / Guaranteed strength (ton))

Place of use	CCH350-3	CCH400-3	CCH500-3	Rope type
Bucket closing	20.0/30.0			A
Bucket holding	20.0/30.0			A
Boom hoist	16.0/21.9			B
Boom suspension	28.0/59.7	28.0/59.7	31.5/74.9	A
Tagline	10.0/5.5			C

Rope type A : 6 × Fi (29) IWRC regular Z lay
B : T IWRC 6 × WS (31) regular Z lay
C : 6 × (19) fiber core regular Z lay
Length of wire rope to be decided according to the ordered boom length.

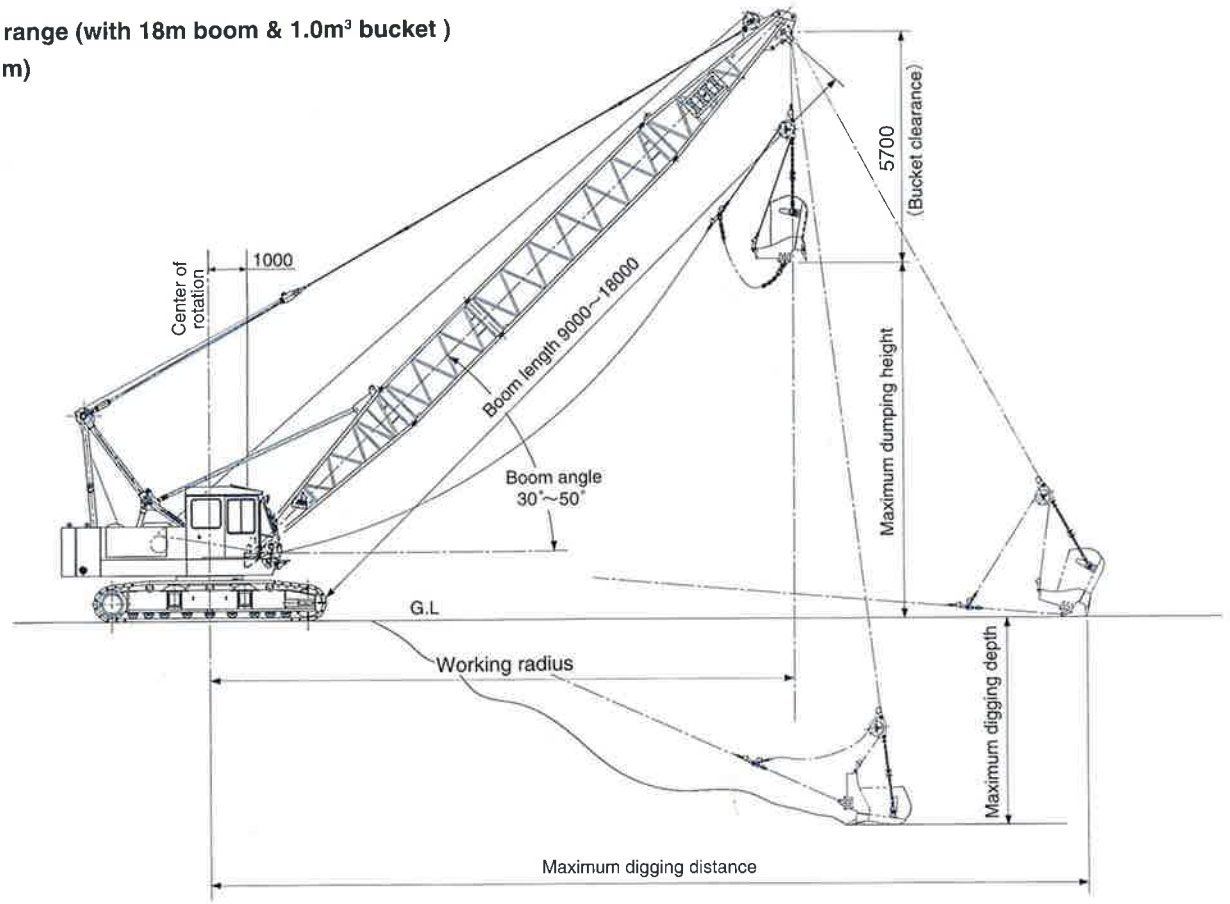
■Working range and rated loads

Boom length (m)		9.0				12.0				15.0				18.0			
Boom angle		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 load (metric ton)	CCH350-3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.7	5.0	5.0
	CCH400-3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
	CCH500-3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.8	5.0	5.0	5.0
Total lift (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		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		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
1. Rated loads are the upper limit of the "bucket weight + load" during clamshell work. Use a bucket suitable for the kind of the load required so that the rated load figures in the table are not exceeded.
2. The maximum digging height is for a standard 1.0m³ bucket.
3. The maximum digging depth is for standard wire rope length as follows.
Closing ····· 65m
Holding ····· 53m
Tagline ····· 50m

Dragline CCH350-3 CCH400-3 CCH500-3

■Working range (with 18m boom & 1.0m³ bucket)
(Unit : mm)



■Dragline Specifications

Max. digging distance (m)		21.7 (18m boom + 1.0 m³ bucket)		
Max.dumping height (m)		10.9 (18m boom + 1.0 m³bucket)		
Max.digging depth (m)		9.6 (18m boom + 1.0 m³ bucket)		
Rope speed	Bucket hoist (m/min)	*100/70 · 50/35		
	Bucket digging (m/min)	*100/70 · 50/35		
	Boom hoist and lowering (m/min)	*60		
