

C-SERIES HYDRAULIC EXCAVATORS
CX210C / 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 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 PRECISION AND CONTROLLABILITY

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



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 CRAWLER EXCAVATORS



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" LCD cluster for a more secure and safe working environment and to constant monitor the main machine parameters.





C-SERIES 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 and pressure settings 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

CX210C/ CX220C

ENGINE

Model _____ GF-4HK1X
 Type _____ Water-cooled, 4-cycle diesel, 4-cylinder in line, electronically controlled, high pressure common rail system, variable geometry turbocharger, air cooled intercooler.
 Number of cylinders/displacement _____ 5.19 l
 Bore/Stroke _____ 115 x 125 mm
 Rated flywheel horse power _____
 Horsepower ISO 9249 (Net) _____ 117.3 kW at 1800 min⁻¹
 Horsepower ISO 14396 (Gross) _____ 122 kW at 1800 min⁻¹
 Maximum torque ISO 9249 (Net) _____ 608 Nm at 1600 min⁻¹
 Maximum torque ISO 14396 (Gross) _____ 624 Nm at 1600 min⁻¹

HYDRAULIC SYSTEM

Main pumps _____ 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

| | | CX210C | | CX220C | |
|--|----|---------------|---------------|---------------|---------------|
| | | Arm 2.40 m | Arm 2.94 m | Arm 2.40 m | Arm 2.94 m |
| Boom length | mm | 5700 | 5700 | 5700 | 5700 |
| Bucket radius | mm | 1450 | 1450 | 1450 | 1450 |
| Bucket wrist action | ° | 177 | 177 | 177 | 177 |
| A Maximum reach at GRP | mm | 9240 | 9730 | 9240 | 9730 |
| B Maximum reach | mm | 9420 | 9900 | 9420 | 9900 |
| C Max. digging depth | mm | 6110 | 6650 | 6110 | 6650 |
| D Max. digging height | mm | 9410 | 9610 | 9410 | 9610 |
| E Max. dumping height | mm | 6590 | 6810 | 6590 | 6810 |
| Arm digging force with auto power up | | 132 kN | 110 kN | 132 kN | 110 kN |
| Bucket digging force with auto power up | | 152 kN | 152 kN | 152 kN | 152 kN |

WEIGHT AND GROUND PRESSURE

2.94 m arm, 0.9 m³ bucket, 800mm grouser shoe, operator, lubricant, coolant and full fuel tank.

| | CX210C | CX220C |
|--|-----------|-----------|
| OPERATING MASS | | |
| Cambodia, Laos, Indonesia, Philippines, Malaysia* | 21,500 Kg | 21,900 Kg |
| Myanmar, Thailand | 21,200 Kg | 21,700 Kg |
| Malaysia | 21,400 Kg | - |
| GROUND PRESSURE | 0.036 MPa | 0.047 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

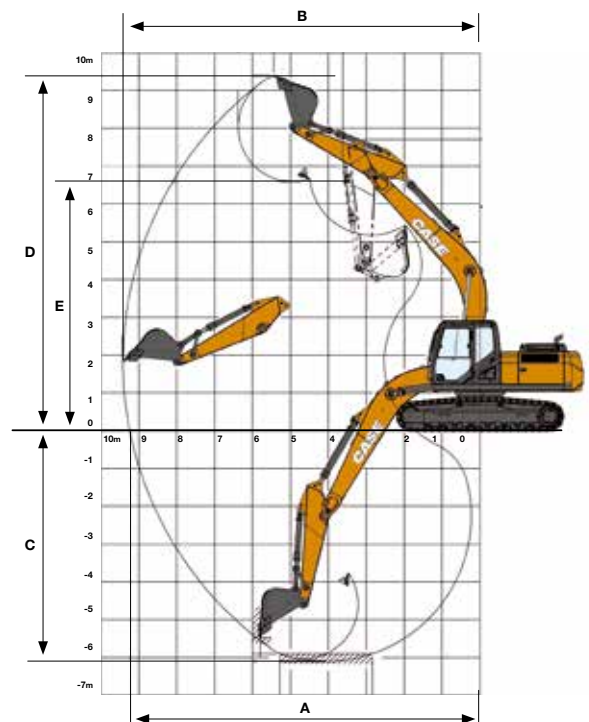
Circuit _____ 24V
 Alternator _____ 50 Amp
 Starter motor _____ 5.0 kW
 Batteries _____
 Indonesia, Malaysia, Philippines _____ 2x12V 88 Ah/5HR
 Indonesia, Malaysia, Philippines _____ 2x12V 92 Ah/5HR

