CASE CONSTRUCTION

HYDRAULIC EXCAVATOR
CX160B

Engine Horsepower	89.2 kW - 120 hp
Operating weight (max)	16.7 t
Bucket capacity	0.27 m^3 to 0.95 m^3

POWER AND SPEED

The CX160B has an advanced hydraulic system with three working modes to match power and speed to every application. This reduces fuel consumption and maximises productivity. The excavator benefits from increased digging forces, slew speeds and high swing torque resulting in reduced cycle times. The Tier III common rail engine offers increased fuel efficiency and engine output, reducing operating costs and improving cost per tonne performance. Combined with the advanced hydraulic system, customers can achieve significant fuel savings, boosting profitability.
Maximum production. Reduced operating cost.

POSITIVE IMAGE

The CX160B shares the same robust, tough design as larger Case machines, creating strong operator acceptance and boosting confidence. An advanced cab structure provides exceptional levels of comfort and low noise. The common rail engine uses exhaust gas recirculation to ensure low emissions and in combination with the easy to use hydraulic mode selection system, results in high productivity with low fuel use.
Environmental benefit. Operator pride.

SAFE OPERATION

The CX160B's cab has floor to roof glazing for improved visibility all round. The cab structure is three times more rigid than a conventional frame, increasing safety for the operator. A single piece side window provides an exceptional view to the right side of the machine. Smooth responsive controls, an easy to use operating console and comfortable seating reduce operator fatigue, further boosting productivity and site safety.
Enhanced safety. Increased production.

ERGONOMIC ENVIRONMENT

With up to 60 mm of additional leg and foot space, this compact Case is a comfortable machine. Up to 60 % more glass area contributes to that spacious feeling, and with a reclining seat and air conditioning with multiple vents any operator will be able to stay comfortable in the CX160B. A hot/cold storage box, a cup holder and even a mobile phone pocket are standard equipment, along with and large storage area behind the operator's seat.
The operating lever consoles have four positions with auto return to selected position on left hand side, ensuring optimum comfort for the operator. In addition viscous cab mountings reduce vibration and noise within the cab.
Operator satisfaction. Productive machine.

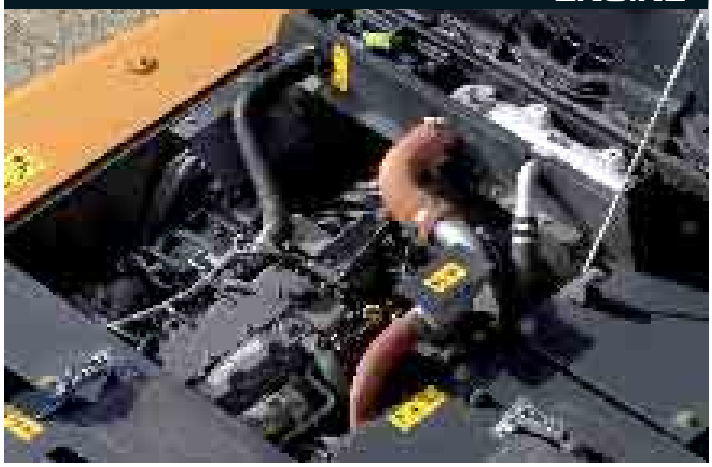
DURABLE DESIGN

Case excavators have long been renowned for their exceptional reliability and durability. A robust upper structure and revised forged bracket boom and dipper design, ensure long service life with low maintenance. EMS bushes increase durability, lowering operating costs. Undercarriage components have been optimised to keep your machinery working efficiently.
A single high performance synthetic fibre hydraulic filter is used to protect the entire hydraulic system. Separate filters are no longer required when the machine is used with a hydraulic breaker.
Reliability built in. Longevity guaranteed.

ECONOMICAL OPERATION

The Case CX160B is equipped with a larger fuel tank complete with high flow auto-stop refuelling pump. This reduces downtime for refuelling and ensures that there is no fuel spillage onto sensitive ground. Up to two days working between fuel stops, can be achieved, increasing cost per litre productivity. Extended Maintenance System (EMS) bushes provide 1,000 hour greasing intervals on the majority of pins and low friction side shims on the boom and dipper further reduce maintenance. Coolers are mounted side by side for ease of cleaning and ground level access to a central filter bank reduces service time.
Maximum efficiency. Minimum operating cost.