Part line	Bucket hoist	1		
	Bucket digging	1		
	Boom hoist	12		
		CCH350-3	CCH400-3	CCH500-3
Counterweight (ton)		11	12	11.5
Total operating weight (ton) (Boom length 18m) (Bucket capacity 1.0m³)		40.9	42.4	45.9
Average ground bearing pressure (kg/cm²) (Boom length 18m) (Bucket capacity 1.0m³)		0.61	0.60	0.58

* : The rope speed changes depending on the load.

■Dragline bucket Specifications

Classification	Type	Capacity (m³)	Weight (ton)
Option	GP	0.6	0.93
Option	GP	0.8	1.17
Standard	GP	1.0	1.40
Option	LD	1.2	1.60

GP : General purpose digging
LD : Light digging, scraping

■ Wire rope (Rope diameter (mm) / Guaranteed strength (ton))

Place of use	CCH350-3	CCH400-3	CCH500-3	Rope type
Hoist rope	20.0/30.0			A
Drag rope	22.0/41.3			C
Boom hoist	16.0/21.9			B
Boom suspension	28.0/59.7	28.0/59.7	31.5/74.9	A
Dump rope	16.0/19.2			A

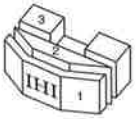
Rope type A : 6 × Fi (29) IWRC regular Z lay
B : T IWRC 6 × WS (31) regular Z lay
C : T7 × 7 + Fi (29) Toughsuper
Length of wire rope to be decided according to the ordered boom length.
One (1) sheave type boom point is recommended to dragline work.

■Working range and rated loads

Boom length (m)		9.0			12.0			15.0			18.0		
Boom angle		30°	40°	50°	30°	40°	50°	30°	40°	50°	30°	40°	50°
Working radius (m)		9.1	8.2	7.1	11.7	10.5	9.1	14.3	12.8	11.0	16.9	15.1	12.9
Rated lifting load (metric ton)	CCH350-3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.8	4.5	4.5
	CCH400-3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.1	4.5	4.5
	*CCH500-3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max. digging distance (m)		11.8	11.6	11.0	15.1	14.8	14.1	18.4	18.0	17.1	21.7	21.2	20.1
Max. digging depth (m)		6.0	5.8	5.3	8.6	8.3	7.7	10.8	10.8	10.1	10.8	10.8	10.8
Max. dumping height (m)		0.2	1.5	2.7	1.7	3.5	5.0	3.2	5.4	7.3	4.7	7.3	9.6

* : Applicable 11.5 ton counterweight only.

