

# CX

SERIES HYDRAULIC EXCAVATORS  
**CX225SR**

**CASE**



P R O F E S S I O N A L P A R T N E R



## Engine

Latest generation engine meeting European standards (tier 2 regulations) "low smoke emissions".

CASE, since the first machines in the "CX" series were introduced, has been the first manufacturer in Europe to market hydraulic excavators with engines of this type.

Particularly suitable for urban work, these engines have a significantly reduced noise level, one

of the lowest fuel consumptions on the market and also meet present and future environmental standards.

Checking of engine rotation speed using an electric potentiometer.

High performance filtration circuit enables oil change intervals to be extended to every 500 h.

Return to idle controlled from RH control lever.

### Choice of two 2 work modes:

**Mode N** = "Standard" work position giving the maximum power available on the machine.

**Mode E** = "Economic" work position providing a significant reduction in fuel consumption and a reduction in noise level (town work).



Make..... ISUZU  
 Type ..... BB-6BG1T  
 Turbo..... Yes  
 Electronically controlled fuel injection  
 Number of cylinders..... 6  
 Bore x stroke ..... 105 x 125 mm  
 Capacity..... 6494 cm<sup>3</sup>  
 Power at 1950 rpm EEC 80/1269..... 103 kW - 138 hp



## Hydraulic system

2 variable displacement axial piston hydraulic pumps feeding attachment, travel and swing.

Maximum flow ..... 2 x 190 l/min

Safety valve pressure:

Attachment/Power Boost.....343/373 bar

Swing ..... 304 bar

Travel..... 343 bar

### CONTROL VALVES

4 control valve sections for the LH travel, boom, bucket and dipper acceleration.

5 control valve sections for RH travel, dipper, swing, auxiliary circuit and boom acceleration.

### FILTRATION

Hydraulic system components protected by "ULTRA CLEAN" filter which filters out particles larger than 1µ and also traces of condensation water.



High performance filtration for longer hydraulic fluid life-time (fluid change interval now 5000 hours).

### SWING

Fixed displacement, axial piston swing motor.

Upperstructure swing speed ..... 11 rpm

Planetary reduction gear with automatic braking by oil bath disc brakes.



### TRAVEL

Variable displacement, axial piston hydraulic motors.

Planetary reduction gear with automatic braking by oil bath disc brakes.

Two travel speeds (selected on the instrument panel).

High speed ..... 5 kph

Low speed ..... 3.1 kph



### Circuit and component capacities

Hydraulic reservoir.....	120 l
Hydraulic system .....	205 l
Travel reduction gear (per side)	4.7 l
Swing reduction gear .....	4.8 l
Engine (including filter change) ...	24 l
Fuel tank .....	265 l
Engine coolant circuit .....	23 l



### Electrical system

Voltage .....	24 v
Alternator.....	50 A/h
Starter motor.....	24 v - 4.5 kW
Batteries.....	2 x 12v - 92 A/h

## Upperstructure

The “short radius” CX225SR has special specifications compared to “standard” models:

- Shorter upperstructure radius for the rear part.
- The boom foot is positioned close to the upperstructure swing axis so as to have the minimum attachment front swing radius.
- Cab is within the upperstructure swing radius.
- The width of the upperstructure is close to the width of the undercarriage (using standard track pads).
- Counterweight and general stability of the machine provides lifting capacities identical to “standard” machines.



## Undercarriage

LC type undercarriage providing excellent stability (as a result of its length) and loading capacity comparable to machines of standard dimensions.

Upper and lower tracks equipped with bushings and seals.

Travel motors protected and incorporated in the undercarriage.

Track tension adjustable by grease cylinder.

### SPECIFICATIONS

Number of upper rollers..... 2

Number of lower rollers ..... 8

Number of track pads..... 49

Type of track pads..... Triple grousers

Steel track pad widths .....500,  
600 and 700 mm

Standard track pad size .. 600 mm

Gradeability ..... 70% (35°)

Front chain guide







## Cab

With CASE, reduced dimensions of the machine do not mean reduction in space for the operator.

The cab of the CX225SR has the same comfort level as the standard CX models. It is integrated into the upperstructure, does not reduce manoeuvrability on 360° swing and has sufficient width for the operator's maximum comfort plus all the advantages of a "standard" machine.

