

C-SERIES HYDRAULIC EXCAVATORS
CX220C LC / CX220C NLC

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 –suspensioned 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

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

WEIGHT AND GROUND PRESSURE

2.40 m arm, 0.9 m³ bucket, 600/500mm grouser shoe, operator, lubricant, coolant and full fuel tank parameters.

	CX220C LC	CX220C NLC
OPERATING MASS	20,900 Kg	21,200 Kg
GROUND PRESSURE	0.043 MPa	0.053 MPa

* CX220C only

BUCKET TYPE VS DENSITY

	Capacity m ³	Number of teeth	Weight (kg)	Arm 1.9 m	CX220C Arm 2.4 m	Arm 2.9 m
GP	0,8	5	645	o	o	o
GP	0,9	5	685	o	o	o
GP	1,0	6	740	o	o	•
GP	1,1	6	775	•	•	•
HD	0,8	5	730	o	o	o
HD	0,9	5	815	o	o	•
HD	1,0	5	850	o	o	•
RC	0,8	4	850	o	o	o

o Suitable for materials with density up to 2,000 kg/m³ or less

• Suitable for materials with density up to 1,600 kg/m³ or less

CX220C LC / CX220C NLC

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 _____ 2x12 V 92 Ah/5HR

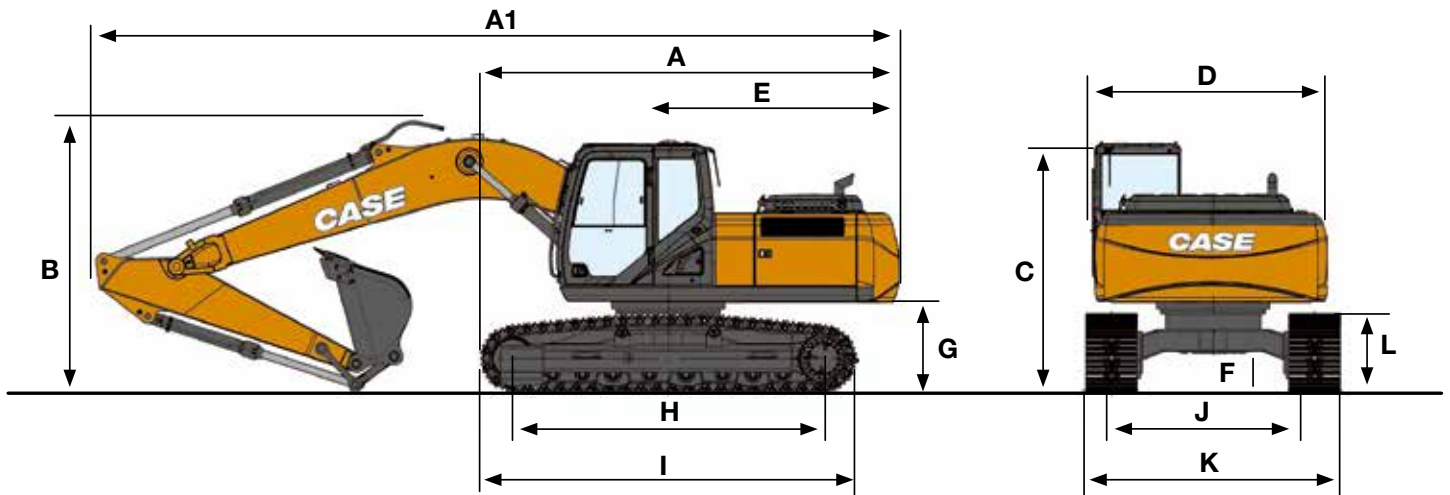
UNDERCARRIAGE

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 (CX220C LC/ CX220C NLC) _____ 410/320 lt
 Hydraulic system _____ 240 l
 Cooling system _____ 30,6 l
 Engine Crank Case _____ 23,1 l