Notes
1. Rated loads is the total of the bucket's deadweight and grabbed load's weight. The total weight of this must not exceed the value in the table above.
2. Above capacities are based on 1.0m³ standard bucket.
3. The reach of bucket and digging depth differ according to the bucket size and type, in addition to the operational conditions.
4. Above working range is based on standard wire rope length as follows.
   Drag rope ····· 28m Hoist rope ····· 40m
5. Selection of the bucket type must be made according to the soil conditions. In particular do not use 1.2m³ bucket for solid soil or clay soil.

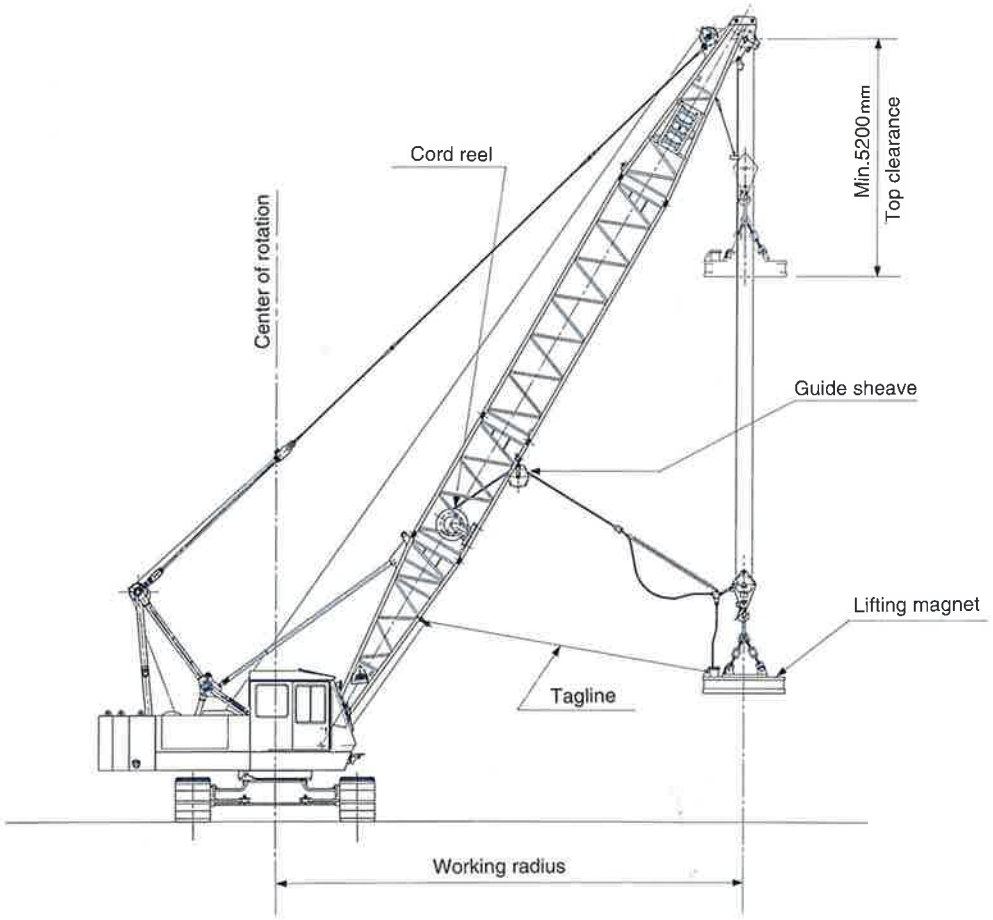


Counterweight
1. . . 4.5 ton
2. . . 5.0 ton] 11.5 ton] 16.0 ton
3. . . 6.5 ton

6. CCH500-3
   Remove outside 4.5ton counterwieght and operate with 11.5 ton.

Lifting magnet CCH350-3 CCH400-3 CCH500-3

■General layout



■Lifting magnet crane specifications

MODEL		CCH350-3	CCH400-3	CCH500-3	
Max. lifting capacity (metric ton) × working radius (m)		25 × 3	25 × 3	25 × 3 (**25 × 3)	
Boom length (m)		9~21	9~21	9~21	
Magnet diameter (mm)		1500	1500	1500	1800
Weight (ton)		2.7	2.7	2.7	4.2
Voltage		DC-220V	DC-220V	DC-220V	DC-220V
Generator capacity (kw/rpm)		20/1800	20/1800	20/1800	25/1800
Lifting capacity (ton)	Ingot	18	18	18	18
	Punched scrap	0.5~0.9	0.5~0.9	0.5~0.9	0.175~1.3
	Scrap	1.2~1.9	1.2~1.9	1.2~1.9	1.65~2.8
	Pig iron	1.3~1.9	1.3~1.9	1.3~1.9	1.8~2.8
Operating weight with 18m boom and 1500mm dia. magnet (ton)		42.8	44.3	52.2 (**47.7)	53.7 (**49.2)
Counterweight (ton)		11	12	16 (**11.5)	16 (**11.5)
Average ground bearing pressure (kg/cm²)		0.63	0.63	0.66 (**0.6)	0.68 (**0.62)

** : When installed 11.5 ton counterweight.

■ Wire rope (Rope diameter (mm) / Guaranteed strength (ton))

Place of use	CCH350-3	CCH400-3	CCH500-3	Rope type
Load hoist	20.0/30.0			A
Boom hoist	16.0/21.9			B
Boom suspension	28.0/59.7	28.0/59.7	31.5/74.9	A
