

# CX

SERIES HYDRAULIC EXCAVATORS  
CX130

**CASE**



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



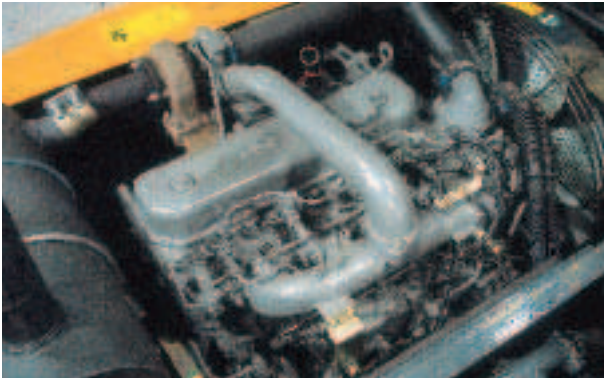
## ENGINE

Latest generation engine, meeting European standards (Tier 2 “low smoke emission”).

Make ..... ISUZU  
 Type ..... BB-4BG1T  
 Turbo ..... Yes  
 Injection ..... electronically controlled  
 No. of cylinders ..... 4  
 Bore - Stroke ..... 105 x 125 mm  
 Cubic capacity ..... 4329 cm<sup>3</sup>  
 EEC 80/1269 horsepower ..... 69 kW - 94 hp  
 Vitesse de rotation ..... 2100 rpm

Automatic engine pre-heating provides for optimum and immediate operation as soon as the working temperature is reached, a guarantee of longer life for the engine and the hydraulic components.

The injection pump is directly, electronically controlled by a special calculator which takes the hydraulic system load parameters into account. Regulation is quicker and more efficient than on conventional systems, reducing smoke and noise emissions and also significantly reducing fuel consumption.



## HYDRAULIC SYSTEM

Linked to the engine power management electronic system, a second electronic system manages all the hydraulic parameters so as to obtain the highest possible available hydraulic power, under optimum conditions of efficiency and economy.

The system consists of two axial piston, variable flow pumps.

Max output ..... 2 x 123 l/min  
 Max safety valve pressure  
 Attachment / **Power Boost** ..... 343/**363** bar  
 Upperstructure swing ..... 280 bar  
 Travel ..... 343 bar

### CONTROL VALVES

4 sections for: LH travel, boom, bucket, and dipper acceleration

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

### SWING

Axial piston, fixed flow motor

Max upperstructure swing speed ..... 13.4 rpm

Swing torque ..... 3300 daN

Hydraulic system gives priority to the swing when operated simultaneously with the dipper.

Hydrostatic swing brake backed up by mechanical brake during swing stopping and when machine is being transported. Hydrostatic upperstructure braking during working phases, with an “anti-bounce” valve stopping neatly and accurately over a truck body or trench.

**Backhoe clamshell** circuit operated by means of a manual control on the dipper.

### Auxiliary circuit

Using the auxiliary section available as standard, a maximum number of different tools and assemblies can be used, to suit customer requirements (See options).

### FILTRATION:

Exceptionally fine protection of all hydraulic system components by means of the “**ULTRA CLEAN**” system (a special filter which removes all particles over 1 micron in size, as well as all traces of water condensation).

The use of this system means the hydraulic fluid retains all its qualities for **5000 hours**, thus reducing servicing intervals and maintenance costs. The hydraulic system is also equipped with an inlet filter, a return filter and a filter on the pilot circuit.

### TRAVEL:

The travel circuit is equipped with two axial piston, variable flow motors.

Planetary reduction gear, automatic multi-disc brake.

Max travel speed ..... 5.5 kph

Low travel speed ..... 3.6 kph

Speed change is controlled from the instrument panel.

Gradeability ..... 70% (35°)

Tractive force ..... 10000 daN



## **ELECTRICAL SYSTEM**

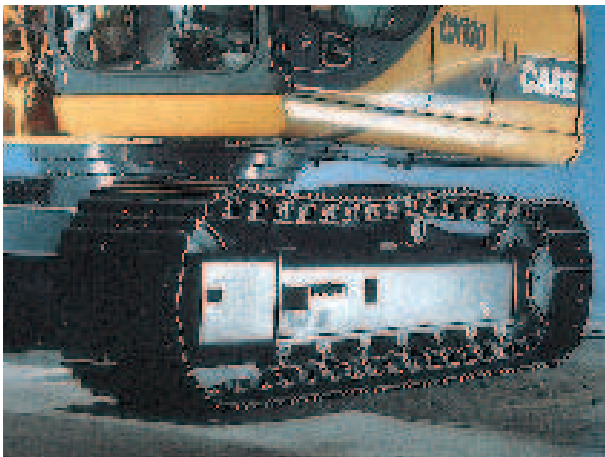
Circuit.....	24 volts
Batteries .....	2 x 12 v - 96 A/h
Circuit equipped with water-proof connectors	
Alternator .....	24 v - 40 A/h