GENERAL DIMENSIONS

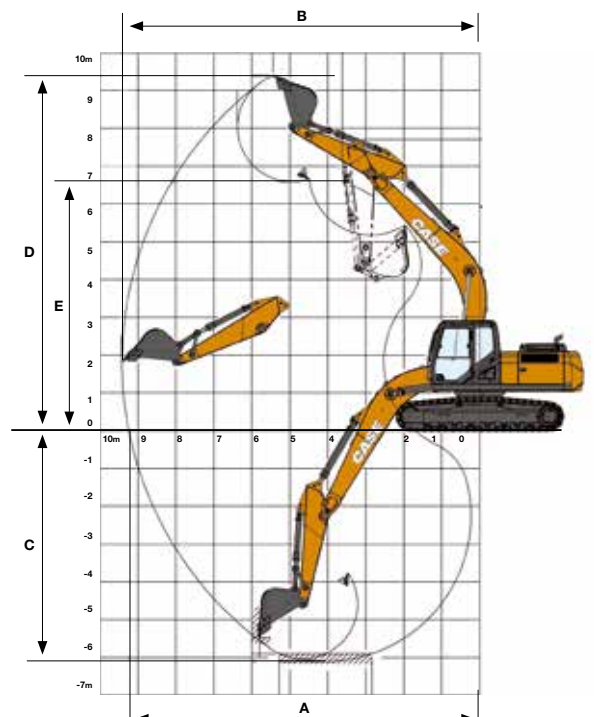


GENERAL DIMENSIONS

			CX220C LC			CX220C NLC		
			Arm 1.9 m	Arm 2.4 m	Arm 2.9 m	Arm 1.9 m	Arm 2.4 m	Arm 2.9 m
A	Overall length (without attachment)	mm	4950	4950	4950	5060	5060	5060
A1	Overall length (with attachment)	mm	9490	9480	9400	9590	9590	9500
B	Overall height (with attachment)	mm	3090	3190	2970	3090	3200	2970
C	Cab height	mm	2950	2950	2950	2980	2980	2980
D	Upper structure overall width	mm	2770	2770	2770	2540	2540	2540
E	Swing (rear end radius)	mm	2750	2750	2750	2830	2830	2830
G	Clearance height under upper structure	mm	1040	1040	1040	1070	1070	1070
F	Minimum ground clearance	mm	440	440	440	430	430	430
H	Wheel base (Center to center of wheels)	mm	3660	3660	3660	3660	3660	3660
I	Crawler overall length	mm	4470	4470	4470	4460	4460	4460
L	Crawler tracks height	mm	920	920	920	920	920	920
J	Track gauge	mm	2390	2390	2390	1990	1990	1990
K	Undercarriage overall width (with 600 mm shoes)	mm	2990	2990	2990	2490	2490	2490

PERFORMANCE DATA

		CX220C LC			CX220C NCL		
		Arm 1.9 m	Arm 2.4 m	Arm 2.9 m	Arm 1.9 m	Arm 2.4 m	Arm 2.9 m
Boom length	mm	5700	5700	5700	5700	5700	5700
Bucket radius	mm	1450	1450	1450	1450	1450	1450
Bucket wrist action	°	177	177	177	177	177	177
A Maximum reach at GRP	mm	8770	9240	9730	8760	9230	9730
B Maximum reach	mm	8960	9420	9900	8960	9420	9900
C Max. digging depth	mm	5610	6110	6650	5580	6080	6620
D Max. digging height	mm	9160	9410	9610	9190	9440	9640
E Max. dumping height	mm	6330	6590	6810	6360	6620	6840
Arm digging force with auto power up		152 kN	132 kN	110 kN	152 kN	110 kN	132 kN
Bucket digging force with auto power up		152 kN	152 kN	152 kN	152 kN	152 kN	152 kN



LIFTING CAPACITY

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

CX220LC, Arm Size: 1.9 m, Bucket: 1.0 m³ (820 kg), Shoes: 600 mm , 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

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, Arm Size: 2.4 m, Bucket: 1.0 m³ (820 kg), Shoes: 600 mm , 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

CX220LC, Arm Size: 2.9 m, Bucket: 0.90 m³ (680 kg), Shoes: 600 mm , 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							4240*	4240*	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

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

CX220NLC, Arm Size: 1.9 m, Bucket: 1.0 m³ (820 kg), Shoes: 500 mm , Max Reach: 8.96 m

7.5 m			4170*	4160					3610*	3590*	6,5
6.0 m	4110*	2700	4470*	4130					3410*	2600*	7,64
4.5 m	4460*	2630	5060*	3920	6380*	6170*			3390*	2140	8,29
3.0 m	4850*	2500	5900*	3690	7720*	5780			3510*	1930	8,59
1.5 m	4930	2390	6590*	3450	9000*	5290			3740*	1870	8,58
0 m	4840	2310	6870	3290	9620*	5060			4140*	1960	8,28
-1.5 m	4860	2330	6830	3260	9450*	5070	10920*	9510	4680*	2240	7,67
-3.0 m			6270*	3400	8670*	5220	12310*	10220	5000*	2850	6,68
-4.5 m					6590*	5420	9400*	9400*	5070*	4320	5,21

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						

CX220NLC, Arm Size: 2.4 m, Bucket : 1.0 m³ (820 kg),Shoes: 500 mm , Max Reach : 9.42 m

7.5 m							3730*	3730*					2900*	2900*	7,13
6.0 m							4050*	4050*	3780*	2750			2740*	2280*	8,16
4.5 m					5710*	5710*	4620*	3970	4210*	2650			2720*	1900	8,77
3.0 m					7400*	5900	5550*	3720	4540*	2500	3160*	1740	2810*	1710	9,05
1.5 m					8760*	5350	6330*	3460	4900	2370	3330*	1680	3000*	1660	9,04
0 m			6830*	6830*	9520*	5040	6780*	3260	4800	2270			3330*	1730	8,76
-1.5 m	7370*	7370*	10200*	9320	9470*	4970	6770*	3180	4760	2240			3930*	1950	8,18
-3.0 m	10330*	10330*	13100*	9980	8950*	5090	6500*	3270					4700*	2410	7,26
-4.5 m			10690*	10100	7440*	5380							4920*	3430	5,92

CX220NLC, Arm Size: 2.9 m, Bucket: 0.90 m³ (680 kg),Shoes: 500 mm,Max Reach: 9.91 m

7.5 m									2690*	2690*			1980*	1980*	7,76
6.0 m									3520*	2920			1880*	1880*	8,71
4.5 m							4260*	4140	3980*	2810	2860*	1940	1870*	1810	9,27
3.0 m			9570*	9570*	7010*	6160*	5300*	3900	4390*	2650	3780*	1870	1930*	1650	9,54
1.5 m			7730*	7730*	8640*	5590	6180*	3620	4930*	2500	3730	1790	2070*	1600	9,53
0 m			7640*	7640*	9490*	5190	6760*	3390	4910	2370	3670	1730	2310*	1650	9,26
-1.5 m	6980*	6980*	9940*	9360	9610*	5050	6860	3260	4830	2310			2700*	1820	8,72
-3.0 m	9200*	9200*	13640*	9890	9320*	5110	6770*	3300	4870	2370			3440*	2180	7,86
-4.5 m	12910*	12910*	12000*	10200	8240*	5330	5860*	3530					4870*	2910	6,61

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) lenght 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 floormat
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/fops 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."