Tagline	10.0/5.5			C

Rope type A : 6 × Fi (29) IWRC regular Z lay
B : T IWRC 6 × WS (31) regular Z lay
C : 6 × (19) fiber core regular Z lay
Length of wire rope to be decided according to the ordered boom length.

Lifting magnet

CCH350-3 CCH400-3 CCH500-3

■Lifting magnet crane rated lifting loads.

CCH350-3 (with 11 ton counterweight)

(unit : metric ton)

Boom length (m)	Working radius (m)														
	3	3.7	4	4.5	5	6	7	8	9	10	12	14	16	18	20
9	25.00	25.00	25.00	24.40	20.50	15.65	12.60	10.45	8.9m× 9.00						
12		25.00	25.00	24.35	20.45	15.60	12.55	10.40	8.85	7.70	11.5m× 6.35				
15		3.9m× 25.00	25.00	24.25	20.35	15.55	12.45	10.30	8.75	7.60	6.00	4.90	14.1m× 4.90		
18			4.4m× 20.00	20.00	20.45	15.45	12.40	10.25	8.70	7.55	5.95	4.85	4.10	16.7m× 3.85	
21					15.00	15.00	12.35	10.20	8.65	7.50	5.90	4.80	4.05	3.40	19.3m× 3.05

CCH400-3 (with 12 ton counterweight)

(unit : metric ton)

Boom length (m)	Working radius (m)														
	3	3.7	4	4.5	5	6	7	8	9	10	12	14	16	18	20
9	25.00	25.00	25.00	25.00	22.75	17.30	13.90	11.60	8.9m× 10.00						
12		25.00	25.00	25.00	22.65	17.20	13.80	11.50	9.85	8.55	11.5m× 7.05				
15		3.9m× 25.00	25.00	25.00	22.55	17.10	13.70	11.40	9.75	8.45	6.65	5.45	14.1m× 5.40		
18			4.4m× 25.00	25.00	22.45	17.00	13.60	11.30	9.65	8.35	6.55	5.35	4.50	16.7m× 4.20	
21					20.00	16.95	13.65	11.25	9.60	8.30	6.50	5.30	4.45	3.75	19.3m× 3.40

CCH500-3 (with 11.5 ton counterweight)

(unit : metric ton)

Boom length (m)	Working radius (m)														
	3	3.7	4	4.5	5	6	7	8	9	10	12	14	16	18	20
9	25.00	25.00	25.00	25.00	25.00	19.80	15.70	13.00	8.9m× 11.10						
12		25.00	25.00	25.00	25.00	19.70	15.60	12.90	11.00	9.60	11.5m× 8.00				
15		3.9m× 25.00	25.00	25.00	25.00	19.60	15.50	12.80	10.90	9.50	7.35	5.90	14.1m× 5.80		
18			4.4m× 25.00	25.00	25.00	19.50	15.40	12.70	10.80	9.40	7.25	5.80	4.80	16.7m× 4.50	
21					25.00	19.40	15.30	12.60	10.70	9.40	7.15	5.70	4.70	4.00	19.3m× 3.65