## **UNDERCARRIAGE**

The LC type "X" design, strongly built undercarriage provides for quick travel over all types of work-site and better stability when working or travelling under load. Perfectly protected motors and piping, a guard underneath the hydraulic swivel, high ground clearance - for easy access to the most difficult work-sites. Spring-type track tensioning, adjustable by an easily accessible grease cylinder.

### **Specifications (per track set):**

Upper rollers .....	1
Lower rollers .....	7
Number of track pads .....	43
Type of shoes .....	Triple grouser
Standard track pad width .....	600 mm
Chain guides .....	Front and central



## **CAB**

Combining comfort, safety and ergonomics, the CX130 cab has been designed to provide the best possible working conditions in a pleasant environment, thus enabling the operator to get the very best out of his machine. Access to the operator's compartment is facilitated by a wide door and the fact that the LH control arm can be raised completely out of the way. Exceptional cab width (1.00 metre) providing a spacious, airy working space. Ergonomic seat with multiple adjustments is standard equipment.

The windscreen can be raised and locked in the upper or lower position.

The lower portion of the windscreen can be removed and placed in a storage compartment at the rear LH side of the cab.

The windscreen wiper is mounted on the RH cab pillar. The cab floor is flush with the door sill for easy cleaning. Ventilation and defrosting of the cab by adjustable outlets (windscreen, operator, rear of cab).

Radio pre-equipment with loud-speaker housings.

Double sliding window on door.

Wide foot-rest on either side of the travel pedals and levers.

Optional pedal location (hammer, offset, etc.)



## **COMFORT - OPERATION - SAFETY**

The safety console and the control panel are located to the right of the operator.

They include:

A large back-lit LCD screen, clearly displaying messages and indicators covering the vital functions of the machine - in a choice of 14 languages.

Touch controls for work mode, travel speed, automatic mode and emergency stop are provided.

There is also a touch control to select the attachment shock absorbing function: a soft or firm mode can be selected by the operator depending on the work being done. "Clear language text and symbol" messages, plus an audible warning, enable the operator to check that his machine is operating correctly.

### **ENGINE RETURN TO IDLE**

The engine return to idle can be automatic or manual as required by the operator (control on RH control lever).

### **ANTI-THEFT PROTECTION**

An anti-theft system incorporated into the machine's electronic system is standard equipment.



**WORK MODES**

Hydraulic power is controlled by the electronic system, which provides a continuous link between the hydraulics and the engine.

The operator has a choice of 3 “**traditional**” modes, plus one “**automatic**” mode:

**H mode** (Heavy) uses all the machine’s available power for tough jobs, providing optimum efficiency, high working speed and maximum force.

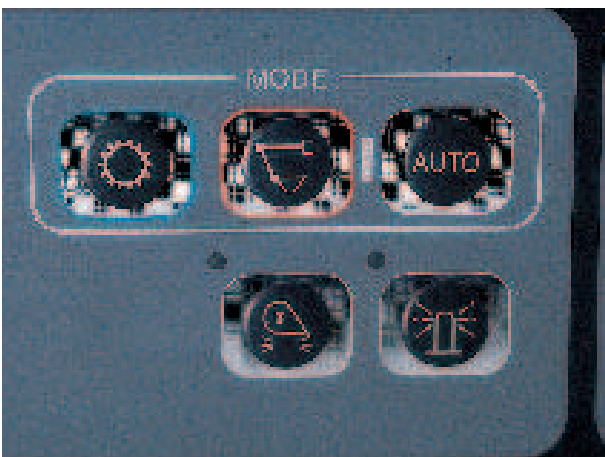
**S mode** (Standard) is the “traditional” working mode. It gives 90% of H mode performance (power and speed), and greater fuel economy.

**L mode** (Light) is the mode to be used for finishing work (sloping banks, profiles, etc), where precision is what is required. It’s also the mode used when handling loads and travelling with loads, due to the reduced flow and the continuous availability of **Power Boost** (maximum pressure applied continuously).

