CASE CONSTRUCTION

HYDRAULIC EXCAVATOR
CX460

Engine Horsepower	270 kW - 362 hp
Operating weight (max.)	48.1 t
Bucket capacity	1.12 m^3 to 2.58 m^3

PROFESSIONAL PARTNER

PERFORMANCE AND ECONOMY

The CX460 has a 362hp (270kW) electronically-controlled Tier 3A engine, that uses common rail fuel injection for high performance with maximum economy. This results in improved productivity and lower exhaust emissions.
Power to perform. Environmental awareness.

EXTENDED SERVICE

Ultra-clean 1 micron hydraulic filter keeps the machine working, extending maintenance intervals and reducing operating costs. Hydraulic oil changes now set at 5,000 hours.
Total filtration. Prolonged component life.

SPEED AND EFFICIENCY

Intelligent Computer Command Control System (ICCCS) provides optimum balance of speed, power and control, with minimum fuel consumption. Hydraulic flow regeneration and boom priority system reduce cycle times and boost performance.
Power on demand. Complete control.

OPERATOR CONTROL

Revolutionary auto mode uses ICCCS to change between operating modes, offering rapid response to changing site conditions. Operator can select individual modes for specific tasks. Auto power boost system increases hydraulic power by 8-10 per cent, for maximum breakout or heavy lifting.
Rapid response. Ease of operation.

LONGEVITY AND RELIABILITY

Internally welded carbody provides increased strength and the turntable bearing hub is extended through the top plate for additional structural rigidity. Track guards and strut-type chain links reduce twisting and point loading.
Structural integrity. Long service life.

RAPID MOVER

Two speed travel with auto downshift offers traction on tough ground and a 5.3km/h top speed.
High torque final drives ensure maximum tractive effort on steep inclines.
Automatic selection. Total traction.

DURABILITY GUARANTEED

Extended Maintenance System (EMS) chrome plated pins and lubricated brass bushes provide maximum durability.
Six months/1,000 hour greasing on boom and arm pins (except bucket) reduce downtime.
Build quality. Extended productivity.

COMFORT CAB

Full 1m wide cab with increased glass area offers excellent visibility and comfort. Six shock absorbing mountings reduce vibration and noise in the cab, while automatic climate control provides the perfect working environment.
Operator comfort. Increased productivity.

SERVICE ACCESS

Wide service doors provide easy access to engine and hydraulic components. A hydraulically-driven cooling fan can be reversed to remove debris from the cooling pack on star-up. Large fuel tank with standard auto-stop electric refuelling pump reduce downtime.
Simplified maintenance. Maximum profitability.

STRUCTURAL INTEGRITY

Case excavators have a heavy duty boom and dipper construction, using internal baffles to provide strength and resistance to torsional loads. A choice of boom and dipper arm configurations increases the versatility of this heavyweight machine.
Designed to perform. Built to last.

ENGINE

The Case CX460 is equipped with a proven Isuzu diesel engine, providing 362 hp (270 kW) of power at an unstressed 1,950 rpm. The electronically-controlled engine utilises common rail fuel injection and easily meets the requirements of the EU directive 97/68/EC Tier 3A on engine emissions.
The combination of electronic engine control and the Case hydraulic Intelligent Computer Command Control System (ICCCS) results in optimum power delivery, whatever the conditions. More efficient use of fuel, with reduced consumption and emissions, provides a more environmentally-friendly machine that is more profitable for the customer and more responsive for the operator. An automatic warm-up system, which increases engine speed gradually as the correct operating temperatures are reached, prevents premature wear of engine components.

HYDRAULICS

Case excavators have always been among the most productive on the market. Through the use of the Intelligent Computer Command Control System (ICCCS), the CX460 provides the optimum balance of speed, power and fuel efficiency whatever the application. The machine features an auto power boost function which automatically increases the system pressure by 8-10 % to power through heavy ground, or to help with heavy lifting duties.
Boom priority ensures faster cycle times in loading operations, with the hydraulic oil prioritised to the main boom circuit during the raise function. Energy created by oil returning from the boom and dipper arm is also regenerated to increase digging speed. All CXB excavators utilise an ultra-clean 1 micron hydraulic filter, providing exceptional levels of filtration. Extended hydraulic oil life results, with oil change intervals extended to 5,000 hours, reducing maintenance downtime and cutting operating costs.

