

Fully Hydraulic Crawler Crane

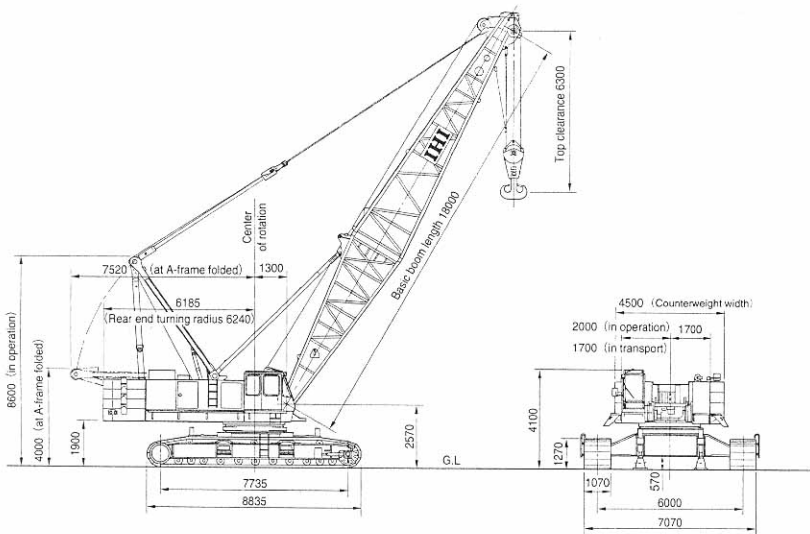
IHI

CCH1500-3



IHI Construction Machinery Limited

■ General dimensions (with basic boom) Unit : mm



■ Specifications

Performance	
Swing speed	0.5-2.3 rpm (controlled stepless)
Travel speed	*1.2 / 0.7 km/h
Gradeability	30% (16.7°)
Engine	
Maker & Model	HINO MOTOR EF 750
Type	4 cycle, water cooled, overhead valve, direct injection diesel
Rated output	275 PS/2000 rpm
Total displacement	16,745 ℓ
Fuel tank capacity	440 ℓ
Battery	12 V × 150 AH × 2 pcs.
Load Hoist System (Main and Aux.)	
Hydraulic motor	Axial piston type
Reduction gear	Two-stage planetary gear
Hoist drums (Main and Aux.)	Rebus type grooved cylindrical drum on individual shaft
Clutches	Internal expanding band type
Brakes	External contracting band type
Drum lock (Main and Aux.)	Ratchet type, spring-loaded hydraulic released
Boom Hoist System	
Hydraulic motor	Axial piston type
Reduction gear	Two-stage planetary gear
Hoist drum	Rebus type grooved cylindrical drum on shaft
Brake	Wet type multi disc
Drum lock	Ratchet type, spring-loaded hydraulic released

* Travel speed changes depending on the load.

Standard equipment

- 18 meter basic boom
- 150 ton hook block
- 2 work lights
- Room light
- Jack devices for dismantling
- Crawler steps
- Lateral cylinders for dismantling crawler
- Front windshield wipers
- Roof aspirator
- Large rear view mirrors (right/left)
- Reclining operator's seat
- Radio
- Cigarette lighter
- Ash tray
- Floor mat
- Foot pedal-type engine throttle
- Steps for operator's cab
- Low-noise cab
- Horn
- Swing warning flasher
- Travel warning horn
- Electric fuel filling pump
- Wire mesh boom walkway (for inner boom)
- Boom foot pin cylinder
- Operator's cab sliding device
- Sun visor
- High "A" frame erecting cylinder
- Hoist drum mirror and light
- Catwalk
- OK monitor

Optional equipment

- Moment limiter (Overload prevention)
- Sling wire for assembly and disassembly
- Off limit fence
- Combustion type heater
- Wireless phone
- Yellow rotary light
- Bullhorn
- Handrail for catwalk (foldable type)
- Catwalk (wider type, wiremovable handrail)
- Safety guard on cab (foldable type)
- Spark arrester
- Electrical type level indicator
- 3 m, 6 m, 9 m, insert boom for lift crane
- 13 m basic jib, 6 m insert jib (with pendant rope)
- 1 m jib
- 100 ton, 80 ton, 60 ton, hook block
- 30 ton hook block (common use for main hook of tower crane and 2 part line of jib)
- 15 ton, 11 ton hook block for jib
- Anemometer
- Boom indicator lamp
- Safety guard on boom
- Mast (required boom length over 69 m)
- Reeling winch
- Hydraulic type tagline
- Drum roller
- Fire extinguisher
- Protector cab and front glass
- Air conditioner