Mechanical suspension, multi-adjustable driver's seat, instrument panel and control console



to the RH and LH of the seat, control lever supports adjustable in relation to the seat, two piece windscreen, with the upper portion retractable and the lower portion removable (with a storage compartment to the rear LH of the seat).

The cab roof has a large glass area which enables continuous checking of the bucket position when the attachment is fully retracted.

For operator comfort, the cab is insulated from vibration and noise by four elastofluid mountings.





## Attachments

To meet user requirements, CASE "short radius" crawler excavators are suitable for all types of work-site.

These machines are mainly used on the following types of work:

- Construction and maintenance of high speed roads and urban streets.
- Construction in residential areas.
- Demolition
- Forestry work
- Machine hire companies

In order to provide the best possible profitability in the various sorts of work encountered, the machine has to be able to change to a new configuration quickly and easily.

### THE "CASE" ANSWERS

- Performance with a choice of work modes and a "Power Boost" function.
- A choice of different dipper lengths.
- A "MULTIFIT" quick coupler



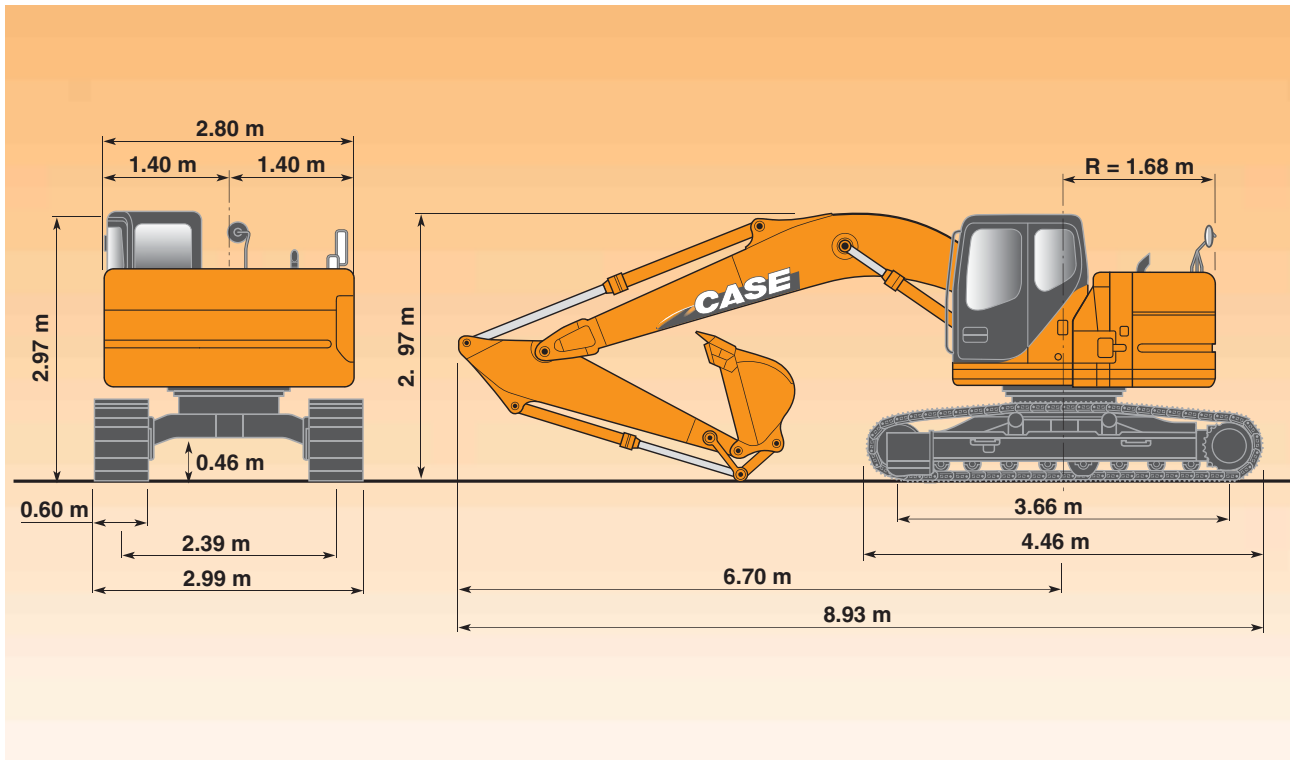
- Supply to the most varied types of implement, using supplementary hydraulic functions (swing, tool orientation, etc.)
- Reduced maintenance costs using EMS (Easy Maintenance System) which is standard on the boom foot and head linkages.

