

**C-SERIES HYDRAULIC EXCAVATORS
CX220C**

CASE
CONSTRUCTION



**QUALITY
YOU CAN TRUST**

www.casece.com

**EXPERTS FOR THE REAL WORLD
SINCE 1842**

MAIN REASONS TO CHOOSE THE C-SERIES



HIGH PRECISION AND CONTROLLABILITY

High performance.
Smooth control.
Improved fuel efficiency.
With CASE Intelligent Hydraulic System.



HIGH EFFICIENCY

Up to 8% more fuel efficiency.
Constant consumption monitoring.
With the 5 Energy Saving Controls, Isuzu engine and the new ECO gauge function.



HIGH RELIABILITY

Robust design.
Increased durability.
Lower cost of ownership.
With the CASE top manufacturing quality.



COMFORT AND SAFETY

Spacious and safe cab.
Low noise and vibrations.
Ergonomic workstation.
Real time parameters monitoring.
With the newly designed cab, fully adjustable seat/ joysticks and brand new LCD cluster.





OUTSTANDING VISIBILITY

Safe and fast operations.
More comfort.
With wider glazed area.



FAST CYCLES

Higher breakout force.
Continuous operations.
Up to 10% higher digging capability.
With H/SP modes and
Auto Power boost.



HIGH VERSATILITY

The perfect machine
for every application.
With 3 available power
modes and 10 auxiliary
hydraulic settings.



LOW TOTAL COST OF OWNERSHIP

Longer service intervals.
Reduced downtimes.
Fast, easy and safe maintenance operations.
With the EMS bushings, high quality components and
service points accessible from the ground.

C-SERIES CRAWLER EXCAVATORS



HIGH PRECISION AND CONTROLLABILITY

The proven CASE Intelligent Hydraulic System (CIHS) delivers impressive machine control with unrivalled energy and fuel savings in all cycle time phases.



HIGH EFFICIENCY

CASE advanced energy management consists of **5 Energy Saving Controls**:

- **Torque Control**: electronic control of the hydraulic output to prevent engine overloads.
- **Boom Economy Control (BEC)**: increased fuel efficiency in boom lowering/swinging operations.
- **Swing Relief Control (SWC)**: optimized hydraulic power distribution in slewing operations to deliver the most efficient flow and pressure.
- **Spool Stroke Control (SSC)**: pressure and flow during digging and leveling operations
- **Idle functions**
 - **Auto Idle**: lowers engine rpm after 5 seconds of lever inactivity;
 - **Idle Shutdown**: shuts the engine down after a pre-set time.

The C series models are powered by **Isuzu engines**, designed to boost machine performances and optimize fuel economy.

Fuel consumption can be constantly monitored by the operator throughout the **new ECO gauge function**, that displays in real time the energy saving level utilized.





HIGH RELIABILITY

Boom and arm structure has been designed to reinforce the thickness rate of the most stressed areas, to increase productivity, the cycle times and durability of components.

- New high strength casting parts joined with thicker hinge flanges reduce stress on components.
- Longer greasing intervals to reduce downtime (1.000 hrs).
- The 'sloped' lower frame design reduces the time needed to clean the undercarriage.

Accurate, simple and robust design for high durability.

- The C-Series delivers leading design solutions and manufacturing quality.
- Boom and arm feature forged brackets and reduced tolerances for **increased component life minimizing downtime.**
- The anti-friction resin shims in the boom foot and head reduce noise and free play, **increasing durability and reliability for the customer.**
- New synthetic hydraulic filter reduces system contamination, **cutting service costs and boosting machine longevity.**



C-SERIES



COMFORT AND SAFETY

- Superior wide and roomy cab with ample legroom.
- New cushioning system to lower noise and vibration levels for the operator's ultimate comfort.
- Totally adjustable workstation with fully reclinable air –suspended seat.
- Air conditioning system with 25% more airflow and 6% better performances compared to B-Series.



OUTSTANDING VISIBILITY

- Wider glazed surface with single piece side window.
- New 7" LED cluster for a more secure and safe working environment and to constant monitor the main machine parameters.