ENGINE



The CX160B has an electronically-controlled common rail engine that exceeds Tier III emissions regulations. Advanced four valve design includes a fuel cooler to better control the volume and timing of injection, and exhaust gas recirculation to reduce emissions. Low engine speed, large capacity driven fan and low large exhaust system contribute to lower noise levels. Auto and one-touch idle speed settings allows the operator to control the engine for maximum efficiency. High output with reduced fuel consumption, contributes to maximum productivity for the customer.

HYDRAULICS

Highly efficient piston pumps with improved tolerances contribute to improved fuel economy. The CX160B uses a variable control pump torque system to align engine output with hydraulic demand, ensuring high productivity and smooth reaction to operator input. A Super Fine synthetic fibre hydraulic filter is standard, protecting valuable components and prolonging hydraulic oil service life. Additional filters are no longer necessary when operating the machine with a hydraulic attachments, cutting cost for the customer. The machine features hose burst control valves that are now located behind the boom cylinders for greater protection and improved operator visibility to the working area.

CONSOLE ENGINE THROTTLE

Mode selection for the hydraulic system is controlled through an advanced engine throttle control, which is positioned within the fully adjustable right hand console. All switches are grouped in a central layout and short servo lever joysticks make the CX160B an easy machine to operate. A clear display console, complete with luminosity sensor, is easy to read whatever the ambient light conditions. Up to 10 auxiliary hydraulic flow settings are stored in the machine's advanced hydraulic control, making it possible to use up to 10 attachments with no manual adjustment to the machine's hydraulic valves. This increases productivity and reduces downtime for attachment changeover.

OPERATOR'S CAB

The redesigned Case excavator cab has more glass , including a single piece window on the right hand side, offering improved visibility all round the machine. The main windscreen an be lifted into the roof space for a clear view of the digging area and has a retractable sun visor. The cab is three times more rigid, for increased safety, and combined with viscous cab mounts results in best in class low levels of noise and vibration.

The operator can easily get comfortable, thanks to adjustable consoles, longer seat slides, an increase in foot space, a fully reclining seat and air conditioning with nine outlet vents.

The CX160B cab specification includes a clock, a large storage box behind the driver's seat, bottle and can holders, a mobile phone holder and a cool box that uses the air conditioning system to regulate internal temperature.

MAINTENANCE

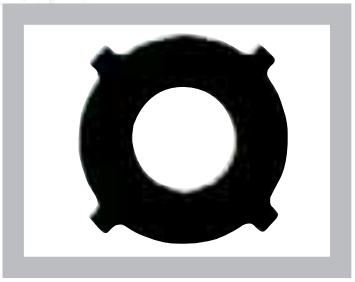
Case CXB excavators achieve the lowest possible score with the SAE Maintenance score system, reducing downtime and service cost. All filters are remote mounted in a central position, providing ground level access for maintenance and reducing service times. The larger fuel tank has both a drain valve and a removable service plate, to allow for easy cleaning in the case of fuel contamination. A green engine oil drainer cuts out the risk of spillage during draining, protecting the environment. The high-flow electric refuelling pump is twice as fast as previous models and the auto-stop function makes refilling easier.
Centralised greasing is available as an option on the CX160B.

UNDERCARRIAGE

Long undercarriage life reduces ownership costs. The CX160B uses heat treated drive sprockets for extended reliability. Robust track guides and improved track links, with new M shaped seals and increased pin hardness, further boost durability and reduce track wear. The machine's track rollers have an O-ring design that prevents the ingress of dirt and dust, and a revised profile for lower wear.

IMPROVED PIN AND BUSHING LIFE

EMS chrome plated pins with brass bushing



Antifriction shims

Extended Maintenance Bushings (EMS) are standard equipment on all CXB excavators. These low maintenance bushings provide up to 1,000 hour greasing intervals, greatly reducing daily and weekly maintenance for the operator. Anti-friction shims in the boom foot and head reduce noise and cut free play, boosting durability and reliability for the customer.

ATTACHMENTS/BUCKETS

CX160B 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 different choice of booms and dipper sticks, along with a range of buckets from 0.27m^3 - 0.95 m^3, there is a configuration to meet the requirements of every customer's job site.