For higher efficiency and maximum use of the machine’s resources, certain functions have been simplified for the operator. This is the case for the Automatic Mode.

The **AUTO mode** on the new CX130 considerably simplifies machine operation, since it enables the working mode to be changed automatically and continuously (without any action on the part of the operator), depending on the type of work being done.

Over all the cycles performed, a real reduction in fuel



consumption is found compared with continuous use in one single working mode.

**AUTO POWERBOOST**

To simplify the operator’s work even further, enabling him to get the maximum performance from his machine, CASE uses a totally automatic powerboost. Regardless of the working mode, AUTO POWERBOOST on the CX130 cuts in whenever the machine encounters a difficult obstacle.

For a period of **8 seconds** the force at the dipper and bucket is increased by 8 to 10 %, totally automatically.



**ATTACHMENT**

For quick attachment changing, a hydraulic quick coupler is recommended. MULTI-FIT is the CASE hydraulic quick coupler which has a self-locking mechanical safety system (so the operator doesn’t have to climb down from his cab).

This coupler can take buckets made by competing manufacturers, without modification, since it can accept varying centre distances (the clearance is automatically taken up).

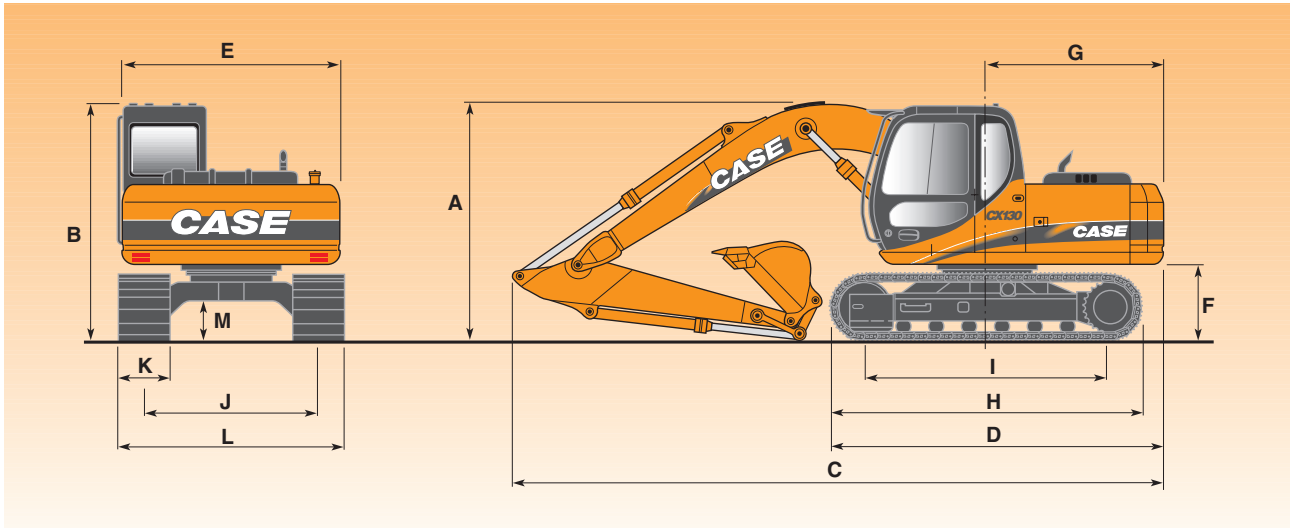


**CIRCUIT AND COMPONENT CAPACITIES**

Hydraulic reservoir .....	73 l
Hydraulic system .....	123 l
Travel reduction gear (per side).....	3 l
Swing reduction gear .....	2.2 l
Engine (including filter change).....	15 l
Fuel tank .....	250 l
Engine coolant circuit.....	17.7 l



## GENERAL DIMENSIONS



<b>A</b> Overall height*	2.74 m
<b>B</b> Cab height	2.74 m
<b>C</b> Overall length*	7.49 m
<b>D</b> Overall length (wo/attachment)	3.81 m
<b>E</b> Width of upperstructure	2.52 m
<b>F</b> Upperstructure ground clearance	0.89 m
<b>G</b> Swing (rear end) radius	2.05 m
<b>H</b> Track overall length	3.51 m

<b>I</b> Centre/centre (idler to sprocket)	2.78 m	
<b>J</b> Track gauge	1.99 m	
<b>K</b> Track shoes width (std)	600 mm	
<b>L</b> Track overall width	Shoes 500 mm	2.49 m
	Shoes 600 mm	2.59 m
	Shoes 700 mm	2.69 m
<b>M</b> Ground clearance	0.44 m	

\* With 4.60 m monobloc boom - 2.50 m dipper and bucket.