RH CONSOLE AND ENGINE THROTTLE

The four position adjustable right hand console includes an advanced engine throttle control, which controls the mode selection for the hydraulic system. All switches are grouped in a central layout and short servo lever joysticks make the CX460 a simple machine to operate. The operator can choose between three dedicated operating modes for heavy, standard and light work, or select Auto mode which changes between the settings to match the demands from the hydraulic system. In addition, the advanced hydraulic system allows up to 10 auxiliary hydraulic flow settings to be programmed into the machine's memory, making it possible to fit 10 attachments with no manual adjustment to the machine, further increasing productivity.

OPERATOR'S CAB/LH CONSOLE

The CX460 offers a climate-controlled working environment with low levels of noise and vibration. The cab is mounted on six shock absorbing rubber and fluid mounts and the operator has a fully adjustable suspension seat, offering height, reach and rake options to ensure that all sizes can find their ideal working position. The cab is 1m wide, with plenty of space for the operator to store coats and bags out of the working area. Large windscreens and side glazing, along with low bodywork to the rear of the machine, provide excellent all round visibility, increasing safety on site. Rear view safety is increased by standard mirrors on the bodywork.

UNDERCARRIAGE

The backbone of the CX460 undercarriage is a modified X-style carbody that is internally welded for additional strength. The turntable bearing hub extends down through the top plate of the carbody for additional structural integrity, creating a robust base from which to work.

Two speed travel motors, with a top speed of 5.3km/h, are standard and compact high torque final drives ensure that the CX460 has the power to pull through the worst ground conditions. The motors downshift automatically when the going gets tough.

MAINTENANCE

There are full height, wide opening access doors to both sides of the machine, to assist with maintenance of the engine and hydraulic system. All filters are centralised for ease of access and the CX460 is equipped with a hydraulically-driven cooling fan, which can be reversed on start-up to blow dust and debris away from the cooling pack.

The CX460 has a large 611 litre fuel tank, to maximise working time, which comes as standard with an auto-stop electric refuel pump. This reduces refuelling time, and makes life easier for the operator and maintenance engineers.

PINS AND BUSHES

EMS chrome plated pins with brass bushing

Booms and dippers are constructed of heavy duty steel box section with internal baffles to increase torsional rigidity. Deep groove welding ensures that the booms and arms can withstand the stress of high breakout forces, heavy lifting and attachments such as hydraulic breakers, compactors, demolition shears and crushers.

All boom pins (except the bucket pins) have extended maintenance system (EMS) chrome plating for increased strength and durability. Lubricated brass bushings are fitted through the boom and dipper and double structured dust seals prevent the ingress of dirt and dust. Lubrication intervals on the boom pins have been extended to six months/1,000 hours, cutting downtime and boosting productivity.

ATTACHMENTS/BUCKETS

CX460 customers can choose from a variety of main booms and dipper arms to suit different applications, all of which are constructed of heavy duty steel box section with internal baffles to increase torsional rigidity. Deep groove welding ensures that the booms and arms can withstand the stress of high breakout forces, heavy lifting and attachments such as hydraulic breakers, compactors, demolition shears and crushers.

With a choice of two main booms and four dipper sticks, along with a range of buckets from 1.12m^3 - 2.58 m^3, there is a configuration to meet the requirements of every customer's job site.


CASE

SPECIFICATIONS

ENGINE

Latest generation engine, meeting European requirements for "low exhaust emissions" Tier 3A, in accordance wihit directive 97/68/EC.

Make	ISUZU
Type	AH-6UZ1XYSS
Common rail, turbo, intercooler, fuel cooler	Yes
Direct injection	Electronically controlled
No. of cylinders	6
Bore - Stroke	120 x 145 mm
Cubic capacity	9839 cc
Horsepower EEC 80/1269 without fan	270 kW - 328 hp @ 1950 rpm
Horsepower EEC 80/1269 with fan	245 kW - 328 hp @ 1950 rpm
Maximum Torque	1435 Nm @ 1500 rpm

HYDRAULIC SYSTEM

Max output	2 x 360 l/min @ 1980 rpm
2 axial piston, variable flow pumps	Yes
Attachment/**Power Boost**	314/**343** bar
Upperstructure swing	294 bar
Travel	343 bar
Oil filtration (Ultra Clean)	1 micron