CASE


CASE

SPECIFICATIONS

ENGINE

Latest generation engine, meeting European requirements for "Low exhaust emissions" Tier III in accordance with directive 97/ 68/EC

Make ISUZU
Type AI-4JJ1X
Common rail, turbo, intercooler, fuel cooler
EGR (Exhaust Gas Recirculator) Yes
Direct injection Electronically controlled
Number of cylinders 4
Bore - Stroke 95.4 x 104.9 mm
Cubic capacity 3000cc
Horsepower EEC80/1269 89.2kW/120hp @ 2200 rpm
Maximum Torque 391 Nm @ 1800 rpm

HYDRAULIC SYSTEM

Max output 2 x 142 l/min @ 2200rpm
2 axial piston, variable flow pumps Yes
Attachment/Power Boost 343/363 bar
Upperstructure swing 279 bar
Travel 343 bar
Oil filtration 6 micron
Type of oil filter Synthetic fiber Super fine High catch

SWING

Max upperstructure swing speed 11,5 rpm
Swing torque 4510 daN

TRAVEL

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

Max travel speed 5.4 km/h
Low travel speed 2.8 km/h
Speed change is controlled from the instrument panel
Automatic downshifting Yes
Gradeability 70% (35°)
Tractive force 16 100 daN

ELECTRICAL SYSTEM

Circuit 24 V
Batteries 2 x 12 V - 72 A/h
Circuit equipped with water-proof connectors Yes
Alternator 24 V - 50 Amp

UNDERCARRIAGE

Upper rollers 2
Lower rollers 7
Number of track pads 44
Type of shoes Triple grouser
Track pad width Standard 600 mm
Track guard Front and 1 central

CIRCUIT AND COMPONENT CAPACITIES

Fuel tank 300 l
Hydraulic reservoir 90 l
Hydraulic system 165 l
Travel reduction gear (per side) 4.5 l
Swing reduction gear 5 l
Engine oil (including filter change) 17 l
Engine cooling system 15 l

BUCKETS

GENERAL PURPOSE

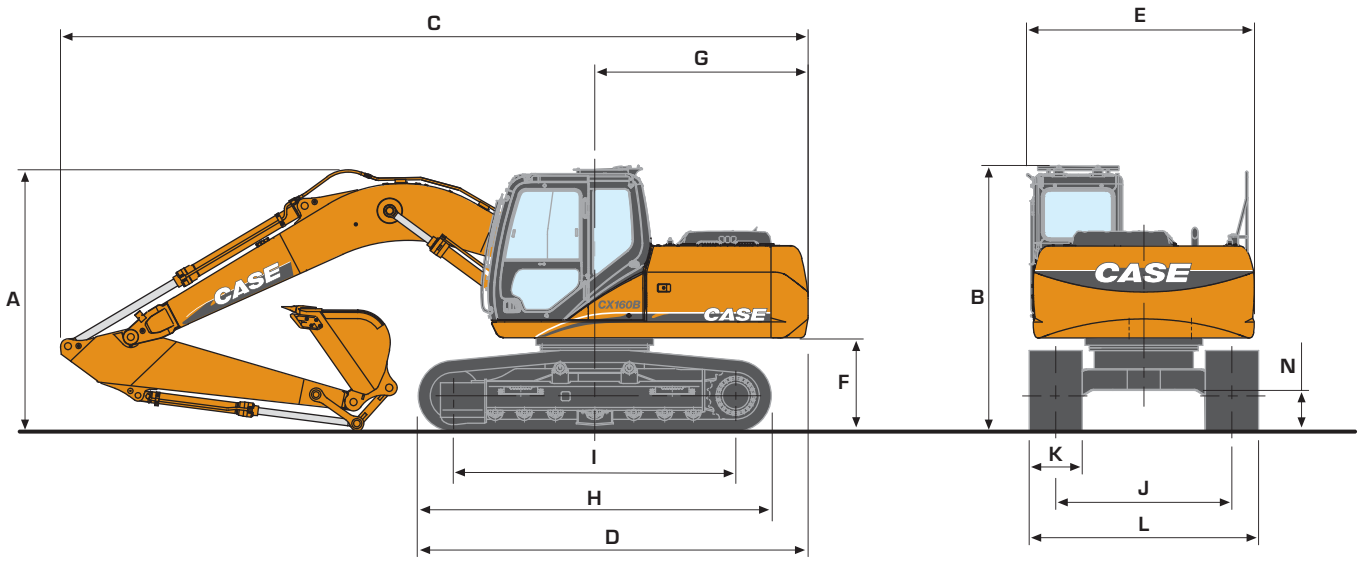
SAE capacity	l	270	390	570	660	750	850	950
Width	mm	500	600	800	900	1000	1100	1200
Weight	kg	350	385	455	495	525	550	590

