

IHI

CCH 2000

Fully Hydraulic Crawler Crane

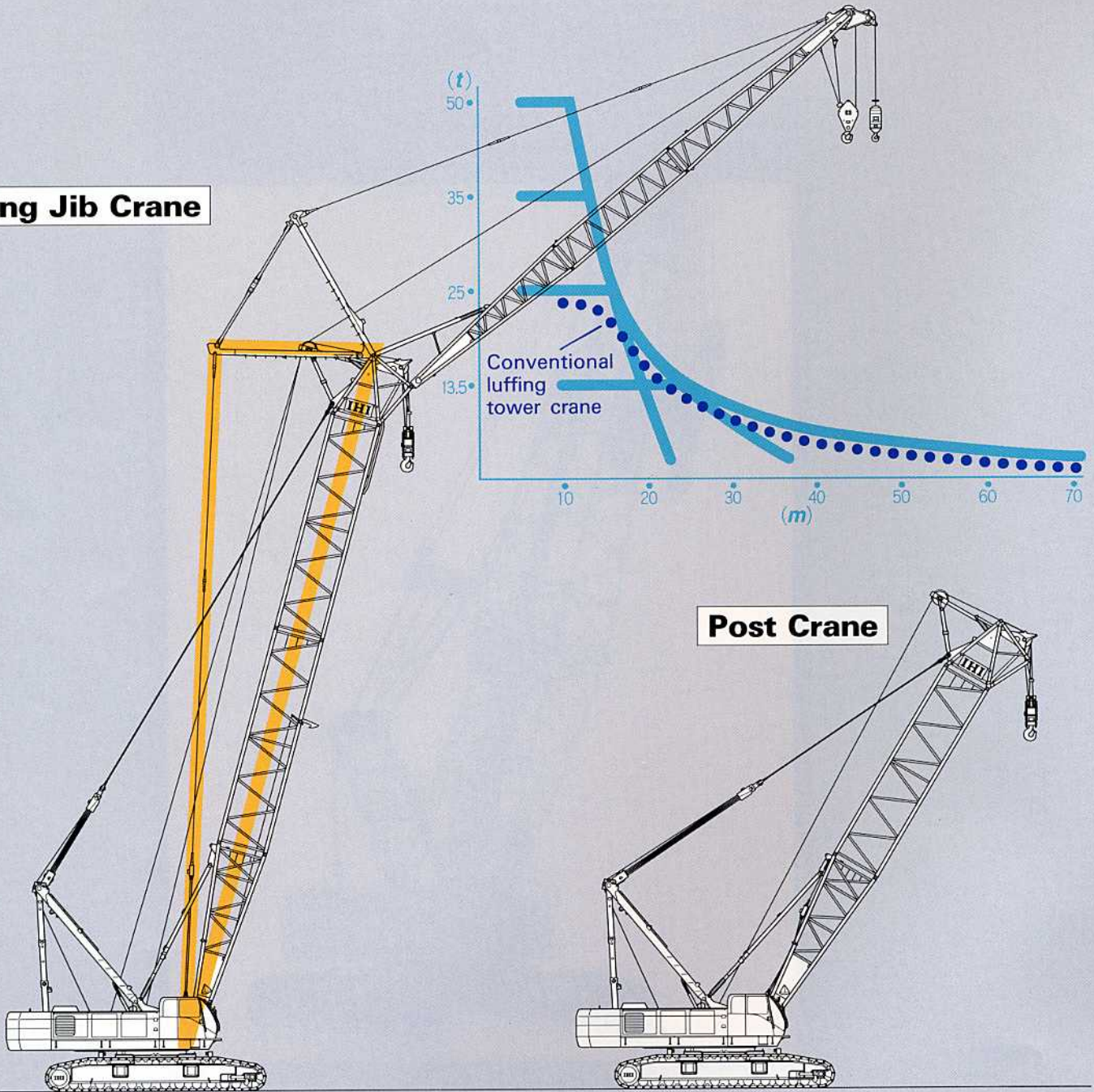
Lifting capacity 200 metric tons



IHI Construction Machinery Limited

Luffing Jib Crane evolved to equip “Auxiliary Jib”

Luffing Jib Crane



Post Crane

Selections are available from:

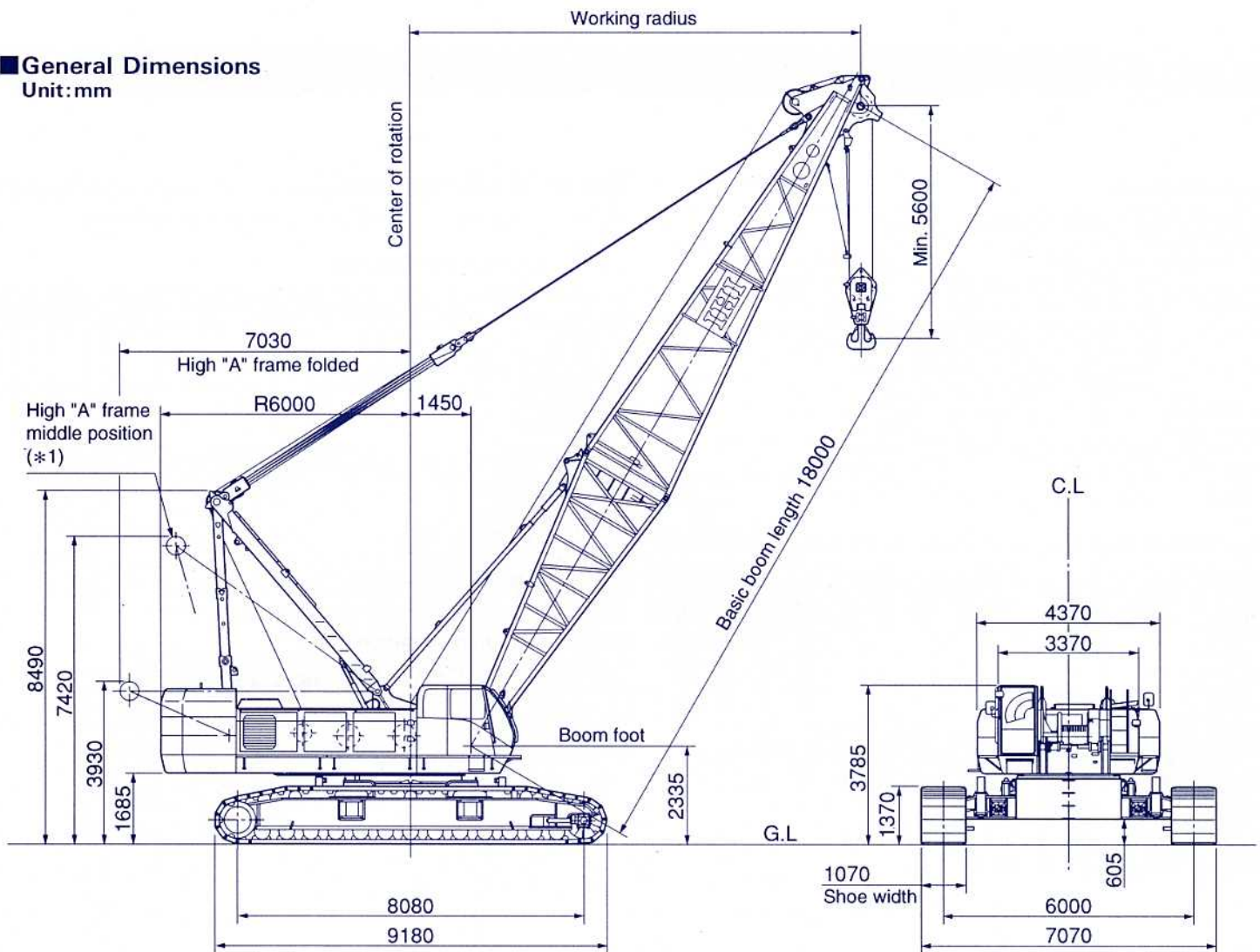
- 1) 50-ton lifting with Post
- 2) 25-ton lifting with Luffing Jib
- 3) 13.5-ton lifting with Auxiliary Jib

Simultaneous lifting by Post and Auxiliary Jib is not permitted.

Middle Equalizer for Luffing Jib lifting is tentatively stowed on inner post when the Luffing Jib is dismantled.