This system, which is also used on the heavy CX machines, provides a considerable reduction in maintenance intervals (every 1000 h).





## General dimensions



## Weight and ground pressure

With shoes 600 mm - bucket operator and full fuel tank	Weight (kg)	Ground pressure (bar)
5.70 m boom - 2.40 m dipper	22 700	0.47



## Buckets

### General purpose

SAE capacity	Litres	400	550	700	800	900	1050	1150	1260
Width	mm	600	750	900	1000	1100	1250	1350	1450
Weight	kg	505	550	620	695	740	760	810	860

### Heavy duty

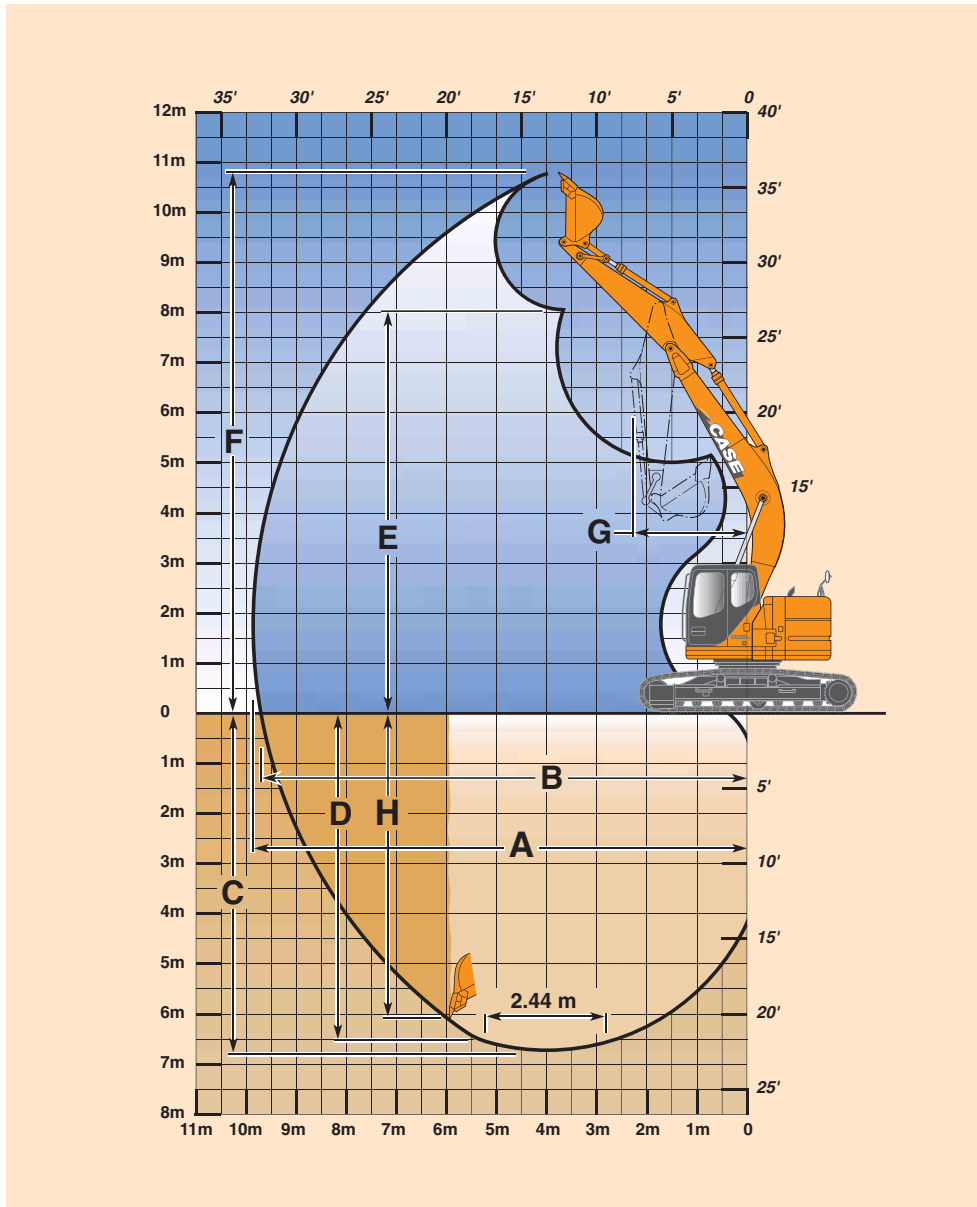
SAE capacity	Litres					900	1050	1150	
Width	mm					1100	1250	1350	
Weight	kg					740	760	810	