Specifications

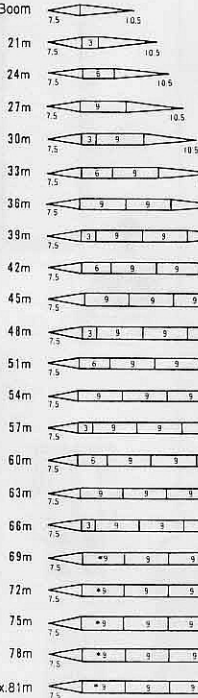
Max. lifting capacity × working radius	150 metric tons × 5.0 m	
Max. boom length w/ib boom	103 m (72 m main + 31m jib)	
Rope speed	Main drum hoist/lowering	* Hi : 100/60 m/min * Lo : 50/30 m/min
	Aux. drum hoist/lowering	* Hi : 100/60 m/min * Lo : 50/30 m/min
	Boom drum hoist/lowering	* 28 × 2 m/min
Part line	150 ton hook block	16 part line
	15 ton hook block	2 part line
	11 ton hook block	2 part line
	Boom drum hoist/lowering	9 × 2 part line
Counterweight	Standard spec.	Additional spec.
	56 ton	69ton+ 16ton (carbody wt.)
Total operating weight (with 18 m boom & 150 ton hook block)	152.6 ton	181.6 ton
Average ground bearing pressure	0.86 kg/cm ²	1.02 kg/cm ²

* : The rope speed will be changed depending on the load.

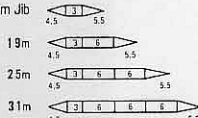
Boom Composition

Jib Boom Composition

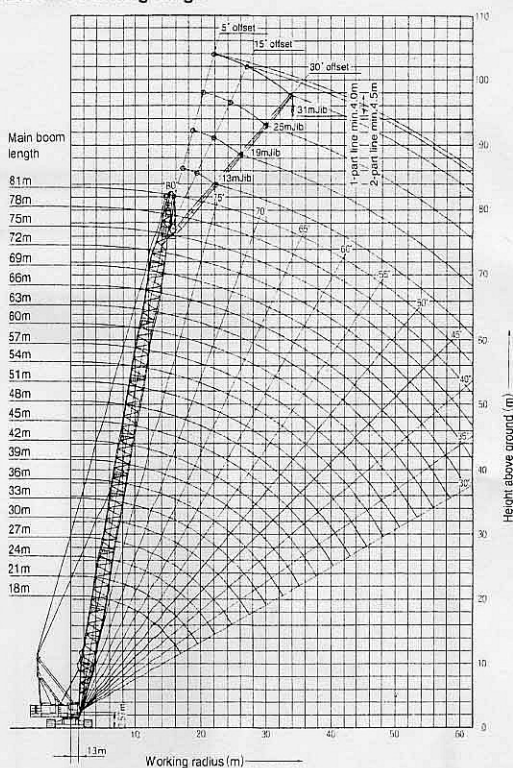
Basic 18m Boom



Basic 13m Jib



Crane working range



Note : 9 m insert boom with an asterisk (*) use with joint type pendant cable 1.5 m + 7.5 m. When installed with mast, use only 7.5 m pendant cable (remove 1.5 m). Required mast and middle suspension for boom length 69 m and longer. Above composition is in case of ordered 81 m boom and 31 m jib boom.

Combination of Boom and Jib (● : Available combination)

Jib boom length (m)	18-42	45	48	51	54	57	60	63	66	69	72	75	78	81
1	●													
13		●	●	●	●	●	●	●	●	●	●	●		
19			●	●	●	●	●	●	●	●	●	●		
25			●	●	●	●	●	●	●	●	●	●		
31			●	●	●	●	●	●	●	●	●	●		

Wire rope

Place of use	Rope diameter (mm)	Guaranteed strength (ton)	Rope type
Load hoist	26	59.6	19 + 39 × 7 Tough-nuflex
Boom hoist	20	34.1	T7 × 7 + 6 × WS (31) IWRC regular Z lay
Boom suspension	34	104.0	T7 × 7 + 6 × WS (36) IWRC regular Z lay
Jib hoist	26	59.6	19 + 39 × 7 Tough-nuflex
Jib suspension	28	59.7	6 × Fi (29) IWRC regular Z lay
Jib strut suspension	31.5	74.9	6 × Fi (29) IWRC regular Z lay
Middle suspension	20	30.0	6 × Fi (29) IWRC regular Z lay

Jib rated lifting loads (for standard counterweight)

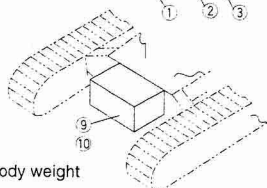
(Unit : metric ton)

Boom length (m)		45												48												51											
Jib length (m)		13				19				25				31				13				19				25				31							
Offset angle		5°		15°		30°		5°		15°		30°		5°		15°		30°		5°		15°		30°		5°		15°		30°		5°		15°		30°	
Working radius (m)																																					
12.0																																					
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Boom length (m)		54												57												60											
Jib length (m)		13				19				25				31				13				19				25				31							
Offset angle		5°		15°		30°		5°		15°		30°		5°		15°		30°		5°		15°		30°		5°		15°		30°		5°		15°		30°	
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Counterweight



Weight No.	Standard Counterweight (ton)	Additional Counterweight (ton)
1	16.0	16.0
2	15.0	15.0
3	15.0	15.0
4	5.0	5.0
5	5.0	5.0
6		4.9
7		3.2
8		4.9
9 (Front)		8.0
10 (Rear)		8.0
Total	56.0	85.0

