HYDRAULIC EXCAVATOR

CX210C / CX220C LC

QUALITY
YOU CAN TRUST
MAIN REASONS TO CHOOSE THE C-SERIES

HIGH EFFICIENCY
Up to 4% more fuel efficiency due to hydraulic system control and 6% better efficiency from FPT engine. 
5 energy saving controls & ECO gauge function enable the continuous monitoring of the fuel consumption.

HIGH PRECISION AND CONTROLLABILITY
High performance and smooth control. 
The CASE Intelligent Hydraulics System is the result of continuous research of perfection of a legendary brand. CASE is synonymous and reference in the market for its fastest cycles times, best energy saving performance and smooth control.

HIGH RELIABILITY
Robust design. 
Increased plate thickness on HD structures and HD attachments to improve durability. 
Lower cost of ownership. 
With the CASE World Class Manufacturing.

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 7” LCD monitor.
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 A/H/SP working 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.
High quality components and service points accessible from the ground.
CASE advanced energy management consists of 5 Energy Saving Controls

- **Automatic Economy control (AEC)**: improving fuel efficiency by drop in engine rpm when the joystick is in neutral position.
- **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 control during digging and leveling operations
- **Idle functions**
  - **Auto Idle**: lowers engine rpm after 5 seconds of joystick inactivity;
  - **Idle Shutdown**: shuts the engine down after a pre-set time.
  - **Regenerative**: hydraulic circuit for boom, arm & bucket operations for better productivity.

The CX210C/ CX220C LC model is powered by **fuel efficient FPT (Fiat PowerTrain) Engine**, designed to boost machine performances and optimize fuel economy. The 6 cylinders FPT engine delivers outstanding power and torque, that reduces the transient time making the hydraulic system immediately reactive to any load. 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 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. Two variable displacement axial piston pumps with regulating system are combined with the CASE main valve, designed in Japan for fine, precise and efficient operations.

The Hydraulic system is governed by a Machine Control Unit which collects input from pressure sensors located on pumps, main valve and pilot lines. The Machine Control Unit contentiously dialogue with the Engine Control Unit in order to optimize machine output at any moment in any condition.

**HIGH EFFICIENCY**

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Accurate, robust and simple design for high durability.

- The CX210C/ CX220C delivers leading design solutions.
- Boom & Arm plate thickness increased by 33% and upper-structure has been reinforced in all area with higher stress to increase the durability.
- The boom has high strength casting parts joined with thicker hinge flanges to reduce stress on the structures.
- The arm design features a single side lateral thicker plate, with extra reinforcement plates and grid on bottom side.
- The bucket linkage has a fortified structure 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 Undercarriage Structure
Designed to last!

Thicker structural plates and new design:
- The ‘sloped’ lower frame design reduces the time needed to clean the undercarriage.
- Reinforced idler guards to protect from stones.
- Larger pin diameter to reduce contact surface pressure and increase component life.
- Travel motor case frame with thicker plate for better durability.
- Recoil spring increase stroke for better cushion performance.
- Track guards to keep chain on rollers in any condition.
COMFORT AND SAFETY

• Superior wide & roomy cab with ample legroom, More secure & safe working environment.
• Ergonomically designed seat with 8 different adjustments enhances operator comfort and hence productivity.
• Vibration dampening protects against whole body fatigue for all day productivity.
• Openable roof window to give better visibility on top.
• Fully adjustable right hand console includes advanced engine throttle control, that determines working mode selection. The console is equipped with a luminosity switches to ensure that the graphics are clear and easily readable in bright sunlight.
• New cab has thinner pillars and wide glass areas, including one piece window on right hand side, for improved visibility all round. Longer seat slides, a fully reclining seat and foot space, and air conditioning with 8 outlet vents ensure that any operator can stay comfortable throughout the working day. A clock is included. Storage is provided, with a large box behind the driver’s seat and bottle or can holders on front right side.
• Radio’s slot, speakers and antenna as standard for an easy radio add on.
• Telematic’s predisposition for an easy plug in.

OUTSTANDING VISIBILITY

• Wider glazed surface with two pieces door’s window.
• Improved front, top and side visibility - Openable roof window to give better visibility on top.
• New 7” LED cluster to constantly monitor the main machine parameters.
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.