## WEIGHT AND GROUND PRESSURE

With 4,60 m monobloc boom - 2,50 m dipper - bucket - operator and full fuel tank	Weight (kg)	Ground pressure (bar)
Shoes 500 mm rubber	12100	0.38
Shoes 500 mm steel	12150	0.39
Shoes 600 mm steel	12300	0.33
Shoes 700 mm steel	12600	0.29



## BUCKETS

### General purpose

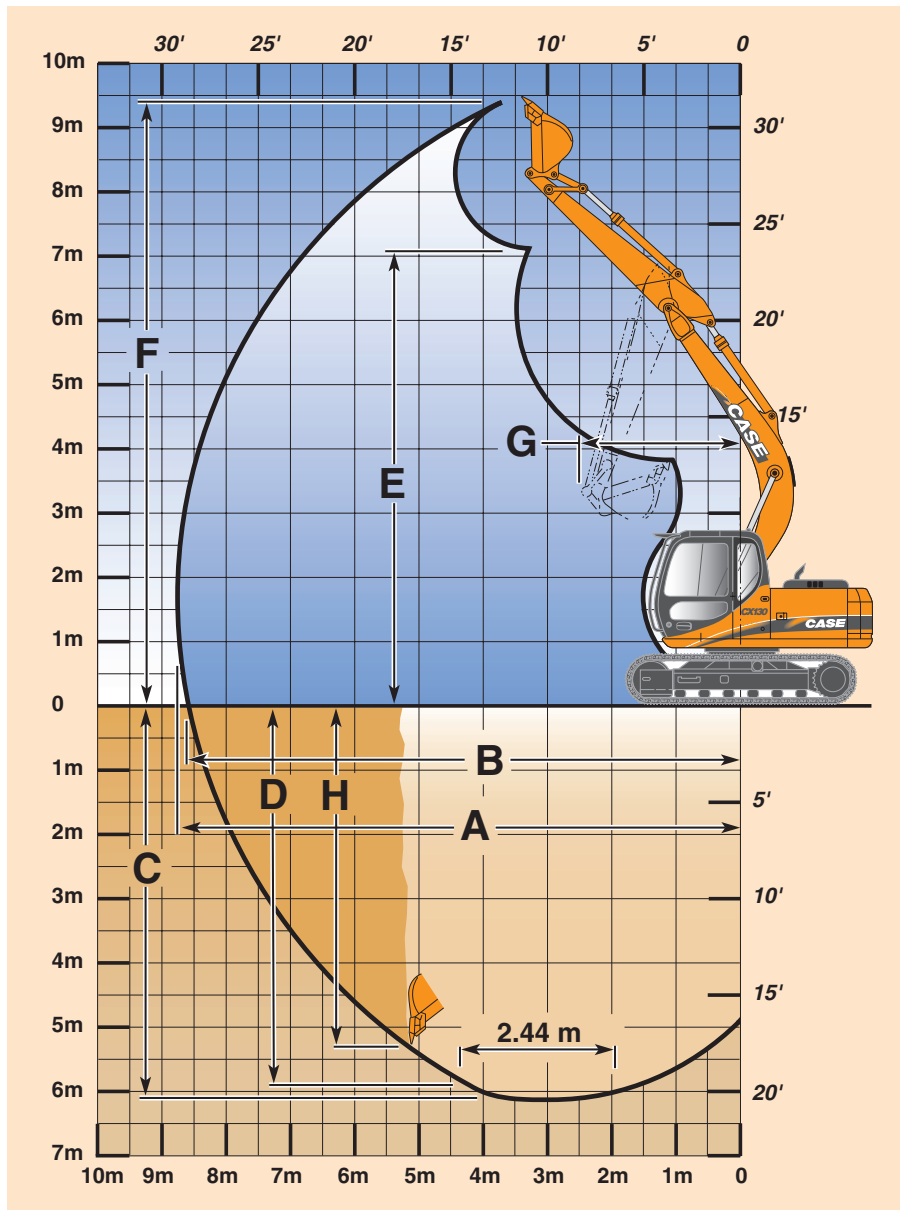
SAE capacity	Litres	155	220	320	430	540	620	700	770
Width	mm	350	450	600	750	900	1000	1100	1200
Weight	kg	270	300	330	370	410	440	470	490