Other types of bucket on application.





## Performance data



### WITH 5.70 M MONOBLOC BOOM

	Dipper :	1.90 m	2.40 m	3.00 m
A Maximum digging reach		8.90 m	9.35 m	9.90 m
B Max. digging reach at ground level		8.70 m	9.20 m	9.70 m
C Maximum digging depth		5.60 m	6.10 m	6.70 m
D Digging depth 2.44 m (8') level bottom		5.40 m	5.90 m	6.50 m
E Maximum dump height		7.30 m	7.60 m	8.00 m
F Overall reach height		10.15 m	10.50 m	10.90 m
G Minimum swing radius		2.40 m	2.55 m	2.30 m
H Vertical straight wall dig depth		5.05 m	5.50 m	6.05 m
Digging force		-	12 600 daN	-
Breakout force		14 100 daN	14 100 daN	14 100 daN





## Lifting capacity

### CX225SR with 5.70 m boom, 1.90 m dipper, 600 mm shoes and bucket

Reach Height	3 m		4.5 m		6 m		7.5 m		maxi		maxi reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	
7.5 m											
<b>6 m</b>			<b>6100*</b>		<b>5550*</b>	<b>4450</b>			<b>4750*</b>	<b>4100</b>	<b>6.3</b>
4.5 m	10200*		7150*	6900	5900*	4300			4900*	3250	7.1
<b>3 m</b>			<b>8600*</b>	<b>6300</b>	<b>6500*</b>	<b>4050</b>			<b>4750</b>	<b>2850</b>	<b>7.5</b>
1.5 m			9550*	5800	6550	3800	4600	2700	4600	2700	7.5
<b>0 m</b>			<b>9700*</b>	<b>5600</b>	<b>6400</b>	<b>3700</b>			<b>4750</b>	<b>2750</b>	<b>7.3</b>
-1.5 m	11900*	11250	9000*	5600	6350	3650			5300	3100	6.7
<b>-3 m</b>	<b>9750*</b>		<b>7500*</b>	<b>5750</b>					<b>5700*</b>	<b>4000</b>	<b>5.7</b>
-4.5 m									4850*		4.0

### CX225SR with 5.70 m boom, 2.40 m dipper, 600 mm shoes and bucket

Reach Height	3 m		4.5 m		6 m		7.5 m		maxi		maxi reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	
7.5 m									5300*		4.3
<b>6 m</b>			<b>5600*</b>		<b>5150*</b>	<b>4600</b>			<b>3800</b>	<b>3600</b>	<b>6.9</b>
4.5 m	8950*		6650*		5600*	4400	4200*	3000	3850*	2950	7.6
<b>3 m</b>	<b>10150*</b>		<b>8150*</b>	<b>6500</b>	<b>6250*</b>	<b>4150</b>	<b>4800</b>	<b>2900</b>	<b>4100*</b>	<b>2600</b>	<b>7.9</b>
1.5 m			9400*	6000	6650	3900	4650	2750	4200	2500	8.0
<b>0 m</b>	<b>7200*</b>		<b>9800*</b>	<b>5700</b>	<b>6450</b>	<b>3750</b>	<b>4550</b>	<b>2700</b>	<b>4300</b>	<b>2500</b>	<b>7.8</b>
-1.5 m	11600*	11250	9400*	5650	6350	3650			4750	2800	7.3
<b>-3 m</b>	<b>11100*</b>		<b>8200*</b>	<b>5750</b>	<b>6000*</b>	<b>3750</b>			<b>5500*</b>	<b>3450</b>	<b>6.4</b>
-4.5 m	7650*		5650*						5150*		4.9