General Dimensions

Unit: mm



Specifications

Performance	
Swing speed	1.7min ⁻¹ (1.7rpm) [Constant swing speed 0.6min ⁻¹ (0.6rpm)---optional]
Travel speed	※0.9/0.6km/h
Gradability	30%(16.7°)
Engine	
Make	HINO MOTOR
Model	K13C-TJ (with turbo) diesel engine
Type	4-cycle, water cooled, straight 6-cylinder, direct injection
Rated output	235kw/2000min ⁻¹ (320PS/2000rpm)
Total piston displacement	12.882 ℓ
Fuel tank capacity	450 ℓ
Battery	DC12V×150AH×2pcs.
Main hoist system (Front left axle, also used for hoisting tower jib)	
Hydraulic motor	Variable displacement axial piston type
Reduction gear	Two-stage planetary gear
Hoist drum	Single drum driven independently by hydraulic motor, lebus grooved drum
Clutch	Internal expanding band type
Brake	External contracting band type
Drum lock	Ratchet lock
Aux. hoist system (Rear left axle)	
Hydraulic motor	Variable displacement axial piston type
Reduction gear	Two-stage planetary gear
Hoist drum	Single drum driven independently by hydraulic motor, lebus grooved drum
Clutch	Internal expanding band type
Brake	External contracting band type
Drum lock	Ratchet lock
Boom hoist system (Rear right axle, also used for hoisting tower post)	
Hydraulic motor	Variable displacement axial piston type
Reduction gear	Three-stage planetary gear
Hoist drum	Dual drums driven independently by hydraulic motor, lebus grooved drum
Brake	Wet type multi-disk
Drum lock	Ratchet lock

※The travel speed changes depending on the load.

Standard equipment

- **Instrument for crane**
 - Engine tacho meter (Hour meter)
 - Hydraulic oil pressure gauge (for control circuit)
 - Fuel level gauge
 - Engine coolant thermo indicator (indicated bar graph in OK monitor)
- **Lighting for crane**
 - 2-Work light (24v×80w)
 - 1-Room light (24v×10w)
- **Safety devices**
 - Automatic stop for hook overwinding
 - Automatic stop for boom overwinding
 - 2nd boom stop device (non-resettable)
 - Telescopic boom limit stop
 - Swing lock
 - Main and auxiliary drum lock
 - Boom hoist drum lock
 - Safety valve for hydraulic circuit
 - Clutch engage pin on main and auxiliary winch
 - Counter balance valve
 - Control lever locking device
 - Traction lever lock
 - Automatic braking system
 - Engine start voice alarm
- **Other standard accessories**
 - Front windshield wipers (intermittent, w/washer)
 - Roof wipers (intermittent, w/washer)
 - Sunvisor
 - Sun shade
 - Storage pouch
 - Tool box
 - Reclining operator's seat
 - Floor mat
 - Steps for operator's cab
 - Radio
 - Cigarette lighter
 - Ash tray

- Large rear view mirrors (right/left)
- Signal horn
- Electric fuel filling pump
- Swing warning flasher & alarm
- Travel warning alarm
- High "A" frame erecting device
- Low-noise cab
- Bronze tinted glass
- Wire mesh boom workway (for inner boom)
- Foot rest
- Electric type engine throttle
- Foot pedal-type engine throttle
- Ultra low-speed control (w/selector switch for coupling with engine speed or independent)
- Hydraulic assist brake for main and aux.winch
- Winch mode selector for main and aux. winch
- Rope guide roller on outer boom
- Plug socket
- Loud speaker
- Dial-type winch speed adjustment device (main, aux. and boom)
- Pump power shift device
- Emergency engine stop switches
- Foot pin cylinder device
- Fulcrum plate for erecting attachment (also used as climbing step to operator's cabin)

Optional equipment

- Moment limiter(*2)
- Optional boom canthus setting device (included in moment limiter)
- Automatic stop system (activated when near the marginal angle or when load is 90%)
- Built-in type air conditioner
- Large-sized storage bin

(*1) High "A" frame middle position when mast is in use.

(*2) Optional depend on region

Specifications

Max. Lifting capacity × working radius	200metric tons × 5.0m	
Max. boom length	90m	
Max. boom length (main + jib)	103m(72m boom + 31m jib)	
Rope speed	Main drum hoist/lowering	* 110~55/55~28m/min
	Aux. drum hoist/lowering	* 110~55/55~28m/min
	Boom drum hoist/lowering	* 32~14m/min × 2
Part line	Hook block capacity × Part line	200ton × 16
	Hook block capacity × Part line	13.5ton × 1
	Boom drum hoist	18
Counterweight	78ton	
Weight for body	16ton	
Total operating weight (with 18m boom)	193ton	
Average ground bearing pressure	103kPa(1.05kgf/cm ²)	

* The rope speed changes depending on the load.