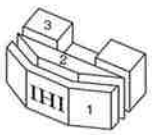
CCH500-3 (with 16 ton counterweight)

(unit : metric ton)

Boom length (m)	Working radius (m)														
	3	3.7	4	4.5	5	6	7	8	9	10	12	14	16	18	20
9	25.00	25.00	25.00	25.00	25.00	23.05	18.45	15.40	8.9m× 13.30						
12		25.00	25.00	25.00	25.00	22.95	18.35	15.30	13.10	11.30	11.5m× 9.45				
15		3.9m× 25.00	25.00	25.00	25.00	22.85	18.25	15.20	13.00	11.20	8.90	7.30	14.1m× 7.20		
18			4.4m× 25.00	25.00	25.00	22.75	18.15	15.10	12.90	11.10	8.80	7.20	6.00	16.7m× 5.70	
21					25.00	22.65	18.05	15.00	12.80	11.00	8.70	7.10	5.90	5.10	19.3m× 4.60

Notes

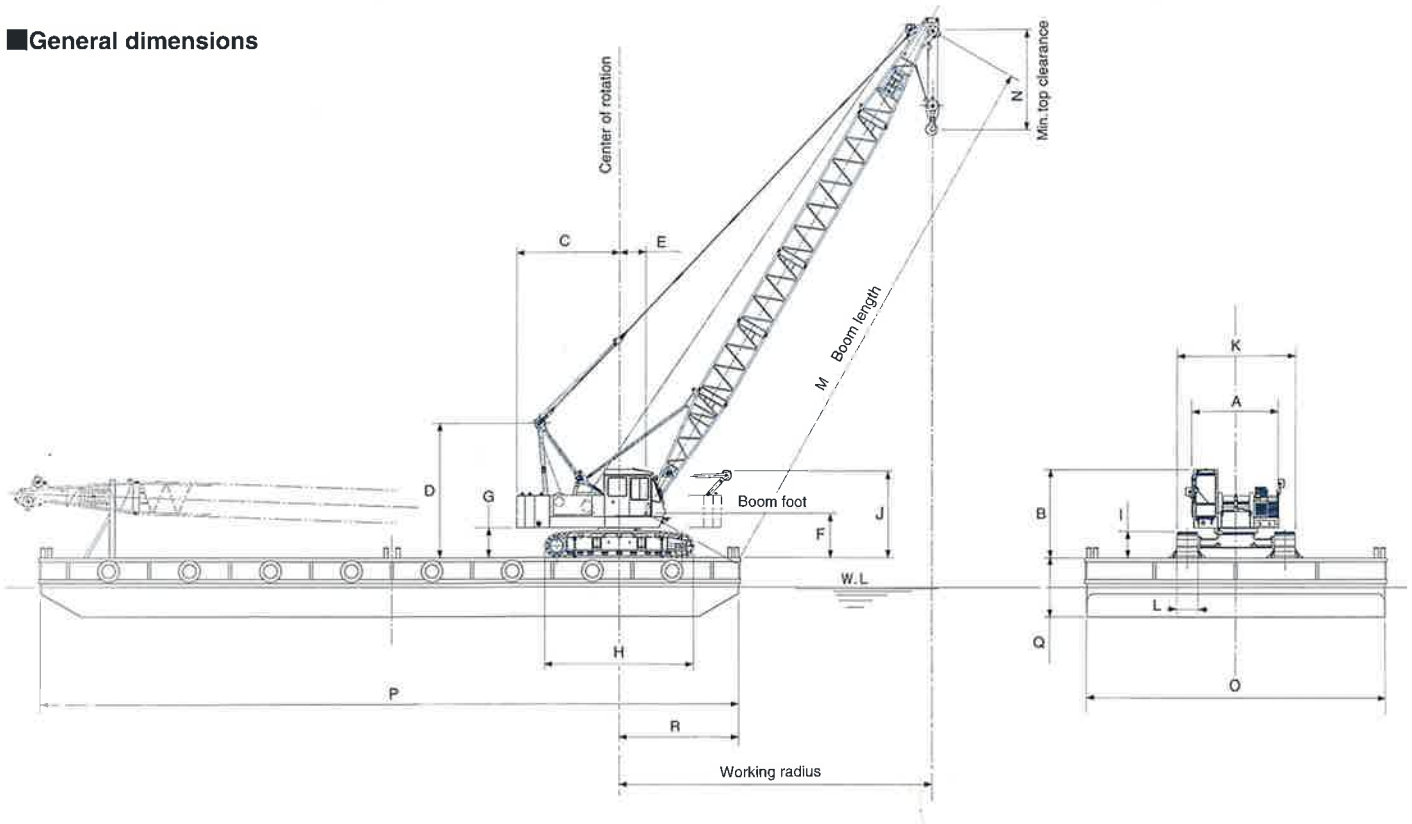
1. Above rated loads are based on firm level ground whithin 78% of tipping load at any point 360° around the machine and with front stability of 1.15 or more.
2. Crawler frame and A frame (High gantry) should also be extended before working.
3. The weight of the hook block, magnet and other lifting devices must be considered to be a part of the load.
   Hook block weight.
   - CCH350-3 25 ton ------- 0.35 ton 15 ton ------- 0.31 ton
   - CCH400-3 25 ton ------- 0.35 ton 15 ton ------- 0.31 ton
   - CCH500-3 25 ton ------- 0.35 ton 15 ton ------- 0.31 ton
4. Depending on the number of part line, rated lifting load is limited as follows.
   - 2-part line ------- up to 11.4 tons
   - 3-part line ------- up to 16.0 tons
   - 4-part line ------- up to 20.0 tons
   - 5-part line ------- up to 25.0 tons
5. CCH500-3 counterweight arrangement.