HEAVY DUTY

SAE capacity	l	660	750	850	950
Width	mm	900	1000	1100	1200
Weight	kg	555	590	625	665

* For other bucket sizes, please contact your CASE dealer

GENERAL DIMENSIONS
WITH 5.15 m STANDARD MONOBOOM



		CX160B Mono		
DIPPER LENGTH		**2.23**	**2.62**	**3.05**
A Overall height (with attachment)	m	3.00	2.96	3.12
B Height (cab/handrail)	m	2.93/2.95	2.93/2.95	2.93/2.95
C Overall lenght (with attachment)	m	8.49	8.44	8.52
D Overall lenght (without attachment)	m	4.41	4.41	4.41
E Width of upperstructure	m	2.54	2.54	2.54
F Upperstructure ground clearance	m	1.02	1.02	1.02
G Swing radius (rear end)	m	2.41	2.41	2.41
H Track overall lenght	m	3.99	3.99	3.99
I Centre idler to centre sprocket	m	3.19	3.19	3.19
J Track gauge	m	1.99	1.99	1.99
K Track shoe width standard	mm	600	600	600
L Track overall width - 500 mm shoes	m	2.49	2.49	2.49
- 600 mm shoes	m	2.59	2.59	2.59
- 700 mm shoes	m	2.69	2.69	2.69
N Ground clearance	m	0.44	0.44	0.44