UNDERCARRIAGE

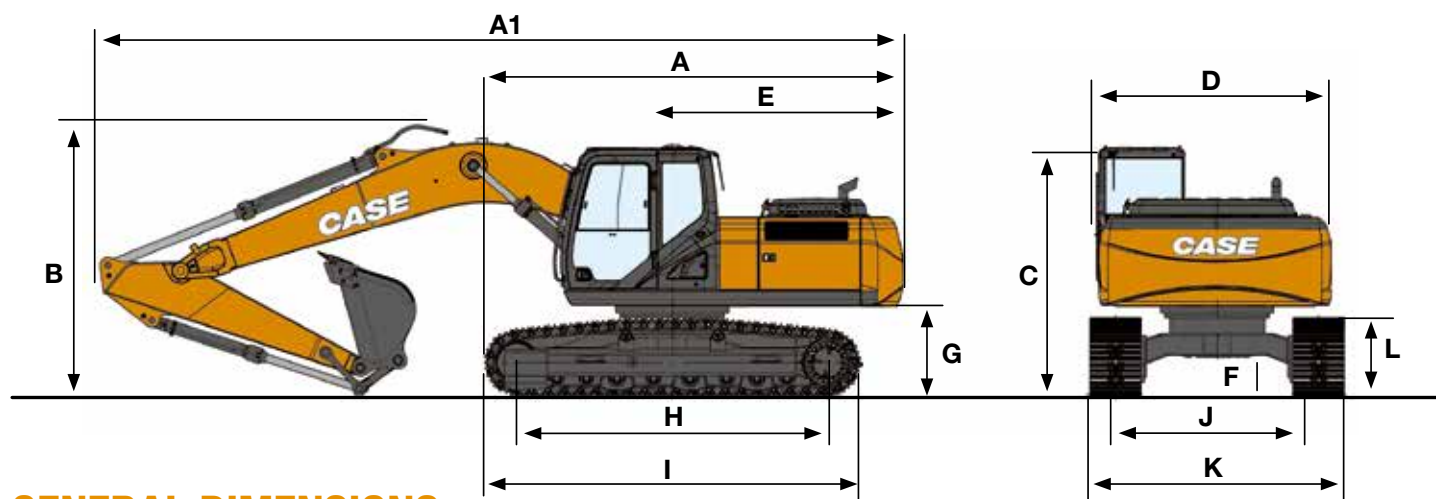
Number of carriers rollers (each side) _____ 2
 Number of track rollers (each side) _____ 7
 Number of shoes (each side) _____ 46
 Type of shoe _____ Triple grouser shoe

CAPACITIES

Fuel tank _____ 410 lt
 Hydraulic system _____ 240 l
 Cooling system _____ 29,8 l
 Engine Crank Case _____ 23.1 l



GENERAL DIMENSIONS AND LIFTING CAPACITY



GENERAL DIMENSIONS

| | | | CX210C | | CX220C | |
|----|---|----|------------|------------|------------|------------|
| | | | Arm 2.40 m | Arm 2.94 m | Arm 2.40 m | Arm 2.94 m |
| A | Overall length (without attachment) | mm | 4810 | 4810 | 4950 | 4950 |
| A1 | Overall length (with attachment) | mm | 9480 | 9400 | 9480 | 9400 |
| B | Overall height (with attachment) | mm | 3190 | 2970 | 3190 | 2970 |
| C | Cab height | mm | 2950 | 2950 | 2950 | 2950 |
| D | Upper structure overall width | mm | 2770 | 2770 | 2770 | 2770 |
| E | Swing (rear end radius) | mm | 2750 | 2750 | 2750 | 2750 |
| G | Clearance height under upper structure | mm | 1040 | 1040 | 1040 | 1040 |
| F | Minimum ground clearance | mm | 440 | 440 | 440 | 440 |
| H | Wheel base (Center to center of wheels) | mm | 3370 | 3370 | 3660 | 3660 |
| I | Crawler overall length | mm | 4180 | 4180 | 4470 | 4470 |
| L | Crawler tracks height | mm | 920 | 920 | 920 | 920 |
| J | Track gauge | mm | 2200 | 2200 | 2390 | 2390 |
| K | Undercarriage overall width (with 800 mm shoes) | mm | 3190 | 3190 | 3190 | 3190 |

| Front 360° | REACH | | | | | |
|---------------|-------|-------|-------|--------------|--|---|
| | 4.5 m | 6.0 m | 7.5 m | At max reach | | |
| | | | | | | m |

CX210C - Standard arm 2.40 m, 800 mm shoes, 0.80 BUCKET (650 kg)

| | | | | | | | | | |
|--------|-------|-------|-------|-------|------|------|-------|------|------|
| 7.5 m | | | 4310* | 4310* | | | 3860* | 3660 | 6,72 |
| 6.0 m | | | 4570* | 4500* | 4490 | 3030 | 3560* | 2790 | 7,75 |
| 4.5 m | 6890* | 6720* | 5390* | 4340 | 4500 | 2950 | 3480* | 2360 | 8,4 |
| 3.0 m | | | 6220* | 4030 | 4340 | 2810 | 3340 | 2120 | 8,73 |
| 1.5 m | | | 5950 | 3770 | 4190 | 2670 | 3250 | 2040 | 8,77 |
| 0 m | | | 5790 | 3630 | 4090 | 2580 | 3360 | 2110 | 8,52 |
| -1.5 m | 5580* | 5580* | 5760 | 3600 | 4080 | 2570 | 3750 | 2360 | 7,94 |
| -3.0 m | 8390* | 5750* | 5840 | 3680 | | | 4680 | 2970 | 6,95 |

| Front 360° | REACH | | | | | |
|---------------|-------|-------|-------|-------|--------------|---|
| | 4.5 m | 6.0 m | 7.5 m | 9.0 m | At max reach | |
| | | | | | | m |