CRAWLER EXCAVATORS



FAST CYCLES

The advanced hydraulic system offers higher breakout forces, improved swing speeds and greater swing torque, resulting in **faster cycle times and 5% increase in productivity**.

Power boost function is automatically engaged. The electronic management of speed and power lowers fuel consumption and offers considerable productivity benefits in terms of outputs.



HIGH VERSATILITY

3 power modes to match any customer need:

- A** AUTO: for normal digging, grading, lifting and precision work.
- H** HEAVY: for heavy operations always granting the best balance between productivity and fuel economy.
- SP** SUPER POWER: extra speed and power for the most demanding jobs that require maximum productivity.

Operators can store up to **10 auxiliary hydraulic flow settings** (and pressures as optional) to easily switch among different attachments with no need of any mechanical adjustment.



LOW TOTAL COST OF OWNERSHIP

- The *Extended Maintenance Bushings (EMS)* provide longer greasing intervals, **reducing daily and weekly maintenance for the operator**.
- All filters and regular check points are grouped and easily accessible from the ground.
- Radiator and cooler are mounted side by side for more efficient cooling and easy access for cleaning.
- Optional refueling pump with auto cut off reduces downtime for regular fills.





C- SERIES HYDRAULIC EXCAVATORS

CX220C

ENGINE

Model _____ ISUZU GI-4HK1X
 Type Water-cooled, 4-cycle diesel, 4-cylinder in line, electronically controlled, high pressure common rail system, turbocharger with air cooled intercooler
 Emission certified _____ Tier 3
 Displacement _____ 5.19 l
 Bore/Stroke _____ 115 x 125 mm
 Horsepower ISO 14396 GROSS _____ 122 kW (164 hp) at 1800 min⁻¹
 Horsepower SAE J1349 NET _____ 117.3 kW (157 hp) at 1800 min⁻¹
 Maximum torque SAE J14396 GROSS _____ 624 Nm at 1600 min⁻¹
 Maximum torque SAE J1349 NET _____ 608 Nm at 1600 min⁻¹

HYDRAULIC SYSTEM

Type _____ 2 variable displacement axial piston pumps with regulating system
 Max oil flow _____ 2 x 211 l/min at 1800 min⁻¹
 Working circuit pressure _____
 Boom/Arm/Bucket circuit _____ 34.3 MPa
 Boom/Arm/Bucket circuit (with auto power up) _____ 36.8 MPa
 Swing circuit _____ 29.4 MPa
 Travel circuit _____ 34.3 MPa

SWING

Maximum swing speed _____ 11.5 min⁻¹
 Swing torque _____ 64,000 N·m

FILTERS

Suction filter _____ 105 µm
 Return filter _____ 6 µm
 Pilot line filter _____ 8 µm

PERFORMANCE DATA

		CX220C		
		Arm 2.40 m	Arm 2.94 m	Arm 1.90 m
Boom length	mm	5700	5700	5700
Bucket radius	mm	1450	1450	1450
Bucket wrist action	°	177	177	177
A Maximum reach at GRP	mm	9240	9730	8770
B Maximum reach	mm	9420	9900	8960
C Max. digging depth	mm	6110	6650	5610
D Max. digging height	mm	9410	9610	9160
E Max. dumping height	mm	6590	6810	6330
Arm digging force with auto power up		132 kN	110 kN	152 kN
Bucket digging force with auto power up		152 kN	152 kN	152 kN

WEIGHT AND GROUND PRESSURE

2.40 m arm, 0.9 m³ bucket, 600mm grouser shoe, operator, lubricant, coolant and full fuel tank.