### CX225SR with 5.70 m boom, 3.00 m dipper, 600 mm shoes and bucket

Reach Height	3 m		4.5 m		6 m		7.5 m		maxi		maxi reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	
7.5 m									4200*		5.3
<b>6 m</b>					<b>4600*</b>		<b>2450*</b>		<b>2400*</b>		<b>7.5</b>
4.5 m			5850*		5100*	4500	4200*	3000	2450		8.2
<b>3 m</b>	<b>11400*</b>		<b>7450*</b>	<b>6650</b>	<b>5800*</b>	<b>4200</b>	<b>4800</b>	<b>2900</b>	<b>2550*</b>	<b>2300</b>	<b>8.5</b>
1.5 m	7600*		8900*	6100	6550*	3950	4650	2750	2800*	2200	8.6
<b>0 m</b>	<b>7800*</b>		<b>9650*</b>	<b>5750</b>	<b>6450</b>	<b>3700</b>	<b>4550</b>	<b>2650</b>	<b>3250*</b>	<b>2200</b>	<b>8.4</b>
-1.5 m	10500*		9600*	5600	6300	3600	4450	2600	4050*	2400	7.9
<b>-3 m</b>	<b>12350*</b>	<b>11200</b>	<b>8700*</b>	<b>5600</b>	<b>6300</b>	<b>3600</b>			<b>4900</b>	<b>2850</b>	<b>7.1</b>
-4.5 m	9400*		6800*	5800					5000*	4000	5.8

- Lift capacities in accordance with SAE J 1097 / ISO 10567 / DIN 15019-2.

- Lift capacities shown in kg do not exceed 75% of the tipping load or 87% of the hydraulic lift capacity.

- Capacities that are marked with an asterisk are hydraulic limited.

- If the machine is equipped with a quick coupler, subtract the weight of the quick coupler from the load shown in the tables to calculate the real lifting capacity.



## Standard attachments

- One-piece boom
- Steel tracks steel track pads 600 mm
- High performance "ULTRA CLEAN" (1 $\mu$ ) filtration system
- "Auxiliary" control valve section
- 2 travel speeds
- Load-holding valves (boom and dipper)
- Tier 2 engine (reduced smoke emissions and noise level)
- Electronic motor speed control
- Automatic engine speed return to idle
- Standard or Eco work mode
- A "Power Boost" function
- RH, LH and rear rear-view mirror (safety when swinging and reversing)

## Options

- Single-acting system ("hammer" type)
- "Multipurpose" circuit (hammer or shears)
- Double-acting circuit (shears, etc.)
- 2nd auxiliary circuit (clamshell orientation type)
- "MULTIFIT" Hydraulic quick coupler
- Electric pump for refuelling
- FOPS (roof) cab protection
- Self-regulating air conditioning
- Backhoe/clamshell circuit
- Safety valves (boom - dipper)

*Standard and optional equipment can vary from country to country*



**NOTE:** Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.

**CNH UK Ltd.**  
Armstrong House  
The Finningley Estate  
Hayfield Lane  
Doncaster  
DN9 3XA  
Fax +44 (0)1302 802126

Conforms to directive 98/37/CE



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

### WORLDWIDE CASE CONSTRUCTION EQUIPMENT CONTACT INFORMATION

**EUROPE/AFRICA/MIDDLE EAST:**  
CENTRE D'AFFAIRES EGB  
5, AVENUE GEORGES BATAILLE - BP 40401  
60671 LE PLESSIS-BELLEVILLE - FRANCE

**NORTH AMERICA/MEXICO:**  
700 STATE STREET  
RACINE, WI 53404 U.S.A.

**LATIN AMERICA:**  
AV. GENERAL DAVID SARNOFF 2237  
32210 - 900 CONTAGEM - MG  
BELO HORIZONTE BRAZIL

**ASIA PACIFIC:**  
UNIT 1 - 1 FOUNDATION PLACE - PROSPECT  
NEW SOUTH WALES - 2148 AUSTRALIA

**CHINA:**  
No. 29, INDUSTRIAL PREMISES, No. 376,  
DE BAO ROAD, WAIGAOQIAO FTZ, PUDONG,  
SHANGHAI, 200131, P.R.C.

**CASE**  
PROFESSIONAL PARTNER