CX210C - Standard arm 2.94 m, 800 mm shoes, 0.80 BUCKET (650 kg)

| | | | | | | | | | | | |
|--------|-------|-------|-------|------|-------|------|-------|-------|-------|------|------|
| 7.5 m | | | | | | | | 2500* | 2500* | 7,34 | |
| 6.0 m | | | | | 4000* | 3080 | | 2340* | 2340* | 8,3 | |
| 4.5 m | 5970* | 5970* | 4870* | 4410 | 4360* | 2970 | | 2300* | 2100 | 8,9 | |
| 3.0 m | 8300* | 6310 | 5940* | 4080 | 4350 | 2810 | 3160 | 1990 | 2360* | 1890 | 9,22 |
| 1.5 m | 7180* | 5730 | 5960 | 3780 | 4180 | 2650 | 3080 | 1920 | 2520* | 1820 | 9,25 |
| 0 m | 5850* | 5530 | 5750 | 3590 | 4050 | 2540 | 2900* | 1870 | 2800* | 1860 | 9,01 |
| -1.5 m | 6690* | 5510 | 5680 | 3520 | 4000 | 2490 | | | 3270* | 2060 | 8,48 |
| -3.0 m | 8410* | 5600 | 5720 | 3560 | 4060 | 2550 | | | 4010 | 2510 | 7,57 |

LIFTING CAPACITY

| Front 360° | REACH | | | |
|---------------|-------|-------|-------|--------------|
| | 4.5 m | 6.0 m | 7.5 m | At max reach |
| | | | | |
| | | | | m |

CX220C - Standard arm 2.40 m, 800 mm shoes, 0.80 BUCKET (650 kg)

| | | | | | | | | | | |
|--------|-------|-------|-------|-------|--|-------|-------|-------|------|------|
| 7.5 m | | | 4250* | 4250* | | | 3840* | 3840* | 6,72 | |
| 6.0 m | | | 4510* | 4510* | | 4430* | 3340 | 3540* | 3090 | 7,75 |
| 4.5 m | 6810* | 6810* | 5310* | 4790 | | 4680* | 3260 | 3460* | 2620 | 8,4 |
| 3.0 m | | | 6310* | 4460 | | 4920 | 3110 | 3540* | 2360 | 8,73 |
| 1,5 m | | | 6790 | 4190 | | 4760 | 2970 | 3690 | 2280 | 8,77 |
| 0 m | | | 6620 | 4040 | | 4660 | 2870 | 3820 | 2350 | 8,52 |
| -1,5 m | 5580* | 5580* | 6590 | 4010 | | 4640 | 2860 | 4270 | 2630 | 7,94 |
| -3.0 m | 8390* | 6450 | 6510* | 4100 | | | | 5220* | 3310 | 6,95 |

| Front 360° | REACH | | | | |
|---------------|-------|-------|-------|-------|--------------|
| | 4.5 m | 6.0 m | 7.5 m | 9.0 m | At max reach |
| | | | | | |
| | | | | | m |

CX220C - Standard arm 2.94 m, 800 mm shoes, 0.80 BUCKET (650 kg)

| | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|
| 7.5 m | | | | | | | | 2500* | 2500* | 7,34 | |
| 6.0 m | | | | | | | 4000* | 3450 | 2340* | 2340* | 8,3 |
| 4.5 m | 5970* | 5970* | 4870* | 4810* | | | 4360* | 3340 | 2300* | 2300* | 8,9 |
| 3.0 m | 8300* | 7120 | 5940* | 4580 | 3420* | 2270 | 4890* | 3180 | 2360* | 2170 | 9,22 |
| 1,5 m | 7180* | 6520 | 6820* | 4270 | 3560 | 2200 | 4810 | 3010 | 2520* | 2090 | 9,25 |
| 0 m | 5850* | 5850* | 6670 | 4080 | 2900* | 2150 | 4680 | 2890 | 2800* | 2140 | 9,01 |
| -1,5 m | 6690* | 6290 | 6590 | 4010 | | | 4630 | 2850 | 3270* | 2360 | 8,48 |
| -3.0 m | 8410* | 6380 | 6640 | 4050 | | | 4690 | 2910 | 4130* | 2870 | 7,57 |
| -4.5 m | 7150* | 6620 | 5080* | 4260 | | | | | 4920* | 4160 | 6,1 |

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/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."

