

CRANE SPECIFICATIONS

TYPE	10 Ton Telescopic Crawler Crane	
MODEL	HITACHI ZX210LC-3	
CRANE CAPACITY	10,000kg	
MAX. TOTAL RATED LOAD		
4.80M Boom	10,000kg at 2.00M Radius (6 Parts-Line) Static	
4.80M Boom	3,500kg at 2.70M Radius (6 Parts-Line) Mobile	
7.70M Boom	5,400kg at 3.50M Radius (6 Parts-Line) Static	
7.70M Boom	2,400kg at 4.00M Radius (6 Parts-Line) Mobile	
10.60M Boom	3,700kg at 5.00M Radius (4 Parts-Line) Static	
10.60M Boom	1,850kg at 5.00M Radius (2 Parts-Line) Mobile	
13.50M Boom	2,600kg at 6.00M Radius (2 Parts-Line) Static	
13.50M Boom	1,100kg at 7.00M Radius (2 Parts-Line) Mobile	
16.30M Boom	1,250kg at 10.00M Radius (2 Parts-Line) Static	
19.20M Boom	250kg at 18.60M Radius (2 Parts-Line) Static	
Hook Height		
Above Ground level	21.00 Meters Max	
Below Ground level	Max 23.50 Meters with 4 part line	
BOOM	6 Section box beam type telescoping boom	
Boom Length	4.80 Metres to 19.20 Metres	
Boom Extending Speed	14.4M/33S	
Boom Raising Speed	` -3 degrees ~ 76 degrees / 15s	
WINCH	Hydraulic Motor driven planetary gear reduction, with automatic mechanical brake and counterbalance valve	
Single Line Pull	18.4kN (1,875kgf)	
Hoisting Speed m/min	High 97 / Low 66	
Hoisting Rope	10mm x 111Meters (Construction IWRC 6xP.Fi(29))	
Breaking Strength	92.2kN (9,400kgf)	
HOOK BLOCK	10,000 kg Capacity, 3 Sheaves with Safety latch	
Swing Speed	min-1 rpm	2.0 (2.0)
Travel Speed	km/h	3.0
ENGINE	ISUZU A1-4HK1X	
Rated Output	(kW(PS)/rpm)	122(166) 2000
Displacement	(ltr.)	5.193
Bore and stroke	115mm x 125mm	
Batteries	2 x 12V / 88Ah	
HYDRAULIC SYSTEM		
Main Pumps	2 variable displacement axial piston pumps	
Maximum Oil Flow	2 x 212 L/min	
Pilot Pump	1 Gear Pump	
Maximum Oil Flow	30 L/min	
Hydraulic Motors		
Travel	2 variable displacement axial piston motors	
Swing	1 axial piston motor	
Relief Valve Settings		
Implement circuit	34.3 MPa (350 kgf/cm ²)	
Swing circuit	34.3 MPa (350 kgf/cm ²)	
Travel circuit	34.3 MPa (350 kgf/cm ²)	
Pilot circuit	3.9 MPa (40 kgf/cm ²)	
Hydraulic Filters	Hydraulic circuits use high-quality filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.	
Controls	Pilot Controls. Hitachi's original shockless valve. Implement Levers 2 . Travel Levers with pedals 2.	
UPPER STRUCTURE		
Revolving Frame	Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-Section frame for resistance to deformation.	
Swing Device	Axial piston motor with planetary reduction gear bathed in oil. Swing circle is single-row, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic release disc type	
Operator's Cab	Independent spacious cab, 1005mm wide by 1675mm high, conforming to	

		ISO * Standards. Reinforced glass windows on 4 sides for visibility.
		Front windows (upper and lower) can be opened. Reclining seat with armrests; adjustable with or without control levers.
		* International Standardisation Organisation
UNDERCARRIAGE		
Tracks		Tractor-type undercarriage. Welded track frame using selected materials.
		Side frame welded to track frame. Lubricated track rollers, idlers and sprockets with floating seals.
		Track shoes with triple grousers made of induction-hardened rolled alloy.
		Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.
Numbers of Rollers and Shoes on each side		
Upper Rollers		2
Lower Rollers		8
Track Shoes		49
Track Guard		1
Travel Device		Each track driven by 2-speed axial piston motor through planetary reduction gear for counter rotation of the tracks. Sprockets are replaceable.
		Parking brake is spring-set/hydraulic release disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.
Travel Speeds		0 to 3.5km/h
Maximum traction force		203kN (20710 kgf)
SERVICE REFILL CAPACITIES		
Fuel Tank	Litres	400
Engine Coolant	Litres	26
Engine Oil	Litres	23
Swing Device	Litres	6.2
Travel Device (each side)	Litres	6.8
Hydraulic System	Litres	240
Hydraulic Oil Tank	Litres	135
Safety Devices		
		Wylie w2245 Safe Load Indicator (EN13000 Compliant) complete with Data Logger
		Boom Upper Angle Limit Cut Out Switch
		Boom Lower Angle Limit Cut Out Switch
		Winch Motor 3rd round end of rope Cut out Switch
		Overwinding alarm and automatic stop
		External Light Tower
		External Beacon Sounder
		Rear Camera
		Motion Alarm
		Spirit Level
		Manual Angle Indicator fitted to Boom
		Counterbalance valves for Boom Raising and Boom Telescoping cylinders and Winch Motor
		Automatic mechanical brake for winch motor
		Sprung Winch drum roller
		Steel Roof Window Guard
		Lower Front Window Guard
		Derrick Ram Steel Guard
STANDARD EQUIPMENT		
Engine		
		50 A Alternator
		Dry-type air filter with evacuator valve (with air filter restriction indicator)
		Cartridge-type engine oil filter
		Cartridge-type fuel double filters
		Air cleaner double filters
		Radiator, oil cooler and intercooler with dust protective net
		Radiator reserve tank
		Fan guard
		Isolation-mounted engine
		Auto idle system
		Fuel Cooler
		Electrical fuel feed pump
		Engine oil drain coupler
Hydraulic System		
		Control valve with main relief valve
		Extra port for control valve
		Suction filter
		Full-flow filter
		Pilot filter
		Swing dampener valve