CX220C	
OPERATING MASS	20,900 Kg
GROUND PRESSURE	0.043 MPa

* CX220C only

TRAVEL

Travel motor _____ Variable displacement axial piston motor
 (Automatic travel speed shifting)
 Max travel speed _____ 5.6 km/h
 Low travel speed _____ 3.4 km/h
 Gradeability _____ 70% (35°)
 Drawbar pull _____ 188 kN

ELECTRICAL SYSTEM

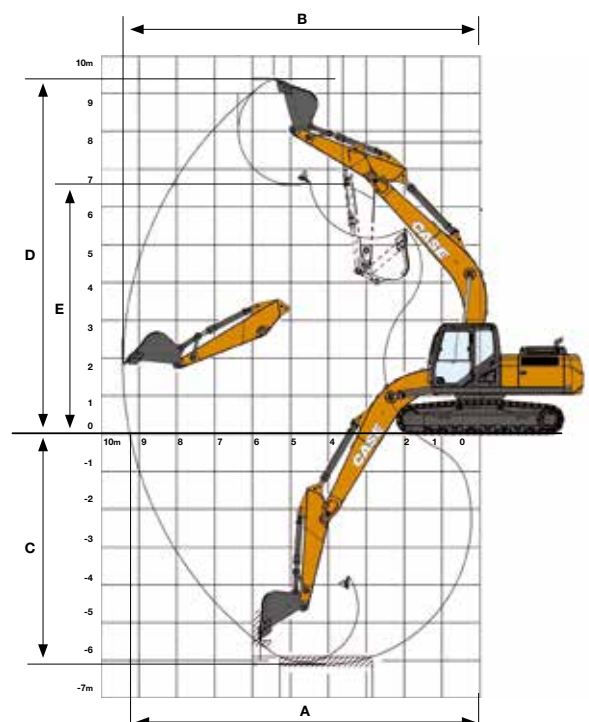
Circuit _____ 24V
 Alternator _____ 50 Amp
 Starter motor _____ 5.0 kW
 Battery _____ 2×12 V 92 Ah/5HR

UNDERCARRIAGE

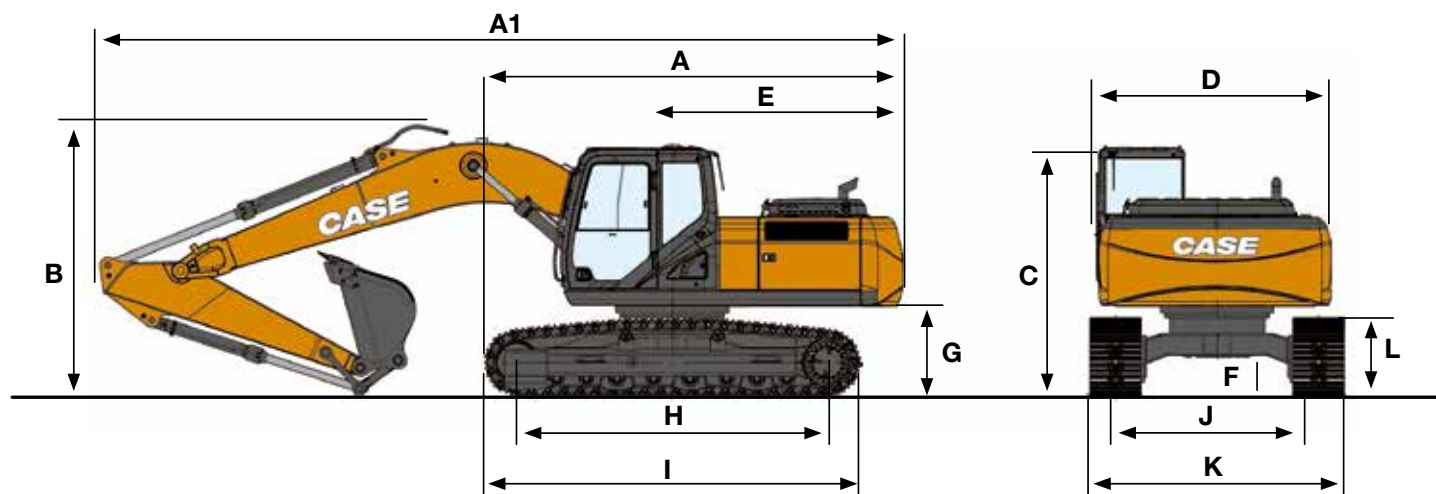
Number of carriers rollers (each side) _____ 2
 Number of track rollers (each side) _____ 8
 Number of shoes (each side) _____ 49
 Type of shoe _____ Triple grouser shoe