SWING

Max upperstructure swing speed	9 rpm
Swing torque	13 300 daN

TRAVEL

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

Max travel speed	5.3 Km/h
Low travel speed	3.1 Km/h

Speed change is controlled from the instrument panel.
Automatic downshifting

Gradeability	70% (35°)
Tractive force (fixed side frame)	34 100 daN

ELECTRICAL SYSTEM

Circuit	24 V
Batteries	2 x 12 V - 128 A/h
Circuit equipped with water-proof connectors	Yes
Alternator	24 V - 50 Amp

UNDERCARRIAGE

Upper rollers fixed sideframe/ retractable sideframe	2/3
Lower rollers	9
Number of track pads	50
Type of shoes	Triple grouser
Track pad width standard	600 mm
Track quard	Full track quard 900 mm

CIRCUIT AND COMPONENT CAPACITIES

Fuel tank	611 l
Hydraulic reservoir	230 l
Hydraulic system	460 l
Travel reduction gear (per side)	15 l
Swing reduction gear	10.5 l
Engine (including filter change)	36 l
Engine cooling circuit	38 l

BUCKETS*

GENERAL PURPOSE

SAE capacity	l	1120	1380	1630	1880	2150	2410	2580
Width	mm	900	1050	1200	1350	1500	1650	1750

HEAVY DUTY

SAE capacity	l	1120	1380	1630	1880	2150	2410
Width	mm	900	1050	1200	1350	1500	1650