**FAST CYCLES**

**HIGH VERSATILITY**

3 power modes to match any customer need:

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

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**

- All filters and regular check points are grouped and easily accessible from the ground.
- Easy access and centralised lubrication points.
- Battery disconnect switch accessible from ground while servicing the machine.
- Radiator and cooler are mounted side by side for more efficient cooling and easy access for cleaning.
- Machine can be supplied suitable for Tropical climate (from -15°C to +50°C) or Super Tropical climate (from -15°C to +55°C)
- Optional refueling pump with auto cut off reduces downtime for regular fills.
ENGINE
Model _______________________________ FPT F4HE0687A*J105
Type _____________________________ Water-cooled, 4-cycle diesel, 6-cylinder in line, electronically controlled, high pressure common rail system, turbocharger, air cooled intercooler
Emission certified ______________________ Tier 3
Displacement ________________________ 6.727 L
Bore/Stroke ___________________________ 104 x 132 mm
Horsepower ISO 14396 GROSS _______ 117 kW (159 hp) at 1800 min⁻¹
Maximum torque ISO 14396 GROSS ______ 622 Nm at 1800 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 ________________________ 64,400 N·m

FILTERS
Suction filter ________________________ 105 μm
Return filter _________________________ 6 μm
Pilot line filter ______________________ 8 μm

WEIGHT AND GROUND PRESSURE
2.4 m arm, 1.1 m³ bucket, 600mm triple grouser shoe, operator, lubricant, coolant and full fuel tank.

<table>
<thead>
<tr>
<th>Bucket Cap (CuM)</th>
<th>Type</th>
<th>Application</th>
<th>Material Handled</th>
<th>(Density upto in T/CuM) - eg</th>
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<tr>
<td>481256008</td>
<td>1.00</td>
<td>GP</td>
<td>General</td>
<td>Earthwork</td>
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<td>461852008</td>
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<td>GP</td>
<td>Light Duty</td>
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<td>HD ROCK</td>
<td>Heavy Duty</td>
<td>Granite/ Marble</td>
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<td>HD</td>
<td>Heavy Duty</td>
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</tbody>
</table>

BUCKET SELECTION GUIDE

TRAVEL
Travel motor _____________ Variable displacement axial piston motor
Max travel speed ____________ 5.6 km/h
Low travel speed ____________ 3.4 km/h
Gradeability ___________________________ 70% (35°)
Drawbar pull _________________________ 205 kN

ELECTRICAL SYSTEM
Circuit _____________________________ 24V
Alternator __________________________ 70 Amp
Starter motor ________________________ 4.0 kW
Battery _____________________________ 2 x 12 V 110Ah

UNDERCARRIAGE
Number of carriers rollers (each side) ___________ 2
Number of track rollers (each side) (CX210C / CX220C LC) ___________ 7/8
Number of shoes (each side) (CX210C / CX220C LC) ___________ 46/49
Type of shoe __________________________ Triple grouser shoe

CAPACITIES
Fuel tank (l) _____________ 410
Hydraulic system (l) ___________ 295
Cooling system (l) ___________ 25
Engine Crank Case (l) ___________ 16.5
Hydraulic Tank capacity (l) ___________ 162

WEIGHT AND GROUND PRESSURE

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Bucket Cap (CuM)</th>
<th>Type</th>
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<tr>
<td>CX210C</td>
<td>CX220C LC</td>
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<tr>
<td>Operating Mass</td>
<td>21,600 Kg</td>
<td>22,220 Kg</td>
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<tr>
<td>Ground Pressure</td>
<td>0.048 MPa</td>
<td>0.046 MPa</td>
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</table>

CX210C | CX220C LC |
| 1.90m Arm | 2.40m Arm | 2.94m Arm | 1.90m Arm | 2.40m Arm | 2.94m Arm |
| A | B | B | A | A | B |
| A | B | C | C | B | C | C |
| A | A | B | A | A | B |
| A | A | B | A | A | B |
### GENERAL DIMENSIONS

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<tr>
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<th>CX210C</th>
<th>CX220C LC</th>
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<tbody>
<tr>
<td><strong>A</strong> Overall length (without attachment)</td>
<td>mm</td>
<td>4840</td>
</tr>
<tr>
<td><strong>A1</strong> Overall length (with attachment)</td>
<td>mm</td>
<td>9430</td>
</tr>
<tr>
<td><strong>B</strong> Overall height (with attachment)</td>
<td>mm</td>
<td>2980</td>
</tr>
<tr>
<td><strong>C</strong> Cab height</td>
<td>mm</td>
<td>2950</td>
</tr>
<tr>
<td><strong>D</strong> Upper structure overall width</td>
<td>mm</td>
<td>2770</td>
</tr>
<tr>
<td><strong>E</strong> Swing (rear end radius)</td>
<td>mm</td>
<td>2780</td>
</tr>
<tr>
<td><strong>F</strong> Minimum ground clearance</td>
<td>mm</td>
<td>440</td>
</tr>
<tr>
<td><strong>G</strong> Clearance height under upper structure</td>
<td>mm</td>
<td>1040</td>
</tr>
<tr>
<td><strong>H</strong> Wheel base (Center to center of wheels)</td>
<td>mm</td>
<td>3370</td>
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<tr>
<td><strong>I</strong> Crawler overall length</td>
<td>mm</td>
<td>4180</td>
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<tr>
<td><strong>L</strong> Crawler tracks height</td>
<td>mm</td>
<td>920</td>
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<tr>
<td><strong>K</strong> Undercarriage overall width (with 600 mm shoes)</td>
<td>mm</td>
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### PERFORMANCE DATA