CAPACITIES

Fuel tank _____ 410 lt
 Hydraulic system _____ 240 l
 Cooling system _____ 30,6 l
 Engine Crank Case _____ 23,1 l



GENERAL DIMENSIONS



GENERAL DIMENSIONS

			CX220C		
			Arm 2.40 m	Arm 2.94 m	Arm 1.90 m
A	Overall length (without attachment)	mm	4950	4950	4950
A1	Overall length (with attachment)	mm	9480	9400	9490
B	Overall height (with attachment)	mm	3190	2970	3090
C	Cab height	mm	2950	2950	2950
D	Upper structure overall width	mm	2770	2770	2770
E	Swing (rear end radius)	mm	2750	2750	2750
G	Clearance height under upper structure	mm	1040	1040	1040
F	Minimum ground clearance	mm	440	440	440
H	Wheel base (Center to center of wheels)	mm	3660	3660	3660
I	Crawler overall length	mm	4470	4470	4470
L	Crawler tracks height	mm	920	920	920
J	Track gauge	mm	2390	2390	2390
K	Undercarriage overall width (with 800 mm shoes)	mm	2990	2990	2990

LIFTING CAPACITY

Front 360°	REACH											
	1.5 m	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	At max reach					
												m

CX220LC, 2.94 m STD arm, bucket 0.90 m³ (680 kg), 500 mm shoes, max reach 9.91 m

7.5 m								2640*	2640*				1990*	1990*	7,73
6.0 m								3510*	3450*				1880*	1880*	8,69
4.5 m								3980*	3360	2830*	2360		1870*	1870*	9,27
3.0 m			9500*	9500*	6970*	6970*	5280*	4670	4380*	3200	3750	2290	1940*	1940*	9,53
1.5 m			7800*	7800*	8610*	6840	6160*	4380	4920	3040	3670	2210	2070*	1980	9,53
0 m			7610*	7610*	9480*	6410	6760*	4140	4820	2910	3600	2150	2300*	2050	9,27
-1.5 m	6920*	6920*	9880*	9880*	9610*	6250	6750	4010	4750	2850			2690*	2250	8,73
-3.0 m	9140*	9140*	13550*	12680	9330*	6310	6730	4040	4790	2900			3410*	2670	7,88
-4.5 m	12810*	12810*	12050*	12050*	8270*	6520	5890*	4260					4870*	3530	6,64

LIFTING CAPACITY

Front 360°	REACH													
	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At max reach	
														m

CX220LC, Short Arm 2.4 m, Bucket 1.0 m³ (820 kg), 500 mm shoes, max reach 9.42 m

7.5 m							3710*	3710*					2900*	2900*	7,1
6.0 m							4040*	4040*	3770*	3300			2740*	2740*	8,15
4.5 m					5680*	5680*	4600*	4600*	4200*	3200			2720*	2340	8,76
3.0 m					7370*	7040	5540*	4490	4530*	3050	3140*	2160	2810*	2130	9,05
1.5 m					8740*	6590	6320*	4220	4830	2910	3340*	2090	2990*	2070	9,05
0 m			6780*	6780*	9520*	6250	6730	4010	4710	2810			3320*	2160	8,77
-1,5 m	7260*	7260*	10120*	10120*	9480*	6170	6660	3930*	4680	2770			3910*	2410	8,2
-3.0 m	10250*	10250*	13130*	12590	8970*	6280	6510*	4010					4680*	2960	7,28
-4.5 m			10750*	10750*	7480*	6480							4940*	4160	5,95

Front 360°	REACH											
	3.0 m		4.5 m		6.0 m		7.5 m		At max reach			
											m	

CX220LC, S-Short Arm 1.91 m, Bucket 1.0 m³ (820 kg), 500 mm shoes, max reach 8.96 m