Counterweight
1. . . . . 4.5 ton
2. . . . . 5.0 ton] 11.5 ton] 16.0 ton
3. . . . . 6.5 ton

Pontoon mounted crane CCH350-3 CCH400-3 CCH500-3

■General dimensions



Above figure is for rference when mounting crawler crane on pontoon as floating crane.

■General dimensions

(Unit : mm)

	CCH350-3	CCH400-3	CCH500-3
A	3140	3140	3140
B	3240	3255	3275
C	3390	3470	3900
D	4555	5100	5210
E	1000	1000	1000
F	1605	1605	1650
G	1075	1075	1110
H	5095	5295	5570
I	990	990	970
J	3245	3255	3250
K	4060	4160	4350
L	760	760	760
M	9000~24000	9000~24000	9000~24000
N	3800	3800	3800
O	11000	11000	11000
P	22000	22000	26000
Q	2200	2200	2200
R	4000	4000	4500

Pontoon mounted crane CCH350-3 CCH400-3 CCH500-3

■Wire rope (Rope diameter (mm) / Guaranteed strength (ton))

Place of use	CCH350-3	CCH400-3	CCH500-3	Rope type
Main drum	20.0/30.0			A
Aux. drum	20.0/30.0			A
Boom hoist	16.0/21.9			B
Boom suspension	28.0/59.7	28.0/59.7	31.5/74.9	A

Rope type A : 6 × Fi (29) IWRC regular Z lay
B : T IWRC × WS (31) regular Z lay
Length of wire rope to be decided acording to the ordered boom length.

■Pontoon mounted crane specifications

MODEL		CCH350-3	CCH400-3	CCH500-3
Max. lifting capacity (metric ton) × working radius (m)		25 × 4.8	30 × 4.5	35 × 4.8
Max. boom length		24m		
Rope speed	Main drum hoist/lowering	*100/70 · 50/35 m/min		
	Aux. drum hoist/lowering	*100/70 · 50/35 m/min		
	Boom drum hoist/lowering	*60 m/min		
Part line	Hook Block capacity (ton) × part line (m)	25 × 5 5.8 × 1	25 × 5 5.8 × 1	30 × 6 5.8 × 1
	Boom drum hoist/lowering	12	12	12
Counterweight (ton)		11	12	16
Total operating weight (With 9 m boom) (including crawler fixing device)(ton)		39.3	40.8	48.9
Average ground bearing pressure (kg/cm²)		0.58	0.58	0.62

* : The rope speed changes depending on the load.