Combination of Boom and Jib (●: Available combination)

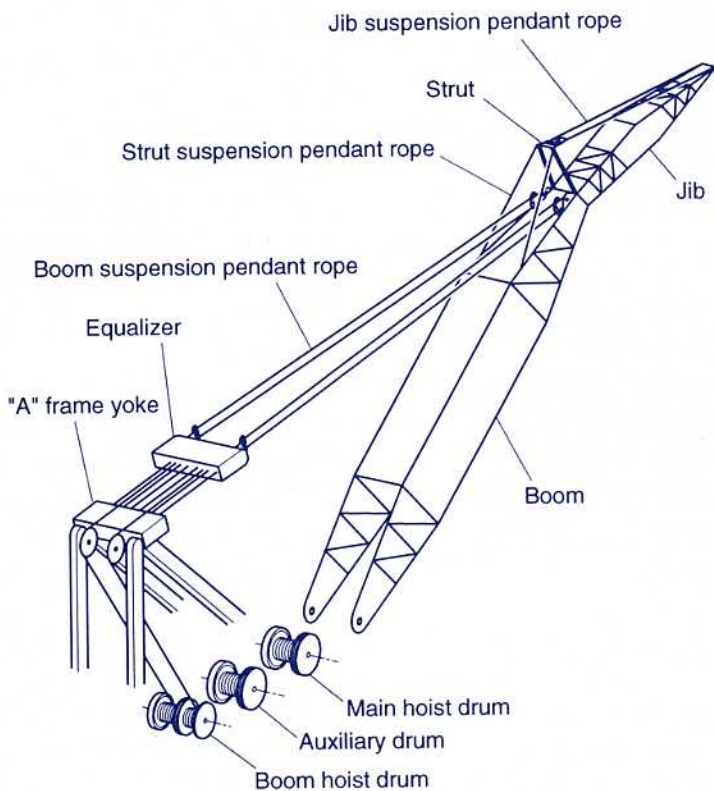
Jib length (m)	Boom length (m)												
	18	21	24	27	30	33	36	39	42	45	48	51	54
Auxiliary	●	●	●	●	●	●	●	●	●	●	●	●	●
13										●	●	●	●
19										●	●	●	●
25										●	●	●	●
31										●	●	●	●

Jib length (m)	Boom length (m)											
	57	60	63	66	69	72	75	78	81	84	87	90
Auxiliary	●	●	●	●	●	●	●	●	●	●	●	●
13	●	●	●	●	●	●	●	●	●	●	●	●
19	●	●	●	●	●	●	●	●	●	●	●	●
25	●	●	●	●	●	●	●	●	●	●	●	●
31	●	●	●	●	●	●	●	●	●	●	●	●

Wire Rope

Place of use	Rope diameter (mm)	Guaranteed strength(ton)	Rope type
Main drum	φ28	70.2	P·S(19)+39×P.7
Boom hoist	φ22	36.3	IWRC6×P·WS(31)
Boom suspension	φ34	104.0	IWRC6×P·WS(36)
Aux. drum	φ28	70.2	P·S(19)+39×P.7
Jib suspension	φ28	59.7	IWRC6×Fi(29)
Jib strut suspension	φ31.5	74.9	IWRC6×Fi(29)

Note: Wire rope length to be determined according to the boom length.



Crane boom composition

The following tables show standard combinations for each boom and jib length.

Boom standard combination

Boom length (m)	18	21	24	27	30	33	36	39	42	45	48	51	54
7.5m inner	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0m insert	—	1	2	1	2	1	1	2	1	1	2	1	1
6.0m insert	—	—	—	1	1	2	1	1	2	1	1	2	1
9.0m insert	—	—	—	—	—	—	1	1	1	2	2	2	3
10.5m outer	1	1	1	1	1	1	1	1	1	1	1	1	1

Boom length (m)	57	60	63	66	69	72	75	78	81	84	87	90
7.5m inner	1	1	1	1	1	1	1	1	1	1	1	1
3.0m insert	2	1	1	2	1	1	2	1	1	2	1	1
6.0m insert	1	2	1	1	2	1	1	2	1	1	2	1
9.0m insert	3	3	4	4	4	5	5	5	6	6	6	7
10.5m outer	1	1	1	1	1	1	1	1	1	1	1	1

Note: Installation of mast is required for boom length exceeding 69m.

Jib standard combination

Jib length (m)	13	19	25	31
6.5m inner	1	1	1	1
6.0m insert	—	1	2	3
6.5m outer	1	1	1	1

* Contact IHI if other combinations required.