Cab	CRES II (Centre pillar reinforced structure) cab
	OPG top guard fitted Level I (ISO 10262) compliant cab
	All-weather sound suppressed steel cab
	Equipped with reinforced, tinted glass windows
	4 fluid-filled elastic mounts
	Front windows on upper, lower and left side can be opened
	Intermitted windshield wipers
	Front window washer
	Adjustable reclining seat with adjustable armrests
	Footrest
	Spirit level
	Electric double horn
	AM-FM radio with digital clock
	Seat belt
	Drink holder
	Cigarette lighter
	Ashtray
	Storage Box
	Glove compartment
	Fire extinguisher bracket
	Floor mat
	Short wrist control lever
	Engine shut-off switch
	Auto control air conditioner
	Transparent roof with slide curtain
	Mechanical suspension seat with heater
Upper Structure	Undercover
	4750kg counterweight
	Fuel Level float
	Electric fuel refilling pump with auto stop
	Rear view camera
	150 Ah batteries
	Hydraulic oil level gauge
	Tool box
	Utility space
	Rear view mirror
	Swing parking brake
Undercarriage	Travel parking brake
	Travel motor covers
	1 track guard (each side) and hydraulic track adjuster
	Bolt on sprocket
	Upper and lower rollers
	Reinforced track links with pin seals
	4 tie down hooks
Miscellaneous	Standard tool kit
	Lockable machine covers
	Lockable fuel refilling cap
	Skid-resistant tapes, plates and handrails
	Travel direction mark on frame
	Onboard information controller
Optional Equipment	Bolt on Rubber Blocks
	160Meter Hoist Rope (for underground applications greater than 23.5Meters)

HITACHI**CRANE RATINGS ZX210LC****Unit: Kg**

	Boom Length (Metres)											
	4.80m Boom		7.70m Boom		10.60m Boom		13.50m Boom		16.30m Boom		19.20m Boom	
	STATIC	MOBILE	STATIC	MOBILE	STATIC	MOBILE	STATIC	MOBILE	STATIC	MOBILE	STATIC	MOBILE
Working Radius (M)												
2.00	10000	3500										
2.50	9000	3500										
2.70	8000	3500	6000	3000	4600	2300	3000	1500	2400	not allowed	1400	not allowed
3.00	6200	3100	6000	3000	4600	2300	3000	1500	2400	not allowed	1400	not allowed
3.50	5500	2750	5400	2700	4600	2300	3000	1500	2400	not allowed	1400	not allowed
4.00	4900	2450	4800	2400	4600	2300	3000	1500	2400	not allowed	1400	not allowed
5.00	4000	2000	3800	1900	3700	1850	3000	1500	2400	not allowed	1400	not allowed
6.00			3000	1500	3000	1500	2600	1300	2400	not allowed	1400	not allowed
7.00			2400	1200	2450	1225	2200	1100	2050	not allowed	1400	not allowed
8.00			1800(7.20M)	900	2000	1000	1900	950	1750	not allowed	1400	not allowed
9.00					1650	825	1550	775	1450	not allowed	1200	not allowed
10.00					1000	500	1300	650	1250	not allowed	1050	not allowed
11.00					1000(10.1M)	500	1100	550	1050	not allowed	950	not allowed
12.00							950	475	900	not allowed	850	not allowed
13.00							500(12.9M)	250	800	not allowed	750	not allowed
14.00									700	not allowed	650	not allowed
15.00									600	not allowed	550	not allowed
16.00									450(15.8M)	not allowed	450	not allowed
17.00											350	not allowed
18.00											300	not allowed
18.60											250	not allowed

Hook		Number of hoist reeving and max. rated loads (kg)		
Cap.	Weight	6	4	2
10.0 ton	80kg	10,000kg	6,800kg	3,400kg

1. The rated loads are determined according to DIN 15018 part 3(lifting class H2, loading group B2).

The stability is according to EN13000 (2004).

The rated loads listed are based on the condition that the machine is stationed on firm, level ground.

The rated loads are available over 360 degrees. The rated loads shown include the weight of all lifting attachments.

such as hook and bucket. The load to be actually lifted is the rated load minus the weight of all lifting attachments.

2. Counterweight of 4,750kgs is fixed to crane.

3. Travelling is allowed according and provided that:

- surface must be firm and level
- the boom is in travelling direction
- speed is not above 0.4m/s (on a firm level ground)
- the load is near the ground (0.5m) and secured against swaying
- no other movements are allowed

4. Standard reeving for working 2 or 4 or 6 reeving's.

5. At windforce of 14m/s or more the operation must be stopped. By windforce of 15m/s or more the boom must be retracted to the minimum and lowered to the ground.

6. For the wind load area of the rated load is 1,2m² per 1000kg calculated.