### Heavy duty

SAE capacity	Litres						620	700	
Width	mm						1000	1100	
Weight	kg						450	485	



**PERFORMANCE DATA**  
**With 4.60 m monobloc boom**



	Dipper :	2.10 m	2.50 m	3.00 m
<b>A</b> Maximum digging reach		7.92 m	8.27 m	8.74 m
<b>B</b> Maximum digging reach at ground level		7.78 m	8.13 m	8.61 m
<b>C</b> Maximum digging depth		5.16 m	5.54 m	6.10 m
<b>D</b> Digging depth - 2.44 m (8') level bottom		4.92 m	5.35 m	5.92 m
<b>E</b> Maxi dump height		6.50 m	6.77 m	7.06 m
<b>F</b> Overall reach height		8.90 m	9.16 m	9.45 m
<b>G</b> Minimum swing radius		2.04 m	2.05 m	2.58 m
<b>H</b> Vertical straight wall dig depth		4.80 m	4.96 m	5.34 m
Digging force		8020 daN	6740 daN	5610 daN
Breakout force		9740 daN	9740 daN	9740 daN

# LIFTING CAPACITY

## With 4.60 m boom, 2.10 m dipper, 600 mm shoes and bucket

Reach Height	1.5 m		3 m		4.5 m		6 m		7.5 m		max		Max reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	
<b>6 m</b>					<b>3080*</b>						<b>2742*</b>		<b>4.84</b>
4.5 m					3306*	3181	2404*	1909			1839*	1815	6.16
<b>3 m</b>			<b>5686*</b>		<b>4106*</b>	<b>2970</b>	<b>2607</b>	<b>1839</b>			<b>1882*</b>	<b>1510</b>	<b>6.68</b>
1.5 m			7899	5051	3959	2727	2500	1738			2016	1393	6.85
<b>0</b>			<b>7574</b>	<b>4780</b>	<b>3776</b>	<b>2560</b>	<b>2417</b>	<b>1660</b>			<b>2056</b>	<b>1410</b>	<b>6.67</b>
-1.5 m	5938*		7554	4764	3716	2506	2396	1641			2329	1596	6.12
<b>-3 m</b>	<b>9637*</b>		<b>7615*</b>	<b>4882</b>	<b>3780</b>	<b>2564</b>					<b>3142</b>	<b>2154</b>	<b>5.08</b>
-4.5 m													

## With 4.60 m boom, 2.50 m dipper, 600 mm shoes and bucket

Reach Height	1.5 m		3 m		4.5 m		6 m		7.5 m		max		Max reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	
<b>6 m</b>					<b>2668*</b>						<b>2103*</b>		<b>5.39</b>
4.5 m					2943*		2713*	1941			1490*		6.55
<b>3 m</b>			<b>4930*</b>		<b>3768*</b>	<b>3019</b>	<b>2629</b>	<b>1857</b>			<b>1519*</b>	<b>1377</b>	<b>7.05</b>
1.5 m			7650*	5191	4001	2763	2511	1747			1650*	1273	7.20
<b>0</b>	<b>2661*</b>		<b>7620</b>	<b>4816</b>	<b>3791</b>	<b>2573</b>	<b>2413</b>	<b>1655</b>			<b>1879</b>	<b>1283</b>	<b>7.03</b>
-1.5 m	5336*		7530	4741	3702	2491	2369	1615			2096	1429	6.52
<b>-3 m</b>	<b>8359*</b>		<b>7623</b>	<b>4819</b>	<b>3729</b>	<b>2517</b>					<b>2702</b>	<b>1850</b>	<b>5.56</b>
-4.5 m			5646*	5073							4312*	3441	3.82

