

**C-SERIES HYDRAULIC EXCAVATORS**  
**CX210C / CX220C**

**CASE**  
CONSTRUCTION



**QUALITY**  
**YOU CAN TRUST**

[www.casece.com](http://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

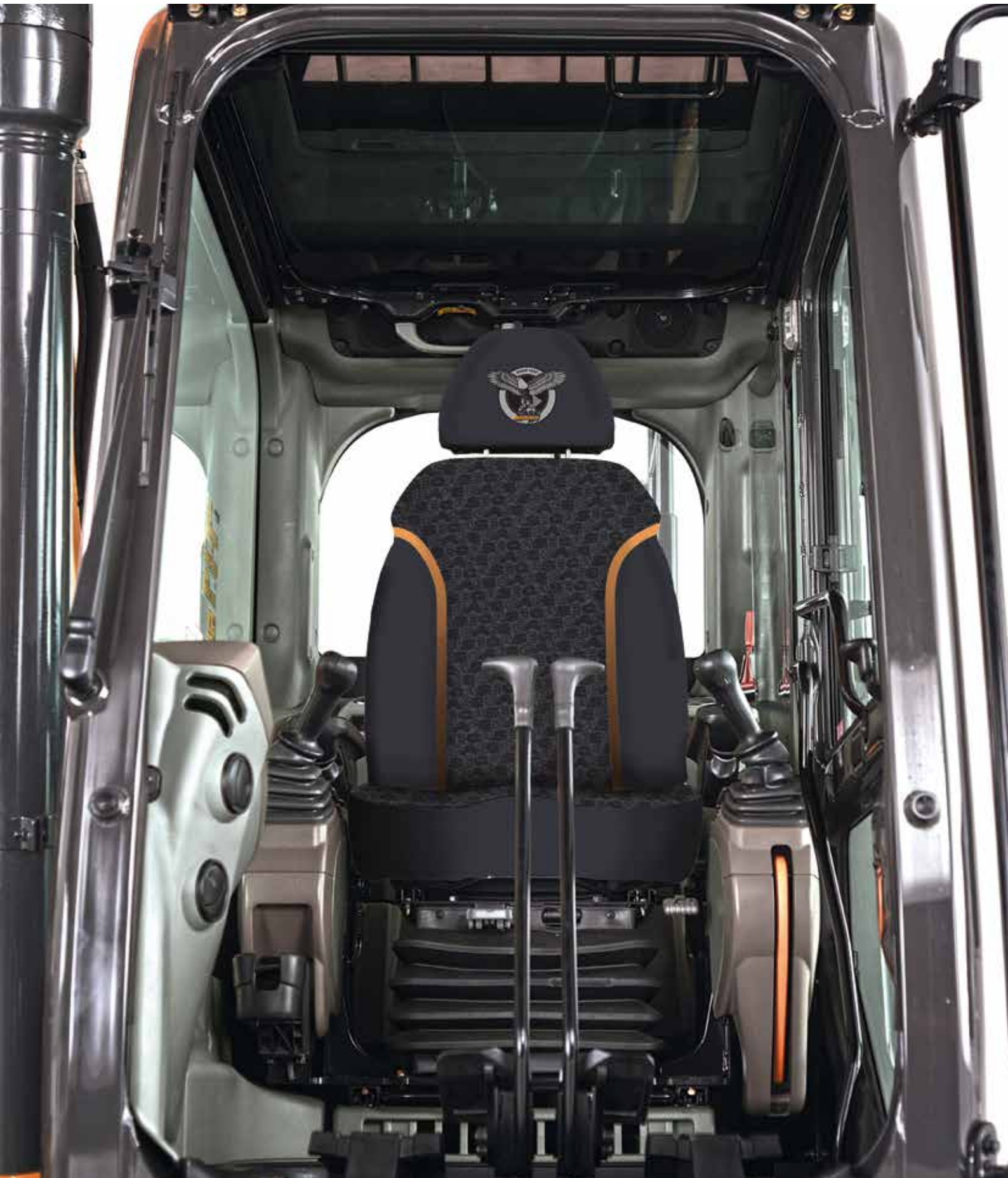
- Superior wide and roomy cab with ample legroom.
- New cushioning system to lower noise and vibration levels for the operator's ultimate comfort.
- Totally adjustable workstation with fully reclinable air –suspended seat.
- Air conditioning system with 25% more airflow and 6% better performances compared 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<sup>-1</sup>  
 Horsepower ISO 14396 (Gross) \_\_\_\_\_ 122 kW at 1800 min<sup>-1</sup>  
 Maximum torque ISO 9249 (Net) \_\_\_\_\_ 608 Nm at 1600 min<sup>-1</sup>  
 Maximum torque ISO 14396 (Gross) \_\_\_\_\_ 624 Nm at 1600 min<sup>-1</sup>

### HYDRAULIC SYSTEM

Main pumps \_\_\_\_\_ 2 variable displacement axial piston pumps with regulating system  
 Max oil flow \_\_\_\_\_ 2 x 211 l/min at 1800 min<sup>-1</sup>  
 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<sup>-1</sup>  
 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
<b>Boom length</b>	mm	5700	5700	5700	5700
<b>Bucket radius</b>	mm	1450	1450	1450	1450
<b>Bucket wrist action</b>	°	177	177	177	177
<b>A Maximum reach at GRP</b>	mm	9240	9730	9240	9730
<b>B Maximum reach</b>	mm	9420	9900	9420	9900
<b>C Max. digging depth</b>	mm	6110	6650	6110	6650
<b>D Max. digging height</b>	mm	9410	9610	9410	9610
<b>E Max. dumping height</b>	mm	6590	6810	6590	6810
<b>Arm digging force with auto power up</b>		132 kN	110 kN	132 kN	110 kN
<b>Bucket digging force with auto power up</b>		152 kN	152 kN	152 kN	152 kN

### WEIGHT AND GROUND PRESSURE

2.94 m arm, 0.9 m<sup>3</sup> bucket, 800mm grouser shoe, operator, lubricant, coolant and full fuel tank.