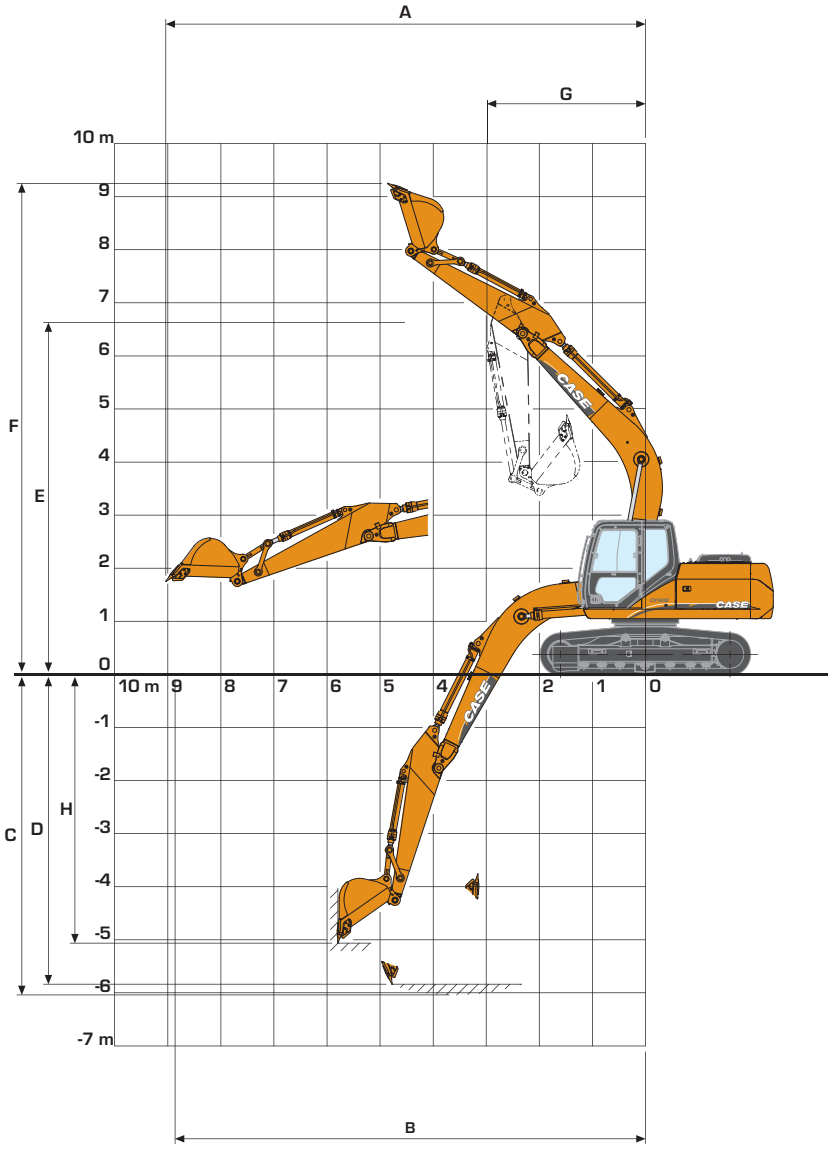
WEIGHT AND GROUND PRESSURE

With 5.15 m standard monoboom 2.62 m dipper - 484 kg, 0.62 m^3 bucket, operator and full fuel tank

	WEIGHT (kg)	GROUND PRESSURE (bar)
shoes 500 mm steel	16 000	0.47
shoes 600 mm steel	17 000	0.40
shoes 700 mm steel	17 400	0.35

MONOBOOM

PERFORMANCE DATA
WITH 5.15 m STANDARD MONOBOOM



DIPPER LENGTH			2.23	2.62	3.05
A	Maximum digging reach	m	8.67	9.04	9.38
B	Maximum digging reach at ground level	m	8.49	8.87	9.21
C	Maximum digging depth	m	5.65	6.04	6.47
D	Digging depth - 2,44 m level bottom	m	5.42	5.84	6.28
E	Max dump height	m	6.40	6.62	6.71
F	Overall reach height	m	9.02	9.25	9.30
G	Minimum swing radius - attachment	m	2.98	2.99	2.98
H	Vertical straight wall dig depth	m	4.70	5.07	5.21
	Digging force - w/o Power Boost	daN	9 000	7 900	7 200
	- with Power Boost	daN	9 500	8 400	7 700
	Breakout force - w/o Power Boost	daN	11 200	11 200	11 200
	- with Power Boost	daN	11 800	11 800	11 800

LIFTING CAPACITY

WITH 5.15 m STANDARD BOOM

Values are expressed in kilos

2.23 m dipper 600 mm shoes and bucket of 0.62 m³ - 484 kg

Front / 360°	REACH 3.0 m		4.5 m		6.0 m		7.5 m		At max reach		m
6.0 m									2634*	2634*	6.00
4.5 m					5020*	4707	4622*	2911	2605*	2298	6.84
3.0 m	10016*	8043	6448*	4315	4532	2749			2739*	1980	7.27
1.5 m	6044*	6044*	6848	3936	4337	2574			3047*	1852	7.38
0 m	7808*	6898	6586	3713	4196	2448			3207	1878	7.17
-1.5 m	11895*	6926	6511	3649	4147	2404			3593	2096	6.62
-3.0 m	11625*	7087	6591	3717					4655	2708	5.62
-4.5 m	8230*	7468							6557*	5063	3.82

