

HYDRAULIC CRAWLER CRANE

CKL2500H

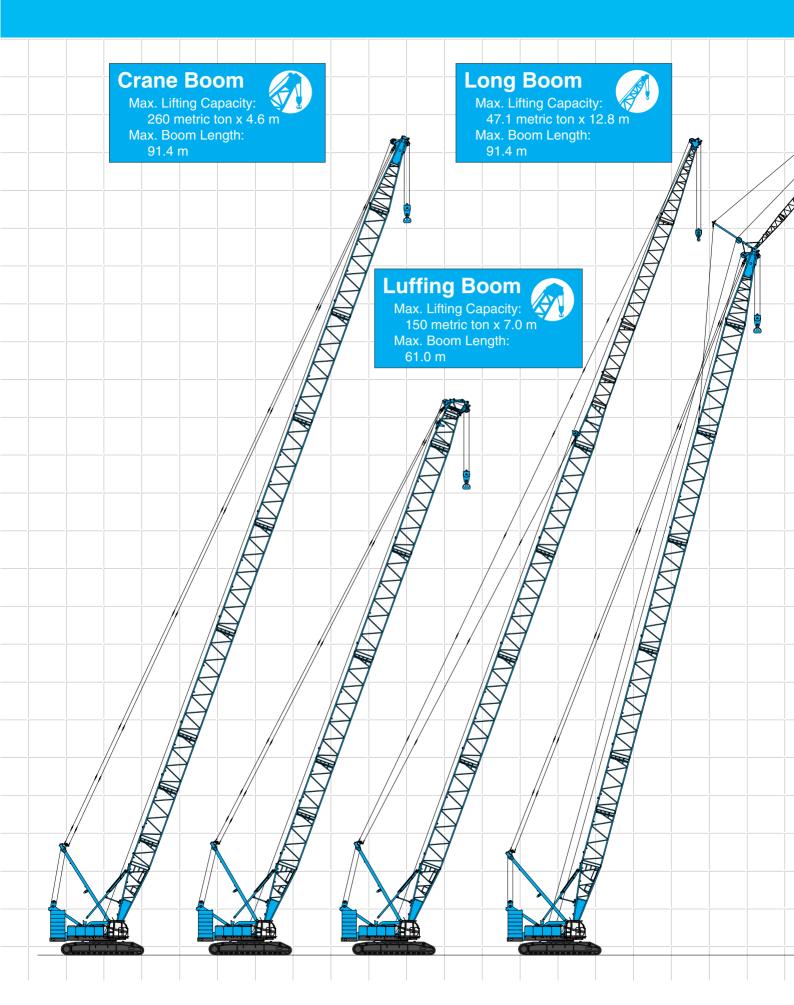
Model: CKL2600i



Max. Lifting Capacity: 260 t x 4.6 m Max. Crane Boom Length: 91.4 m

Max. Fixed Jib Combination: 76.2 + 30.5 m
Max. Luffing Jib Combination: 61.0 + 61.0 m

CONFIGURATION



SPECIFICATIONS



Power Plant

Model: Hino diesel engine P11C-UN

Type:Water-cooled, direct fuel injection, with turbocharger Compiles with NRMM (Europe) Stage IIIA and US EPA Tier III.

Displacement: 10.520 liters

Rated Power:247 kW at 2,000 min⁻¹ {rpm} (ISO)

Max. torque: 1,300 N·m/1,500 min-1

Cooling system: Liquid, recirculating bypass

Starter: 24 V/6.0 kW

Radiator: Corrugated type core, thermostatically controlled Air cleaner: Dry type with replaceable paper element Throttle: Electric throttle control, twist grip type

Fuel filter: Replaceable paper element

Batteries: Two 12V, 150Ah/20HR capacity batteries, series con-

nected.

Fuel tank capacity: 370 liters



Hydraulic System

Four variable displacement piston pumps are driven by heavyduty pump drive. Two of variable displacement pumps are used in the main hook hoist circuit, auxiliary hook hoist circuit, jib hoist circuit and each propel circuit. One of the other two pumps is used in the boom hoist circuit, and the other is used in the swing circuit.

Control: Full-flow hydraulic control system for infinitely variable pressure to front and rear drums, boom hoist drum and propel. Controls respond instantly to the touch, delivering smooth function operation.