EXTRA HEAVY DUTY

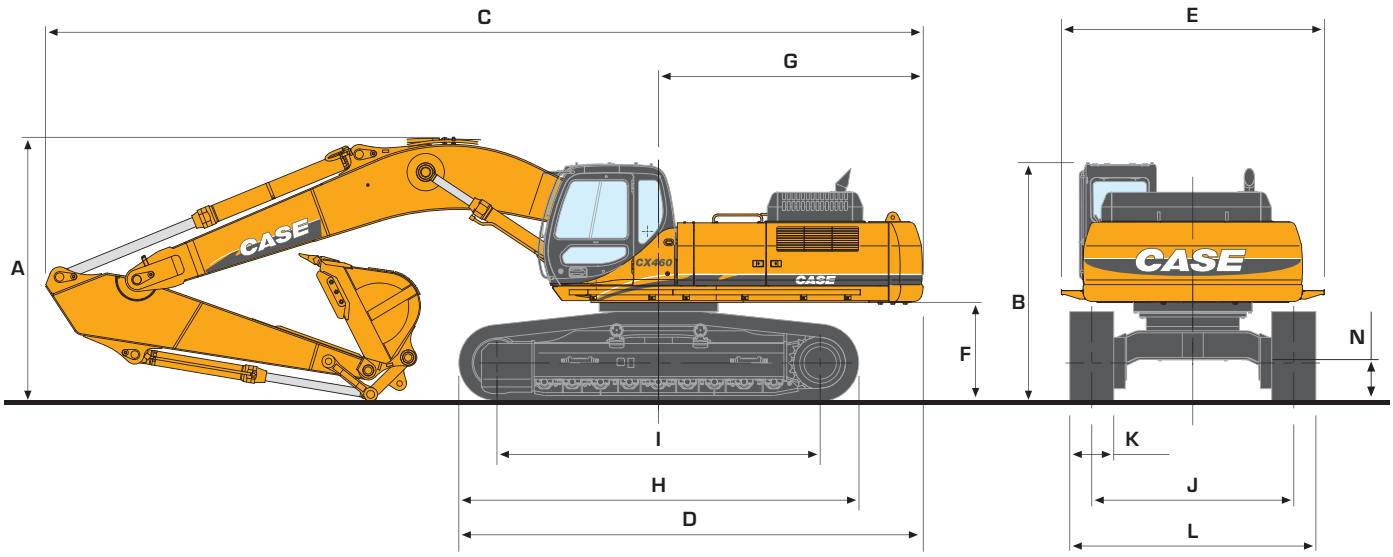
SAE capacity	l	1880
Width	mm	1350

QUARRY

SAE capacity	l	2580
Width	mm	1750

* For other bucket sizes, please contact your CASE dealer

GENERAL DIMENSIONS
WITH 6.98 m STANDARD MONOBOOM



		CX460 MONO FIXED SIDE FRAME		CX460 MONO RETRACTABLE SIDE FRAME	
DIPPER LENGTH		**2.53**	**3.38**	**2.53**	**3.38**
A Overall height (with attachment)	m	3.67	3.60	3.73	3.66
B Height (cab/handrail)	m	3.27	3.27	3.42	3.42
C Overall length (with attachment)	m	11.99	11.94	11.97	11.91
D Overall length (w/o attachment)	m	6.32	6.32	6.32	6.32
E Width of upperstructure (with cat walk)	m	3.04	3.04	3.04	3.04
(w/o cat walk)	m	3.58	3.58	3.58	3.58
F Upperstructure ground clearance	m	1.33	1.33	1.48	1.48
G Swing (rear end) radius	m	3.62	3.62	3.62	3.62
H Track overall length	m	5.45	5.45	5.45	5.45
I Centre/centre (idler to sprocket)	m	4.40	4.40	4.40	4.40
J Track gauge	m	2.75	2.75		
J Side frame retracted/extended	m			2.39/2.89	2.39/2.89
K Track shoes width (std)	mm	600	600	600	600
L Track overall width - Shoes 600 mm	m	3.35	3.35	2.99/3.49	2.99/3.49
M Undercarriage overall width (extended/600 mm/steps installed)	m			3.20/3.70	3.20/3.70
N Ground clearance	m	0.54	0.54	0.74	0.74