2.62 m dipper 600 mm shoes and bucket of 0.62 m³ - 484 kg

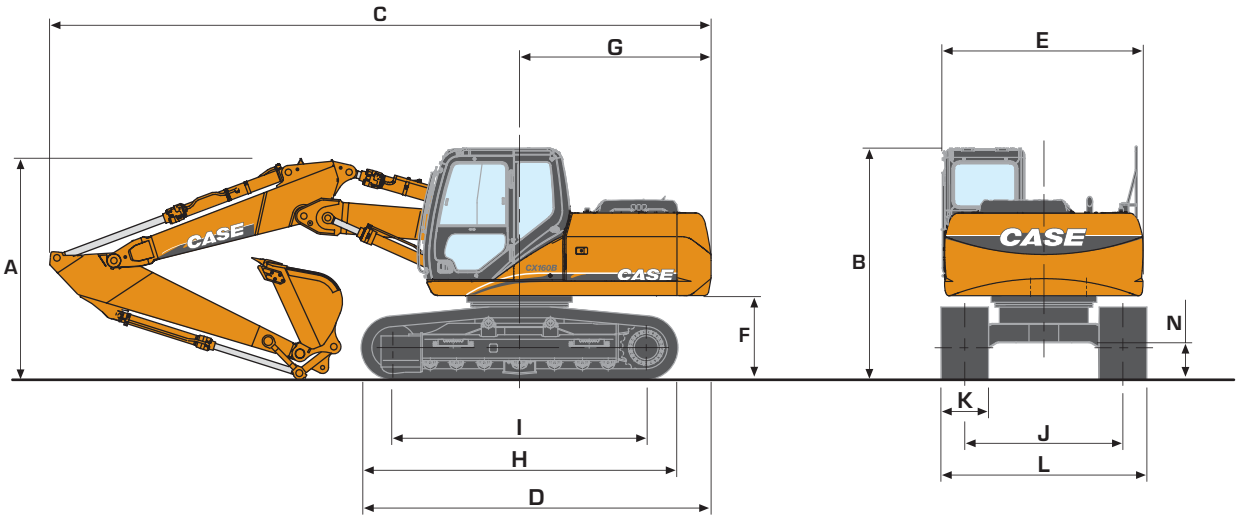
6.0 m					3022*	3022*			1970*	1970*	6.46
4.5 m					4263*	2931			1934*	1934*	7.24
3.0 m	8782*	8330	5952*	4374	4547	2758	2632*	1866	2014*	1795	7.65
1.5 m	8267*	7236	6893	3967	4336	2568	3032	1782	2214*	1680	7.76
0 m	8027*	6875	6582	3703	4173	2423	2957*	1716	2592*	1695	7.56
-1.5 m	10933*	6839	6463	3601	4097	2355			3231	1867	7.04
-3.0 m	12211*	6961	6501	3634	4139	2392			4033	2335	6.01
-4.5 m	9394*	7272	6259*	3639					6222*	3816	4.52

3.05 m dipper 600 mm shoes and bucket of 0.51 m³ - 440 kg

6.0 m							3060*	3060*	1817*	1817*	6.84
4.5 m					3894*	2989	2023*	1972	1795*	1795*	7.58
3.0 m	7479*	7479*	5406*	4478	4575*	2804	3129*	1893	1873*	1680	7.98
1.5 m	11593*	7456	6982	4040	4371	2598	3047	1794	2057*	1571	8.08
0 m	8785*	6905	6614	3727	4183	2430	2955	1710	2397*	1574	7.89
-1.5 m	10656*	6779	6444	3583	4079	2337			2981	1711	7.39
-3.0 m	12747*	6851	6438	3578	4080	2337			3617	2082	6.51
-4.5 m	10459*	7102	6605	3719					5480	3142	5.05

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 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 table to calculate the real lift capacity

GENERAL DIMENSIONS
WITH 4.98 m ARTICULATED BOOM



			CX160B Articulated boom		
DIPPER LENGTH			**2.23**	**2.62**	**3.05**
A	Overall height (with attachment)	m	2.76	2.79	3.02
B	Height (cab/handrail)	m	2.93/2.95	2.93/2.95	2.93/2.95
C	Overall lenght (with attachment)	m	8.36	8.33	8.36
D	Overall lenght (without attachment)	m	4.41	4.41	4.41
E	Width of upperstructure	m	2.54	2.54	2.54
F	Upperstructure ground clearance	m	1.02	1.02	1.02
G	Swing radius (rear end)	m	2.41	2.41	2.41
H	Track overall lenght	m	3.99	3.99	3.99
I	Centre idler to centre sprocket	m	3.19	3.19	3.19
J	Track gauge	m	1.99	1.99	1.99
K	Track shoe width standard	mm	600	600	600
L	Track overall width - 500 mm shoes	m	2.49	2.49	2.49
	- 600 mm shoes	m	2.59	2.59	2.59
	- 700 mm shoes	m	2.69	2.69	2.69
N	Ground clearance	m	0.44	0.44	0.44