Cooling: Oil-to-air heat exchanger (plate-fin type)

Filtration: Full-flow and bypass type with replaceable element **Electrical system:** All wiring corded for easy servicing, individ-

ual fused branch circuits.

Max. relief valve pressure:

Load hoist, boom hoist and propel system:

31.9 MPa {325 kgf/cm²}

Swing system: 27.5 MPa {280 kgf/cm²} Control system: 5.4 MPa {55 kgf/cm²}

Reservoir capacity: 600 liters



Boom Hoisting System

Powered by a hydraulic motor through a planetary reducer. **Brake:** A spring-set, hydraulically released multiple-disc brake is mounted on the boom hoist motor and operated through a counter-balance valve.

Drum lock: External ratchet for locking drum.

Drum: Double drum, grooved for 26 mm dia. wire rope.

Line speed: Double line on first drum layer **Hoisting/Lowering:** 22 to 2 m/min x 2

Diameter of wire ropes
Boom guy line: 38 mm

Boom hoist reeving: 16 parts of 26 mm dia. high strength

wire rope

Boom backstops: Required for all boom lengths



Load Hoist System

Front and rear drums for load hoist powered by a hydraulic variable plunger motors, driven through planetary reducers.

Negative Brake: A spring-set, hydraulically released multipledisc brake is mounted on the hoist motor and operated through a counter-balance valve. (Positive free fall brake is optional item.)

Drum lock: External ratchet for locking drum

Drums:

Front drum:

617.1 mm P.C.D. x 833.7 mm Lg. wide drum, grooved for 25 mm wire rope. Rope capacity is 480 m working length and 600 m storage length.

Rear drum:

617.4 mm P.C.D. x 833.7 mm Lg. wide drum, grooved for 25 mm wire rope. Rope capacity is 390 m working length and 600 m storage length.

Note: Rope lengths listed above denote drum capacity and may differ from actual rope lengths supplied when machinery is shipped.

Line speed: Single line on the first drum layer

Hoisting/Lowering: 100 to 3 m/min

Line Pull (Single-line):

Rated line pull: 132 kN {13.5 tf}



Swing System

Swing unit is powered by hydraulic motor driving spur gears through planetary reducers (2 sets), the swing system provides 360° rotation.

Swing parking brakes: A spring-set, hydraulically released multiple-disc brake is mounted on swing motor.

Swing circle: Single-row ball bearing with an integral internally cut swing gear.

Swing lock: Manually, four position lock for transportation

Swing speed: 2.0 min⁻¹ {rpm}



Upper Structure

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine with low noise level. Complies with EC Directive 2000/14/EC.

Counterweight: 90.0 ton



Cab & Control

Totally enclosed, full vision cab with safety glass, fully adjustable, high backed seat with a head-rest and armrests, and intermittent wiper and window washer (skylight and front window).

Cab fittings:

Air conditioner, convenient compartment (for tool), cup holder, ashtray, cigarette lighter, sun visor, roof blind, tinted glass, floor mat, foot-rest, shoe tray

Controls:

Four adjustable levers for front drum, rear drum, boom drum and swing controls, and boom hoist pedal.



Lower Structure

Steel-welded carbody with axles. Crawler assemblies are designed with quick disconnect feature for individual removal as a unit from axles. Crawler belt tension is maintained by hydraulic jack force on the track-adjusting bearing block.

Carbody weight: 24.0 ton

Crawler drive: Independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor propelling a driving tumbler through a planetary gear box. Hydraulic motor and gear box are built into the crawler side frame within the shoe width.

Crawler brakes: Spring-set, hydraulically released parking brakes are built into each propel drive.

Steering mechanism: A hydraulic propel system provides both skid steering (driving one track only) and counter-rotating steering (driving each track in opposite directions).

Track rollers: Sealed track rollers for maintenance-free operation.

Shoes (flat): 68 shoes, 1,220 mm wide each crawler (Optional 1,330 mm shoe is availavle)

Max. travel speed: 1.1/0.7 km/h Max. gradeability: 30%



Weight

Including upper and lower machine, 90.0 ton counterweight and 24.0 ton carbody weight, basic boom (or basic boom + basic jib), hook, and other accessories.