## With 4.60 m boom, 3.00 m dipper, 600 mm shoes and bucket

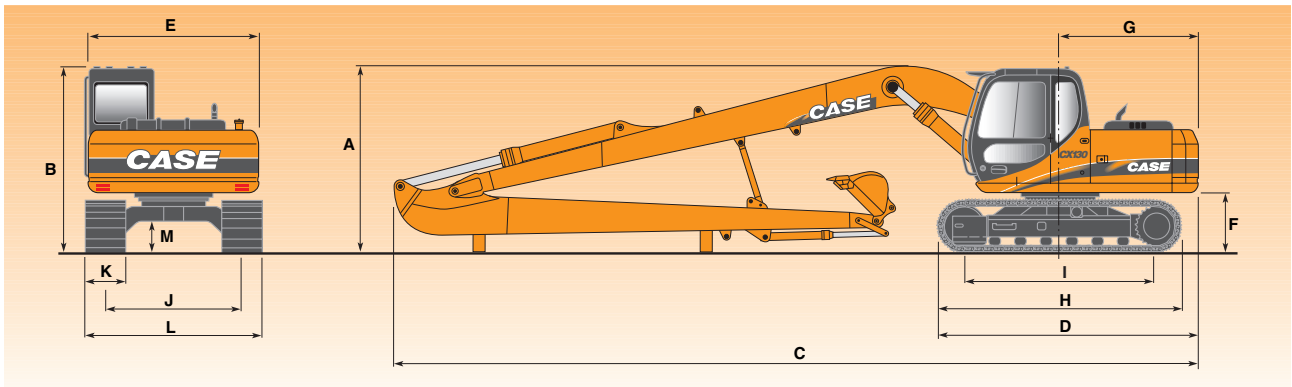
Reach Height	1.5 m		3 m		4.5 m		6 m		7.5 m		max		Max reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	
<b>6 m</b>							<b>2005*</b>				<b>1734*</b>		<b>6.17</b>
4.5 m					2422*		2617*	2009			1590*	1460	7.06
<b>3 m</b>			<b>3812*</b>		<b>3263*</b>	<b>3123</b>	<b>2689</b>	<b>1913</b>	<b>1695*</b>	<b>1257</b>	<b>1624*</b>	<b>1248</b>	<b>7.53</b>
1.5 m			6687*	5423	4093	2846	2554	1788	1753	1205	1686	1155	7.67
<b>0</b>			<b>7720</b>	<b>4898</b>	<b>3839</b>	<b>2616</b>	<b>2435</b>	<b>1675</b>	<b>1703</b>	<b>1158</b>	<b>1699</b>	<b>1155</b>	<b>7.51</b>
-1.5 m	4841*		7511	4724	3704	2493	2364	1609			1858	1261	7.03
<b>-3 m</b>	<b>7363*</b>		<b>7534</b>	<b>4743</b>	<b>3687</b>	<b>2478</b>	<b>2370</b>	<b>1615</b>			<b>2285</b>	<b>1558</b>	<b>6.15</b>
-4.5 m	10972*		6840*	4920	3810	2589					3619	2468	4.65

- Machine in «LIGHT» mode
- Lift capacities are taken 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.





## GENERAL DIMENSIONS - LONG REACH With 7.40 m monobloc boom and 5.30 dipper



<b>A</b> Overall height	2.74 m
<b>B</b> Cab height	2.74 m
<b>C</b> Overall length	10.38 m
<b>D</b> Overall length (wo/attachment)	4.07 m
<b>E</b> Width of upperstructure	2.53 m
<b>F</b> Upperstructure ground clearance	0.88 m
<b>G</b> Swing (rear end) radius	2.19 m

<b>H</b> Track overall length	3.76 m
<b>I</b> Centre/centre (idler to sprocket)	3.04 m
<b>J</b> Track gauge	1.99 m
<b>K</b> Track shoes width (std)	700 mm
<b>L</b> Track overall width	Shoes 700 mm 2.69 m
<b>M</b> Ground clearance	0.44 m



## WEIGHT AND GROUND PRESSURE

With 7.40 m monobloc boom - 5.30 m dipper - bucket - operator and full fuel tank	Weight (kg)	Ground pressure (bar)
Shoes 700 mm	14600	0.31