7.5 m					4160*	4160*			3620*	3620*	6,47
6.0 m					4460*	4460*	4110*	3250	3410*	3140	7,62
4.5 m			6340*	6340*	5050*	4700	4450*	3180	3400*	2620	8,28
3.0 m			7690*	7040	5890*	4460	4840*	3050	3510*	2370	8,59
1.5 m			8980*	6520	6580*	4210	4840	2930	3730*	2320	8,58
0 m			9620*	6260	6790	4040	4750	2850	4060	2420	8,29
-1,5 m	10830*	10830*	9460*	6270	6730	4000	4770	2860	4580	2750	7,68
-3.0 m	12350*	12350*	8700*	6420	6290*	4140			5010*	3460	6,7
-4.5 m	9480*	9480*	6650*	6550*					5090*	5090*	5,25

STANDARD AND OPTIONAL

STANDARD EQUIPMENT

ENGINE

Std configuration for temperatures -25° +50° c
 Turbocharger with air cooled intercooler
 Double element air cleaner
 Pre fuel filter
 Fuel filter w/ water separator
 Automatic/manual engine return to idle
 Neutral safety start
 Emergency stop
 Warm up mode
 Dial type throttle control
 Glow-plug pre-heat
 Tropical package

HYDRAULIC SYSTEM

2 variable flow piston pumps
 Auto/heavy/super power working modes
 Auto power boost
 Swing priority (swing+arm)
 Travel speed change
 Selectable working modes
 Pre-set auxiliary pump settings

Iso pattern controls
 Arm and boom regeneration
 Straight travel valve
 100% return oil filtration
CAB AND OPERATOR COMPARTMENT
 Pre-disposal for the optional cab protection
 Pressurized cab ac/heat/defrost w/ auto climate control
 Tilting consoles - 4-position
 Low-effort controls (short) length to be removed
 Sliding cockpit
 Mechanical suspended seat
 Arm rest
 Color lcd monitor display
 Auxiliary select system
 Aux-in port for personal electronics (12v)
 Rubber floor mat
 One-piece right hand window
 Windshield wiper / washer
 Storage compartments
 On-board diagnostic system
 Standard handrails

Sliding front window - storable
 Anti-theft device
 Cool box
 Cab top lights
 High band am/fm radio
 Rh front console w/ clock and cell phone holder
 Rear mirror (mounted on cab)
 Rear mirror (mounted on tool box)
EQUIPMENT AND UNDERCARRIAGE
 5,70 meter boom
 Boom mounted work light (70 watt)
 Bucket linkage
 Centralized lube bank
 Attachment cushion valve
 Tool box
 Ems (extended maintenance system) pins and bushings as standard
 Sealed and lubricated tracks
 Lower under cover

OPTIONAL EQUIPMENT

CAB AND OPERATOR COMPARTMENT

Rops/tops protection
 Iron roof window
 Sun visor & rain deflector
 Sun shade
 Case telematics

EQUIPMENT AND UNDERCARRIAGE

Arm 1.90m
 Arm 2.40m
 Arm 2.94m

Hd bucket linkage w hook
 Arm and boom hose burst check valves
 600mm triple grouser steel shoes
 700mm triple grouser steel shoes
 800mm triple grouser steel shoes
 Single track guide
 Triple track guide
 Auxiliary single acting circuit
 Auxiliary single or double acting circuit
 Auxiliary double acting circuit

Hose burst control valve on boom & arm cylinder with over load warning device
 Refuel pump
 Upper front screen (mesh type)
 Front grill (bar, opg1)
 Front grill (bar, opg2)
 Air-pre cleaner - cup type
 Air-pre cleaner - cyclone type



PARTS AND SERVICE

Wide network of customer support across the world.

No matter where you work, we're here to support and protect your investment and exceed your expectations. You can count on Case and your Case dealer for full-service solutions-productive equipment, expert advice, flexible financing, genuine Case parts and fast service. We're here to provide you with the ultimate ownership experience. To locate a Case dealer or learn more about Case equipment or customer service, go to www.casece.com

NOTE: "CASE provides specific outfits for various countries and many optional fittings (OPT). The illustrations on this or other leaflets may relate to standard or optional fittings. Please consult your CASE dealer for any information in this regard and any possible updating on components. CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes."