SpecificationWeightGround pressureCrane boomApprox. 214 ton, 109 kPa {1.11 kgf/cm²}Fixed jibApprox. 215 ton, 109 kPa {1.11 kgf/cm²}Luffing jibApprox. 223 ton, 114 kPa {1.16 kgf/cm²}



Attachment

Boom and Jib:

Welded lattice construction using tubular, high-tensile steel chords with pin connections between sections.

Boom and Jib Length

	Min. Length	Max. Length
	(Min. Combination)	(Max. Combination)
Crane Boom	15.2 m	91.4 m
Luffing Boom	15.2 m	61.0 m
Long Boom	64.0 m	91.4 m
Fixed Jib	27.4 m + 12.2 m	76.2 m + 30.5 m
Luffing Jib	21.3 m + 21.3 m	61.0 m + 61.0 m

Main Specifications (Model: CKL2600i)

Crane Boom			
Max. Lifting Capacity	260 t/4.6 m		
Max. Length	91.4 m		
Luffing Boom			
Max. Lifting Capacity	150 t/7.0 m		
Max. Length	61.0 m		
Long Boom			
Max. Lifting Capacity	47.1 t/12.8 m		
Max. Length	91.4 m		
Fixed Jib			
Max. Lifting Capacity	27 t/10.4 m		
Max. Length	30.5 m		
Max. Combination	76.2 m + 30.5 m		
Luffing Jib			
Max. Lifting Capacity	80 t/9.8 m		
Jib Length	21.3 m ~ 61.0 m		
Max. Combination	61.0 m + 61.0 m		
Luffing Angle	63° ~ 88°		
Main & Aux. Winch			
Max. Line Speed	100 m/min (1st layer)		
Rated Line Pull (Single Line)	132 kN {13.5 tf}		
Wire Rope Diameter	25.4 mm		
Wire Rope Length	480 m (Main) 390 m (Aux.)		
Brake Type	Spring set hydraulically released (Negative)		
Free-Fall Brake Type	Wet-type multiple disc brake (Optional)		

Working Speed		
Swing Speed	2.0 min ⁻¹ {2.0 rpm}	
Travel Speed	1.1/0.7 km/h	
Power Plant		
Model	Hino P11C-UN	
Engine Output	247 kW/2,000 min ⁻¹ {rpm}	
Fuel Tank Capacity	370 liters	
Hydraulic System		
Main Pumps	4 variable displacement	
Max. Pressure	31.9 MPa {325 kgf/cm²}	
Hydraulic Tank Capacity	600 liters	
Self-Removal Device	Standard	
Weight		
Operating Weight*	Approx. 214 t	
Ground Pressure*	109 kPa {1.11 kgf/cm²}	
Counterweight	90.0 t (Upper), 24.0 t (Lower)	
Transport Weight**	Approx. 46.0 t	

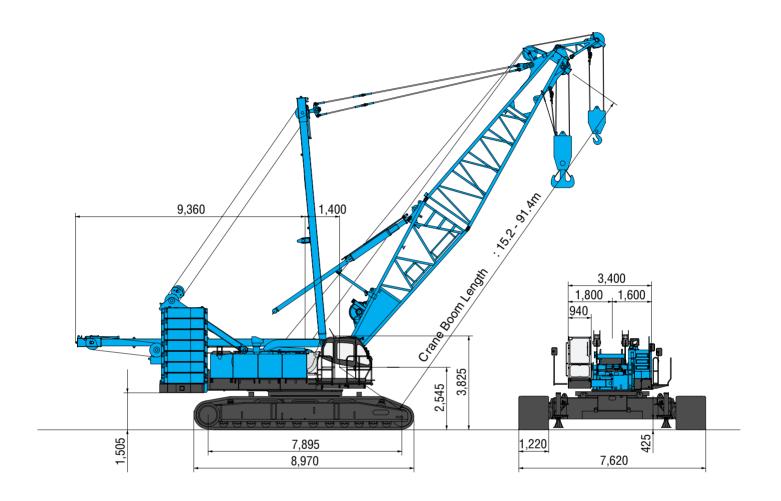
^{*} Including upper and lower machine, 90.0 ton counterweight and 24.0 ton carbody weight, basic boom, hook, and other accessories.

Units are SI units. { } indicates conventional units.

^{**} Base machine with trans-lifter, main and aux. winches (non-free fall) including wire rope, and boom hoist winch including wire rope.

GENERAL DIMENSIONS

Crane Boom (Unit: mm)



Limit of Hook Lifting