## BUCKETS for 7.40 m monobloc boom and 5.30 m dipper

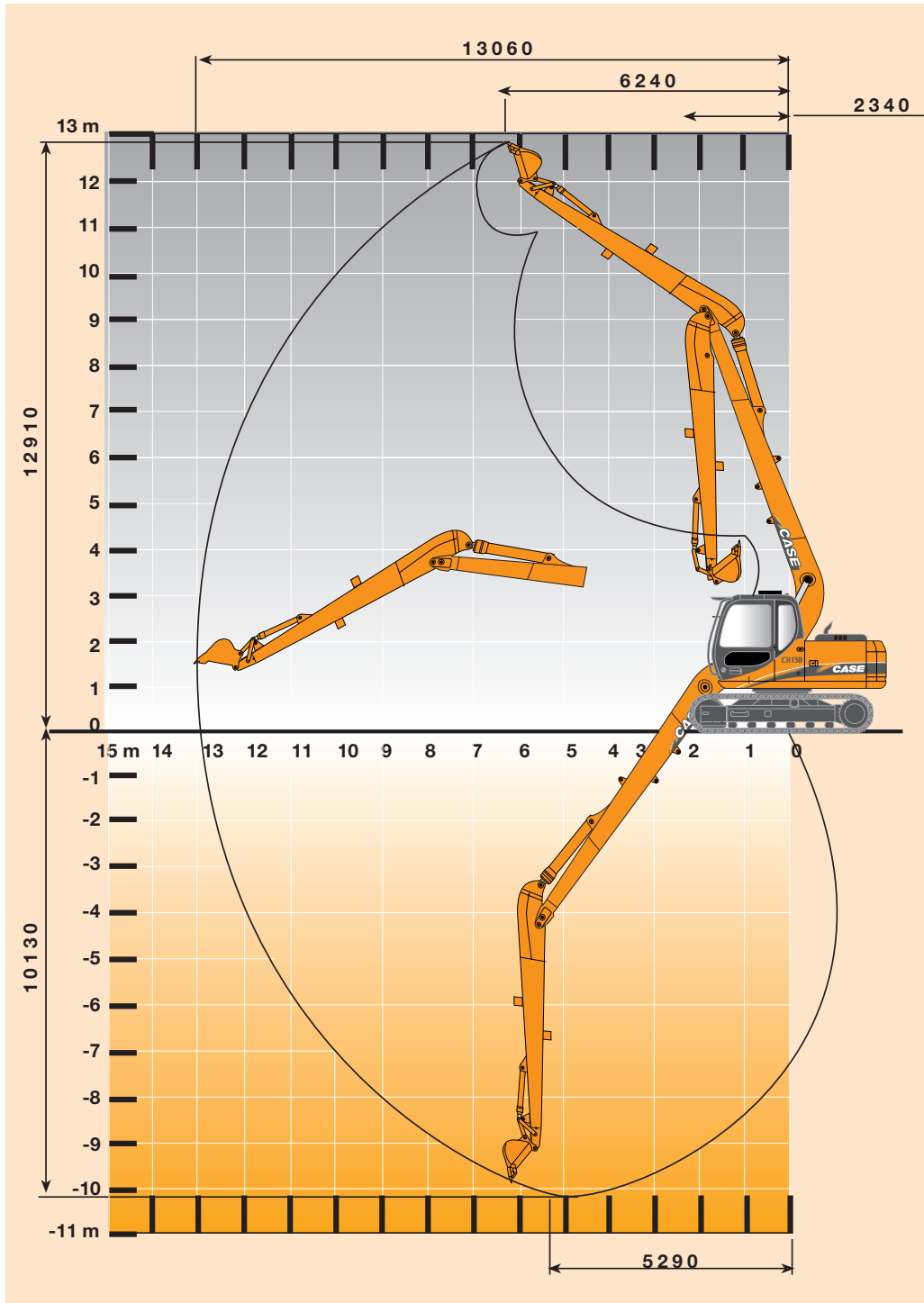
### General purpose

SAE capacity	Litres	240	310
Width	mm	600	750
Weight	kg	170	200





**PERFORMANCE DATA - LONG REACH**  
**With 7.40 m monobloc boom and 5.30 m dipper**



Digging force..... 2340 daN  
 Breakout force..... 4000 daN

## CX130 Long Reach with 7.40 m boom, 5.30 m dipper, 700 mm shoes and bucket



## LIFTING CAPACITY - LONG REACH

Reach	2 m		3 m		4 m		5 m		6 m		7 m		8 m		9 m		10 m		11 m		12 m		Max		Max reach m
	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	front	360°	
9 m														1057*										1051*	8.23
8 m														1056*	1058*	611*								583*	10.04
7 m														1063*	1097*	1120*	929*							384*	10.88
6 m														1171*	1173*	1171*	1156* 1130	646*						382*	11.33
5 m														1363*	1322*	1282*	1249*	1223* 1100	902* 877					387*	11.68
4 m														1789*	1631*	1511*	1418*	1347* 1320	1292* 1061	1104* 851				398*	11.93
3 m	5976*		3695*		2762*		2257*		1941*		1727*	1573* 1564	1460* 1257	1374* 1016	1282* 820		521*							416*	12.1
2 m														3302*	3576*	2752*	2269*	1955* 1840	1738* 1471	1580* 1190	1462* 967	1345 787	637* 636	441*	12.18
1 m														1575*	4229* 3808	3210* 2805	2582* 2162	2178* 1713	1900* 1380	1700* 1124	1550 919	1309* 753	682* 614	474*	12.18
0 m	655*		1359*		2828*	3581* 2583	2853* 2005	2378* 1600	2049* 1297	1786 1063	1503 875	1276 721	637* 594											516*	12.1
-1 m	934*		1460*		2520*	3845* 2427	3064* 1885	2533 1508	2075 1228	1731 1011	1463 837	1248 695												571*	11.93
-2 m	1218*		1674*		2555*	4003* 2330	3084 1801	2459 1440	2018 1175	1688 970	1432 807	1227 675												642* 602	11.67
-3 m	1512*		1947*		2753*	3993* 2279	3028 1750	2411 1395	1979 1138	1658 942	1411 788	1217 665												737* 632	11.31
-4 m	1819*		2264*		3056*	3976* 2264	3003 1728	2386 1373	1959 1119	1644 928	1404 781													866* 682	10.86
-5 m	2145*		2622*		3449* 3216	3949* 2278	3006 1730	2385 1372	1957 1118	1646 931	1414 790													1051* 758	10.28
-6 m	2495*		3027*		3941* 3285	3761* 2319	3036 1757	2407 1392	1977 1137	1670 952														1338* 873	9.57
-7 m	2870*		3489*		4280* 3384	3467* 2388	2872* 1809	2406* 1435	2015* 1179															1766* 1053	8.67
-8 m	3268*		4024*		3720* 3521	3032* 2489	2505* 1892	2062* 1511																1832* 1361	7.55
-9 m					2923*	2374*	1900*																	1879*	6.05

- Machine in «LIGHT» mode

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- 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 EQUIPMENT**

### **Hydraulic control**

- 4 working modes (3 manual + 1 auto)
- 2 travel speeds
- Swing brake control
- Load-holding valves on boom and dipper
- Power control - automatic powerboost
- Hydraulic control lever locking, lever position adjustment
- Auxiliary circuit control valve section