	CX210C	CX220C
<b>OPERATING MASS</b>		
<b>Cambodia, Laos, Indonesia, Philippines, Malaysia*</b>	21,500 Kg	21,900 Kg
<b>Myanmar, Thailand</b>	21,200 Kg	21,700 Kg
<b>Malaysia</b>	21,400 Kg	-
<b>GROUND PRESSURE</b>	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

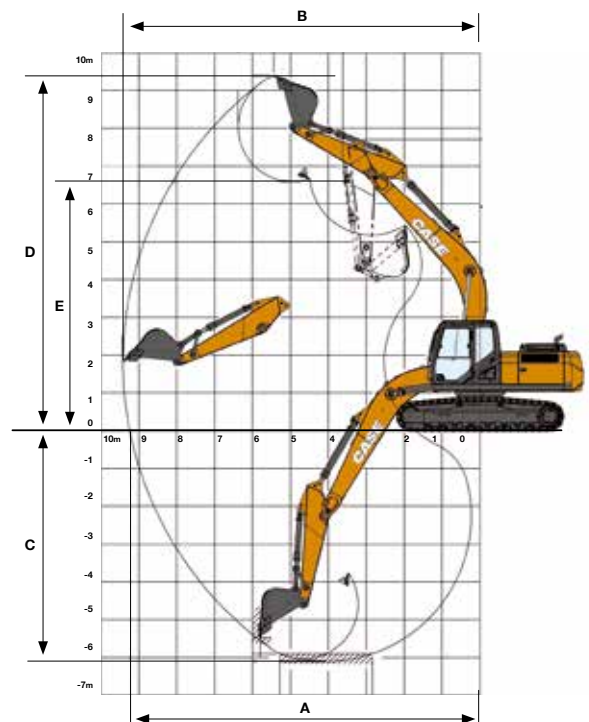
Circuit \_\_\_\_\_ 24V  
 Alternator \_\_\_\_\_ 50 Amp  
 Starter motor \_\_\_\_\_ 5.0 kW  
 Batteries \_\_\_\_\_  
 Indonesia, Malaysia, Philippines \_\_\_\_\_ 2x12V 88 Ah/5HR  
 Indonesia, Malaysia, Philippines \_\_\_\_\_ 2x12V 92 Ah/5HR

### UNDERCARRIAGE

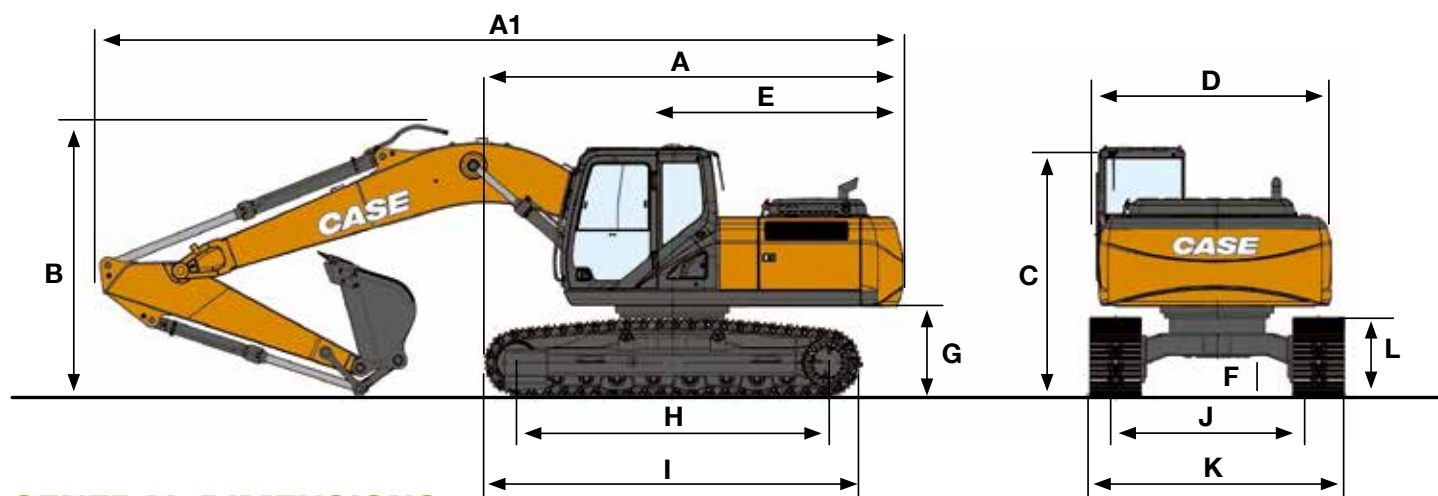
Number of carriers rollers (each side) \_\_\_\_\_ 2  
 Number of track rollers (each side) \_\_\_\_\_ 7  
 Number of shoes (each side) \_\_\_\_\_ 46  
 Type of shoe \_\_\_\_\_ Triple grouser shoe

### 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	3000	3000	3190	3190

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

### 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					m
	4.5 m	6.0 m	7.5 m	9.0 m	At max reach	

### 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

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*			3540*	3090	7,75
4.5 m	6810*	6810*	5310*	4790	4430*	3340	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](http://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."