■Pontoon mounted crane rated lifting loads. (Throughout 360°)

CCH350-3 (with 11 ton counterweight)

(unit : metric ton)

Working radius (m)	Boom length (m) 9.0	12.0	15.0	18.0	21.0	24.0
3.0	25.00					
3.7	25.00	25.00	3.9m× 20.00			
4.0	25.00	25.00	20.00	4.4m× 20.00		
4.5	4.6m× 25.00	4.7m× 25.00	20.00	20.00		
5.0	22.80	22.75	5.4m× 20.00	5.3m× 20.00	5.6m× 15.00	5.5m× 15.00
6.0	17.40	17.35	17.30	17.25	6.6m× 15.00	6.5m× 15.00
7.0	14.00	13.95	13.90	13.85	13.75	13.70
8.0	11.60	11.55	11.50	11.45	11.35	11.30
9.0	8.9m× 10.00	9.80	9.75	9.70	9.60	9.55
10.0		8.55	8.50	8.45	8.35	8.30
12.0		11.5m× 7.10	6.70	6.65	6.55	6.50
14.0			5.50	5.45	5.35	5.30
16.0			14.1m× 5.45	4.60	4.50	4.45
18.0				16.7m× 4.30	3.80	3.75
20.0					19.3m× 3.40	3.15
22.0						21.9m× 2.75
No. of part line	5	5	4	4	3	3

CCH400-3 (with 12 ton counterweight)

(unit : metric ton)

Working radius (m)	Boom length (m) 9.0	12.0	15.0	18.0	21.0	24.0
3.0	30.00					
3.7	30.00	30.00	3.9m× 25.00			
4.0	30.00	30.00	25.00	4.4m× 20.00		
4.5	30.00	30.00	25.00	20.00		
5.0	25.30	25.25	25.00	5.7m× 20.00	5.6m× 20.00	5.5m× 15.00
6.0	19.25	19.20	19.15	19.10	19.05	15.00
7.0	15.50	15.45	15.40	15.35	15.30	7.1m× 15.00
8.0	12.90	12.85	12.80	12.75	12.70	12.65
9.0	8.9m× 11.15	10.95	10.90	10.85	10.80	10.75
10.0		9.50	9.45	9.40	9.35	9.30
12.0		11.5m× 7.85	7.40	7.35	7.30	7.25
14.0			6.05	6.00	5.95	5.90
16.0			14.1m× 6.00	5.00	4.95	4.90
18.0				16.7m× 4.70	4.20	4.15
20.0					19.3m× 3.80	3.60
22.0						21.9m× 3.10
No. of part line	6	6	5	4	4	3

NOTES

1. The working radius is horizontal distance from center of rotation to vertical line through the center line of gravity of the load.
2. The weight of the hook block and other lifting devices must be considered to be a part of the load.
   35 ton hook block ····· 0.35 ton　　30 ton hook block ····· 0.35 ton
   25 ton hook block ····· 0.35 ton　　15 ton hook block ····· 0.31 ton
   5.8 ton hook block ····· 0.12 ton
3. Do not exceed 3° of trim angle of pontoon on loaded condition.
4. Depending on the number of part line, rated lifting is limited as follows.
   1-part line ····· up to 5.8 tons　　5-part line ····· up to 25.0 tons
   2-part line ····· up to 11.4 tons　　6-part line ····· up to 30.0 tons
   3-part line ····· up to 15.0 tons　　7-part line ····· up to 35.0 tons
   4-part line ····· up to 20.0 tons
5. When 1 m jib installed, actual load that can be lifted with main hook block should be reduced 0.3 ton from above chart.
6. The 1 m jib lifting load should be reduced (0.3 ton + main hook block weight) from above chart. However do not exceed 5.8 tons.
7. Bucket operation can not be performed by 1 m jib.
8. Maximum boom length is 18 m on bucket work.
9. The rated lifting length is 5 ton on bucket work.
   Do not exceed 5 ton for "bucket weight + load" during bucket work.