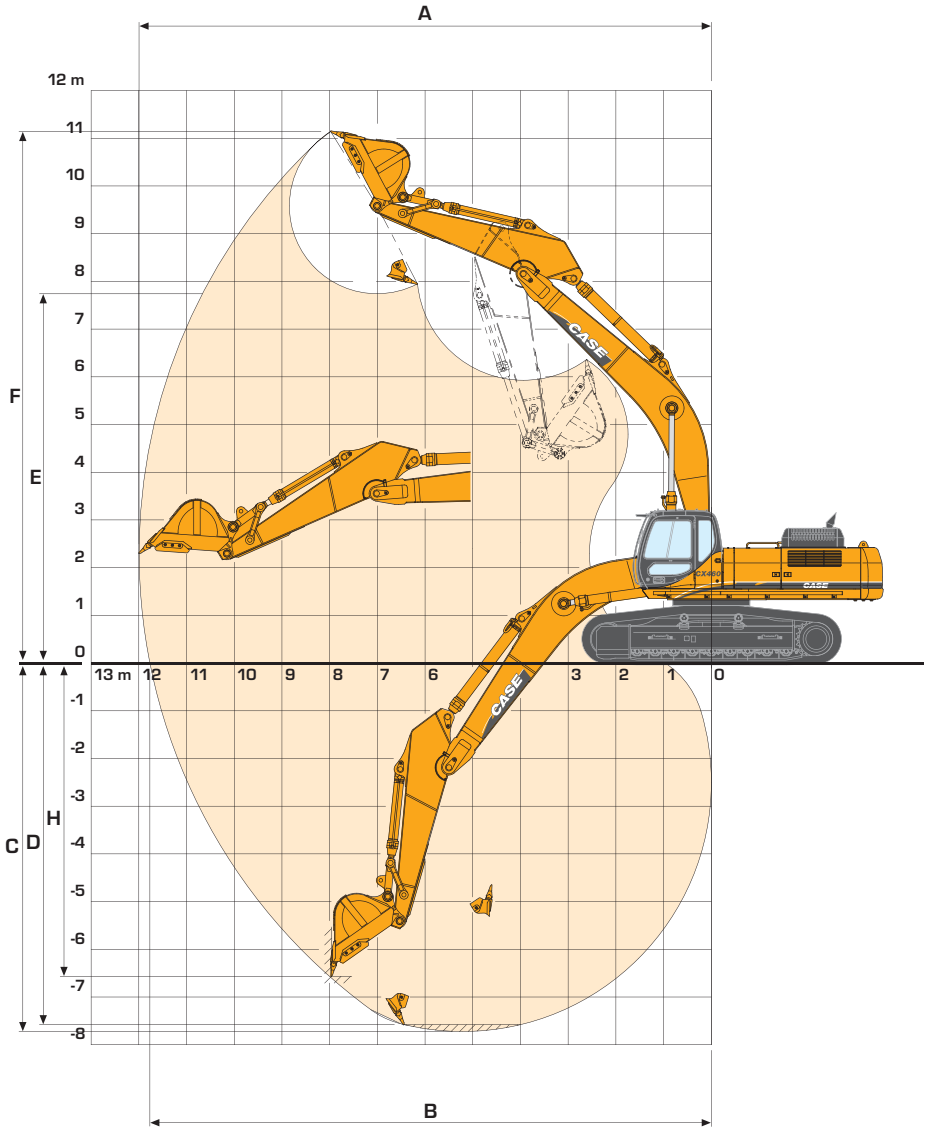
WEIGHT AND GROUND PRESSURE

With 6.98 m standard monoboom
3.38 dipper - 1850 Kg 1.8 m^3 bucket
operator and full fuel tank

	WEIGHT (kg)		GROUND PRESSURE (bar)	
	fixed side frame	retractable side frame	fixed side frame	retractable side frame
Shoes 600 mm steel	46 600	48 100	0.80	0.82

PERFORMANCE DATA

WITH 6.98 m STANDARD MONOBOOM - fixed side frame



			CX460 MONO FIXED SIDE FRAME		CX460 RETRACTABLE	
DIPPER LENGTH			**2.53**	**3.38**	**2.53**	**3.38**
A	Maximum digging reach	m	11.23	12.00	11.23	12.00
B	Maximum digging reach at ground level	m	10.99	11.77	10.95	11.74
C	Maximum digging depth	m	6.87	7.72	6.72	7.57
D	Digging depth - 2.44 m level bottom	m	6.69	7.58	6.54	7.43
E	Max dump height	m	7.42	7.74	7.57	7.89
F	Overall reach height	m	10.82	11.14	10.97	11.29
G	Minimum swing radius - attachment	m	5.13	4.99	5.13	4.99
H	Vertical straight wall dig depth	m	5.67	6.57	5.52	6.42
	Digging force (w/o Power Boost)	daN	25 700	20 900	25 700	20 900
	(with Power Boost)	daN	28 100	22 900	28 100	22 900
	Breakout force (w/o Power Boost)	daN	24 700	24 700	24 700	24 700
	(with Power Boost)	daN	27 000	27 000	27 000	27 000

CX460

LIFTING CAPACITY
WITH 6.98 m STANDARD MONOBOOM

Values are expressed in kilos

Front / 360°	REACH												
	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At max reach		m

Fixed sideframe with 3,38m dipper, 600mm shoes and bucket of 1,8m³ - 1850kg

7.5 m											8864*	7848	8,17
6.0 m							9606*	8946	8868*	6286	6326*	5496	9,58
4.5 m					12616*	12356	10550*	8437	9306*	6027	6539*	4814	10,04
3.0 m			20564*	17651	14609*	11295	11626*	7867	9865*	5714	6972*	4429	10,26
1.5 m			23129*	16088	16204*	10414	12558*	7355	9804	5417	7680*	4270	10,25
0 m			23653*	15441	16992*	9862	12826	6985	9559	5195	8043	4328	10,02
-1.5 m	17072*	17072*	22772*	15307	16861*	9622	12609	6794	9445	5092	8628	4642	9,55
-3.0 m	24491*	24491*	20764*	15472	15755*	9638	12202*	6795			9675*	5345	8,79
-4.5 m	22794*	22794*	17404*	15906	13390*	9900	10005*	7038			9617*	6820	7,67
-6.0 m			11837*	11837*							8710*	8710*	5,97

Fixed sideframe with 2,53m dipper, 600mm shoes and bucket of 2,0 m³ - 1920kg

7.5 m											10357*	9472	7,3
6.0 m							10689*	8703			9703*	6529	8,71
4.5 m			19033*	18738	13995*	11892	11502*	8224	10078*	5912	9913	5645	9,21
3.0 m			22665*	16491	15735*	10885	12401*	7700	10056	5653	9251	5169	9,45
1.5 m			18811*	15512	16885*	10147	13082*	7260	9795	5417	9062	4994	9,44
0 m			22976*	15341	17125*	9771	12814	6984	9636	5272	9331	5104	9,19
-1.5 m			21329*	15455	16427*	9692	12720	6901			10189	5571	8,67
-3.0 m	22719*	22719*	18673*	15793	14684*	9859	11309*	7043			10574*	6631	7,83
-4.5 m			14436*	14436*	11289*	10323					10031*	9094	6,54