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<tr>
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<th>CX220C LC</th>
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<tr>
<td><strong>A</strong> Maximum reach at GRP</td>
<td>mm</td>
<td>9730</td>
</tr>
<tr>
<td><strong>B</strong> Maximum reach</td>
<td>mm</td>
<td>9870</td>
</tr>
<tr>
<td><strong>C</strong> Max. digging depth</td>
<td>mm</td>
<td>6650</td>
</tr>
<tr>
<td><strong>D</strong> Max. digging height</td>
<td>mm</td>
<td>9610</td>
</tr>
<tr>
<td><strong>E</strong> Max. dumping height</td>
<td>mm</td>
<td>6810</td>
</tr>
<tr>
<td><strong>Arm digging force with auto power up</strong></td>
<td>kN</td>
<td>110</td>
</tr>
<tr>
<td><strong>Bucket digging force with auto power up</strong></td>
<td>kN</td>
<td>152</td>
</tr>
<tr>
<td>Front</td>
<td>360°</td>
<td>REACH</td>
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<td>-------</td>
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<td>-------</td>
</tr>
<tr>
<td></td>
<td>0.0 m</td>
<td>4.5 m</td>
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<tr>
<td>CX220C LC, ARM 1.90 M, BUCKET 1.10M³ (868 KG), SHOES 600 MM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.5 m</td>
<td>5540*</td>
<td>5540*</td>
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<tr>
<td>6.0 m</td>
<td>6910*</td>
<td>6910*</td>
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<tr>
<td>4.5 m</td>
<td>8640*</td>
<td>6610</td>
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<td>3.0 m</td>
<td>9860*</td>
<td>6160</td>
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<td>1.5 m</td>
<td>10140*</td>
<td>6030</td>
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<td>9710*</td>
<td>6080</td>
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**CX220C LC, ARM 1.90 M, BUCKET 1.10M³ (868 KG), SHOES 600 MM**

**CX220C LC, ARM 2.40 M, BUCKET 1.10M³ (868 KG), SHOES 600 MM**

**CX220C LC, ARM 2.94 M, BUCKET 1.10M³ (868 KG), SHOES 600 MM**

**CX210C, ARM 1.90 M, BUCKET 1.10M³ (868 KG), SHOES 600 MM**

**CX210C, ARM 2.40 M, BUCKET 1.10M³ (868 KG), SHOES 600 MM**
STANDARD EQUIPMENT

ENGINE
Super Tropical package for temperatures -15°C +55°C
Turbocharger with air cooled intercooler
Double element air cleaner
Air-pre cleaner - cup type
Pre fuel filter
Fuel filter w/ water separator
Automatic/manual engine return to idle
Neutral safety start
Emergency stop
Dial type throttle control

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 heat and defrost functions
Tilting consoles - 4-position
Low-effort controls
Sliding cockpit
Mechanical suspended seat
Sun shade
Color LCD monitor display
Auxiliary select system
Aux-in port for personal electronics (12v)
Rubberflooromat
One-piece right hand window
Two piece door window
Roof top openable metal window
Windshield wiper / washer
Storage compartments

Anti-theft device
On-board diagnostic system
Standard handrails
Sliding front window – storable lower windshield
Rh front console w/ clock and cell phone holder
Rear mirror (mounted on cab)
Glow-plug pre-heat

EQUIPMENT AND UNDERCARRIAGE
5,70 meter boom
Two lights on cabin top
One light on tool box
HD Bucket linkage
Tool box
Sealed and lubricated tracks
Single track guide
600mm triple grouser steel shoes
Rear mirror (mounted on tool box)

OPTIONAL EQUIPMENT

CAB AND OPERATOR COMPARTMENT
Case telematics
Air suspended seat
Cabin Fan
HVAC with Auto Climate Control function
High band AM/FM Radio
Tropical package for temperatures -15°C +55°C
Cold Package for temperatures -25°C +45°C
Warm up mode

EQUIPMENT AND UNDERCARRIAGE
Triple track guide
Auxiliary single acting circuit
Auxiliary single or High flow circuit
Refuel pump
Upper front screen (mesh type)
Air-pre cleaner - cyclone type
Side cutter for GP bucket
Boom mounted work light (70 watt)
One light on Boom foot
Lower under cover
BUILDING A STRONG CASE.

Since 1842, at CASE Construction Equipment we have lived by an unwavering commitment to build practical, intuitive solutions that deliver both efficiency and productivity.

We continually strive to make it easier for our customers to implement emerging technologies and new compliance mandates.

Today, our global scale combined with our local expertise enables us to keep customers’ real-world challenges at the center of our product development.

The vast CASE dealers’ network is always ready to support and protect your investment and exceed your expectations, while also providing you with the ultimate ownership experience.

Our goal is to build both stronger machines—and stronger communities. At the end of the day, we do what’s right for our customers and our communities so that they can count on CASE.

CaseCE.com