Pontoon mounted crane CCH350-3 CCH400-3 CCH500-3

■Pontoon mounted crane rated lifting loads. (Throughout 360°)

CCH500-3 with 16 ton counterweight. (unit : metric ton)

Working radius (m)	Boom length (m)					
	9.0	12.0	15.0	18.0	21.0	24.0
3.0	35.00					
3.7	35.00	35.00	3.9m x 30.00			
4.0	35.00	35.00	30.00	4.4m x 25.00		
4.5	4.8m x 35.00	4.9m x 35.00	30.00	25.00		
5.0	33.90	33.80	5.3m x 30.00	25.00	25.00	5.5m x 25.00
6.0	25.60	25.50	25.40	6.1m x 25.00	25.00	25.00
7.0	20.50	20.40	20.30	20.20	20.10	20.00
8.0	17.10	17.00	16.90	16.80	16.70	16.60
9.0	8.9m x 14.80	14.50	14.40	14.30	14.20	14.10
10.0		12.60	12.50	12.40	12.30	12.20
12.0		11.5m x 10.50	9.90	9.80	9.70	9.60
14.0			8.10	8.00	7.90	7.80
16.0			14.1m x 8.00	6.70	6.60	6.50
18.0				16.7m x 6.95	5.70	5.60
20.0					19.3m x 5.20	4.90
22.0						21.9m x 4.30
No. of part line	7	7	6	5	5	5

NOTES

1. The working radius is horizontal distance from center of rotation to vertical line through the center line of gravity of the load.
2. The weight of the hook block and other lifting devices must be considered to be a part of the load.
   35 ton hook block ····· 0.35 ton　　30 ton hook block ····· 0.35 ton
   25 ton hook block ····· 0.35 ton　　15 ton hook block ····· 0.31 ton
   5.8 ton hook block ····· 0.12 ton
3. Do not exceed 3° of trim angle of pontoon on loaded condition.
4. Depending on the number of part lines, rated lifting is limited as follows.
   1-part line ····· up to 5.8 tons　　5-part line ····· up to 25.0 tons
   2-part line ····· up to 11.4 tons　　6-part line ····· up to 30.0 tons
   3-part line ····· up to 15.0 tons　　7-part line ····· up to 35.0 tons
   4-part line ····· up to 20.0 tons
5. When 1 m jib installed, actual load that can be lifted with main hook block should be reduced 0.3 ton from above chart.
6. The 1 m jib lifting load should be reduced (0.3 ton + main hook block weight) from above chart. However do not exceed 5.8 tons.
7. Bucket operation can not be performed by 1 m jib.
8. Maximum boom length is 18 m on bucket work.
9. The rated lifting length is 5 ton on bucket work.
   Do not exceed 5 ton for "bucket weight + load" during bucket work.

User-Friendly Systems offer best of Mark Ⅲ's Exceptional Versatility and Reliability.

Convenient control lever design for no-fatigue operations.

The slewing lever is an ergonomic hand grip design with an easy one-touch engine throttle switch. No-slip brake pedals with rubber covers allow for long hours of operation without fatigue. Brake depression angle and pedal stroke have been improved, and a foot rest added for periods of inactivity or rest while in the cab. In addition to the right hand boom control lever, a left foot control pedal is now standard. Perform complex derricking operations with greater ease and efficiency than ever before.

Graphic display Moment Limiter (Option) for absolutely safe operation. Crane stops automatically upon reaching rated load.

The Moment Limiter overload prevention device has an LCD screen with four selectable display modes. One display is used for input/setting of operational conditions. Other display modes indicate the actual loaded conditions in a figure, in a graph and in a chart. Upper and lower limit boom angle can be set optionally based on site conditions. Sound alarm when boom angle has reached limit.

Loaded condition in figure

Loaded condition in graph

Loaded condition in chart

CCH500-3 with 1m jib (Option)

Double Wing drum arrangement for maximum power.

Main and auxiliary hoist drums are equal width and are mounted on separate in-line shafts. Each drum is driven by an independent hydraulic motor, enabling operator to use winches at maximum efficiency. Plenty of surrounding space for drums provides easy access. A one-button winch mode selection system allows the operator to choose between Automatic/Free-fall or Crane/Bucket work modes.