Retractable sideframe with 3,38m dipper, 600mm shoes and bucket of 1,8 m³ - 1850kg

7.5 m											8838*	8158	8,36
6.0 m							9688*	9688*	8901*	6873	6338*	5962	9,64
4.5 m	27583*	27583*	16913*	16913*	12818*	12818*	10657*	9166	9359*	6602	6573*	5283	10,07
3.0 m			20917*	19249	14797*	12290	11731*	8591	9920*	6284	7029*	4908	10,27
1.5 m			23265*	17756	16324*	11425	12633*	8084	10130	5990	7771*	4772	10,24
0 m			23619*	17164	17021*	10899	13120*	7727	9896	5777	8391	4868	9,98
-1.5 m	17770*	17770*	22621*	17063	16796*	10684	13005*	7553	9798	5687	9048	5249	9,48
-3.0 m	25318*	25318*	20495*	17259	15582*	10724	12058*	7574			9684*	6074	8,69
-4.5 m	22129*	22129*	16966*	16966*	13055*	11018	9649*	7855			9584*	7814	7,53
-6.0 m			11076*	11076*							8494*	8494*	5,75

Retractable sideframe with 2,53m dipper, 600mm shoes and bucket of 2,0 m³ - 1920kg

7.5 m											10271*	9772	7,49
6.0 m					12419*	12419*	10739*	9430			9731*	7030	8,77
4.5 m			19420*	19420*	14156*	12864	11577*	8936	10104*	6480	9932*	6153	9,25
3.0 m			22890*	18081	15870*	11865	12472*	8413	10374	6220	9537	5694	9,46
1.5 m			19092*	17223	16943*	11161	13121*	7988	10124	5992	9399	5552	9,43
0 m			22854*	17100	17095*	10821	13247	7734	9983	5864	9735	5718	9,15
-1.5 m			21127*	17249	16309*	10775	12733*	7676			10579*	6285	8,6
-3.0 m	22326*	22326*	18353*	17628	14447*	10978	11073*	7854			10565*	7541	7,72
-4.5 m			13904*	13904*	10806*	10806*					9923*	9923*	6,38

Machine in Auto mode
-Lift capacities are taken in accordance with SAE J1097 / ISO 10567 / DIN 15019-2
-Lift capacities shown in kg do not exceed 75% of the tipping load or f1 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 f1 from the load shown in the table to calculate the real lift capacity


CASE


CX460
CASE

CX460

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

Hydraulic control
- 4 working modes (3 manual + 1 auto)
- 2 travel speeds with automatic speed change
- 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)

Engine control
- Common rail engine to Tier 3A European standards
- Electrical control on injection pump
- Automatic /manual engine return to idle
- Fuel level check
- Emergency stop
- Automatic engine pre-heating
- Auto-stop electric refuel pump

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 lights on the boom
- 1 working lights on the cab

Operator environment
- Modern cab, 1 meter 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 controls
- Windscreen washer and wiper
- Adjustable heater
- Floor mat
- Sun visor
- Rear-view mirror and safety mirrors
- Self adjusting air conditioning
- Anti-theft device

Operator seat
- Air suspension
- Height and tilt adjustment
- Adjustable head-rest
- Adjustable seat-back angle
- Adjustable arm-rests
- Reel-type safety belt

Equipment
- EMS (Extended Maintenance System) chrome pins with brass bushing throughout entire attachment except bucket
- Track guide (over full chassis length)
- Upper and lower undercovers
- LC undercarriage
- Sealed and lubricated track

OPTIONS
- Auxiliary hydraulic circuit
- Possible options and combinations:
  - Hammer circuit
  - Auxiliary circuit for clamshell rotation, etc.
  - Multi-purpose circuit (hammer or shears)
- Windscreen and cab protection

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Standard and optional equipment shown can vary by country.

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.

CE
Conforms to directive 98/37/CE

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

www.casece.com

CASE CONSTRUCTION