- High performance “Ultra Clean” filtration system (1 µ)
- Automatic speed change

### **Engine control**

- Engines to Tier 2 standard
- Calculator on injection pump
- Automatic / manual engine return to idle
- Fuel level check
- Emergency stop
- Automatic engine pre-heating

### **System Monitor, with 14 language display**

- Messages (Function, safety, etc.)
- Working modes (H-S-L and auto)
- Operating modes (travel mode, swing locking, etc.)
- Audible warning device
- Digital clock
- Water temperature

- Hydraulic oil temperature
- Diagnostic system

### **Electrical system**

- Leak-proof connectors
- Double horn

### **Lighting**

- 1 working light on the fuel tank
- 1 working light on the boom
- 1 working light on the cab

### **Operator environment**

- Modern cab, 1 metre wide
- Safety glass
- Suspended cab (6 mounting points with rubber/fluid shock absorbing mountings)
- Windscreen with lockable opening
- “LCD” display
- Water and dust-proof membrane type touch controls
- Windscreen washer and wiper
- Adjustable heater
- Floor mat
- Sun-visor
- Rear-view mirror and safety mirrors
- Anti-theft device

### **Operator seat**

- Multi-adjustment, low frequency suspension with springs and dual-acting shock absorber
- Reel-type safety belt

## **OPTIONS**

- Auxiliary hydraulic circuit  
Possible options and combinations:
  - Hammer circuit with pedal control
  - 2nd auxiliary circuit for clamshell rotation, etc.
  - Dual-acting circuit (shears type)
  - Multi-purpose circuit (hammer or shears)
  - Multi-purpose circuit + 2nd circuit
- MULTI-FIT quick coupler
- Rubber tracks
- Dozer blade
- Self-adjusting air conditioning

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



## SERVICE & SUPPORT THE CASE DEALER YOUR PROFESSIONAL PARTNER

World-class construction equipment is just the start with Case. Your local Case dealer is a total solutions provider. Look to Case dealers to help find the right size machine, attachments and options to meet the demands of your job.

Case dealers help you maximise machine uptime - and profitability. That means you can focus on the job, knowing your Case dealer is never far away.

Case dealers stand behind the equipment they sell, with skilled service technicians fully equipped to resolve your maintenance and repair issues and, the support of a global parts network, recognised as second to none in the industry.

But it doesn't stop there. Through CNH Capital, your local Case dealer offers flexible financing options, leasing packages and insurance services to protect your investment.

When you need more than just equipment, Case dealers deliver. More.



### 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.

**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  
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