

**CCH1500-2**

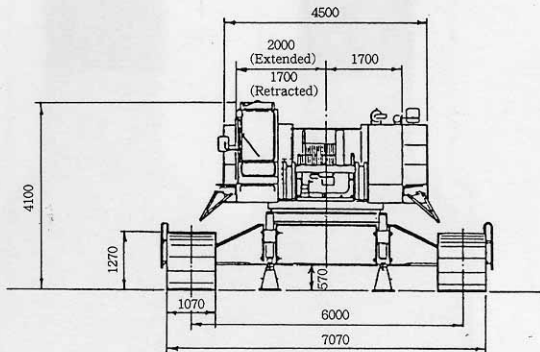
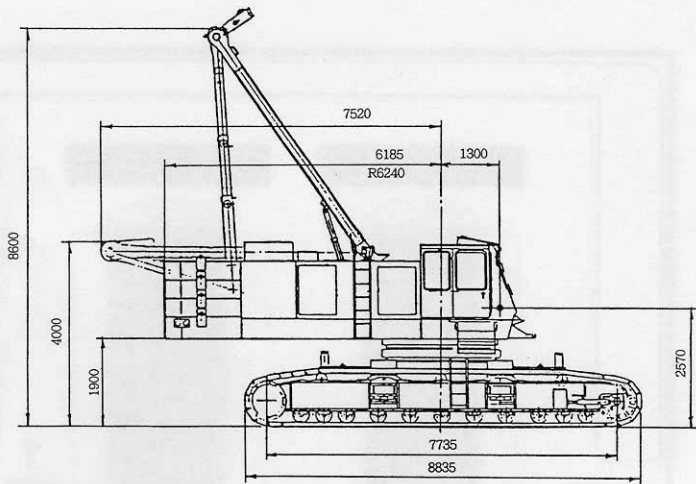
**CRAWLER CRANE**

**IHI**

# SPECIFICATIONS

## 1. BASE MACHINE

### 1 - 1 Dimensions



# SPECIFICATIONS

## 1 - 2 Performance

### (1) Speed

Name	Speed		Remarks
	High speed	Low speed	
Swing	0.5~2.3 rpm		Stepless speed change
Traveling	1.2 km/Hr	0.7 km/Hr	
Main hoist	100/60 m/min	50/30 m/min	1 Layer on drum
Auxiliary hoist	100/60 m/min	50/30 m/min	1 Layer on drum
Boom	55 m/min (Left & Right, 28 m/min × 2)		1 Layer on drum
			1 Layer on drum

### (2) Gradeability

30% (16.7°)

### (3) Drum winding capacity

Name	Groove (rope dia.)	Capacity	Remarks
Main hoist	Lebus type (φ 26)	Approx. 380m	8 layer
Auxiliary hoist	Lebus type (φ 26)	Approx. 380m	8 layer
Boom	Lebus type (φ 20)	Approx. 370m	6 layer (Right & left total)

Note that the rope winding capacity is not the rope length.

Main hoist drum : Front drum

Auxiliary hoist drum : Rear drum

# SPECIFICATIONS

## 1 - 3 Hydraulic Units

### (1) Main Hydraulic Circuit

Hydraulic pump (See 2 - 14, "Hydraulic Circuit System Block Diagram.")

First	Piston pump (variable capacity)	Winch (Aux. hoist), right travel, 1st speed main hoist, 2nd speed aux. hoist
Second		Winch (Main hoist), left travel, 2nd speed main hoist, 1st speed aux. hoist
Third	Piston pump (variable capacity)	Boom raising/lowering, (tower post raising/lowering)
Fourth	Piston pump (Fixed capacity)	Dedicated for swing circuit
Fifth	Gear pump	Gantry raising/lowering, crawler extension, jack - up, clamp device
Sixth		Sub - circuit (control)

The first, second, third and fourth pumps are tandem type pumps.

### Power Transmission

	Hydraulic pump and name	Control	Hydraulic motor	Remarks
First	Winch (main hoist, auxiliary hoist)	Remote control operation spool	Axial piston	
Second	Travel (left and right)	Remote control operation spool		
Third	Boom raising/lowering, tower jib raising/lowering	Remote control operation spool	Axial piston	
Fourth	Swing	Remote control operation spool	Axial piston	
Fifth	Gantry raising/lowering etc.	Solenoid, manual control		Hydraulic cylinder control

### (2) Sub (control) circuit

	Pump	Main uses
Sixth	For control	Remote control, Main/auxiliary clutch contraction, Brake release, Main/auxiliary brake assist, Main/auxiliary automatic brake, drum lock release

### (3) Hydraulic oil tank

Quantity of until tank level	300 ℓ
Total Quantity of hyd. system	420 ℓ

## SPECIFICATIONS

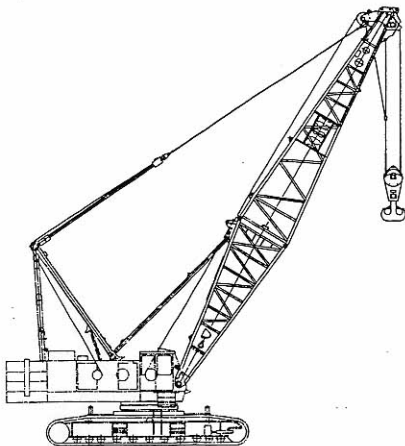
### 1 - 4 Engine

Maker	HINO MOTORS, LTD.
Model	EF750 diesel engine
Type	4 - cycle water cooled overhead valve, direct fuel injection
Number of cylinder Diameter × Stroke	8 - 137 mm × 142 mm (V8)
Engine displacement	16.745 ℓ
Compression ratio	17.7 : 1
Rated output	275ps · /2000 rpm
Maximum torque	112kg · m/1400 rpm
Specific fuel consumption	Approx. 168 g/ps. h (2000 rpm)
Min. RPM at no load	800 rpm (by engine only)
Starter	24V - 7kW motor
Air cleaner	Dry filter - paper type
Generator	AC24V - 35A
Battery	12V - 150AH × 2
Cap. of engine oil	Total oil capacity 34 ℓ (oil pan 28 ℓ)
Fuel tank capacity	440 ℓ
Cooling water capacity	58 ℓ (engine only : 26 ℓ)

# SPECIFICATIONS

## 2. STANDARD CRANE

### 2-1 Outline specification



Lifting capacity		Max. lifting load × working radius	150 t × 5 m
Boom length	Main jib	Basic (inner and outer)	18 m (7.5 m + 10.5 m)
		Maximum length	81 m
	Aux. jib	1.5 m, 13 m, 19 m, 25 m, 31 m	Relay by 6 m insert
	Maximum combination of main jib and aux. jib		103 m (72 m + 31 m)
Working range	Main jib	Working radius	5 m ~ 62 m
	Main jib	Max. grounding lifting (81 m main jib)	Approx. 76 m
	Aux. jib	Max. grounding lifting (72 m + 31 m)	Approx. 100 m
	Main jib	Boom angle	30° ~ 80°
Number of part of line	Main hoist	150 ton hook	1 ~ 16 part of line
		15 ton hook	2 parts of line
		11 ton hook	1 part of line
	Aux. hoist		Boom hoisting/lowering
Counterweight			Approx. 56 t
Working weight	Equipped with 18 meters boom and 150 t hook		Approx. 153 t
Average grounding pressure	Equipped with 18 meters boom and 150 t hook		Approx. 0.86 kgf/cm <sup>2</sup>