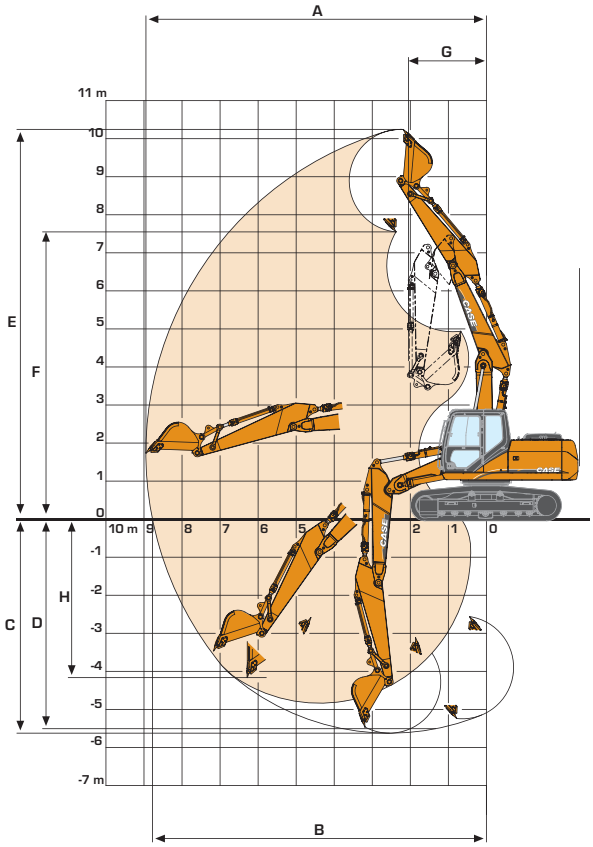
WEIGHT AND GROUND PRESSURE

With 4.98 m articulated boom 2.62 m dipper - 484 kg, 0.62 m^3 bucket, operator and full fuel tank

	WEIGHT (kg)	GROUND PRESSURE (bar)
shoes 500 mm steel	17 300	0.49
shoes 600 mm steel	17 500	0.41
shoes 700 mm steel	17 900	0.36

PERFORMANCE DATA
WITH 4.98 m ARTICULATED BOOM

DIPPER LENGTH			2.23	2.62	3.05
A	Maximum digging reach	m	8.57	8.95	9.31
B	Maximum digging reach at ground level	m	8.39	8.78	9.14
C	Maximum digging depth	m	5.24	5.62	6.03
D	Digging depth - 2,44 m level bottom	m	5.11	5.51	5.92
E	Max dump height	m	7.22	7.55	7.79
F	Overall reach height	m	9.91	10.25	10.49
G	Minimum swing radius - attachment	m	2.16	2.08	2.16
H	Vertical straight wall dig depth	m	4.26	4.17	4.58
	Digging force - w/o Power Boost	daN	9 000	7 900	7 200
	- with Power Boost	daN	9 500	8 400	7 700
	Breakout force - w/o Power Boost	daN	11 200	11 200	11 200
	- with Power Boost	daN	11 800	11 800	11 800



LIFTING CAPACITY
WITH 4.98 m ARTICULATED BOOM

Values are expressed in kilos

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

2.23 m dipper 600 mm shoes and bucket of 0.62 m³ - 484 kg

6.0 m					4610*	4610*			2990*	2990*	5.83
4.5 m	6390*	6390*	4930*	4860	3910*	2960			2520*	2280	6.78
3.0 m	11330*	8740*	5860*	4690	4210*	2900			2610*	1950	7.22
1.5 m	13140*	8370*	7120	4480	4500	2740			2850*	1830	7.33
0 m	13850*	7780	7040	4160	4360	2550			3250	1870	7.12
-1.5 m	14030*	7420	6900	3910	4220	2420			3670	2100	6.56
-3.0 m	12890*	7360	6750	3790					4090*	2770	5.55

2.62 m dipper 600 mm shoes and bucket of 0.62 m³ - 484 kg

6.0 m			4030*	4030*	2970*	2970*			2050*	2050*	6.37
4.5 m	4590*	4590*	4630*	4630*	3690*	3020			1870*	1870*	7.19
3.0 m	9350*	8740*	5450*	4700	3980*	2950	2390*	1830	1910*	1770	7.61
1.5 m	13030*	8400*	6970*	4490	4450	2800	3000*	1760	2070*	1650	7.71
0 m	13690*	7890	7000	4190	4390	2590	2460*	1680	2390*	1680	7.51
-1.5 m	13890*	7420	6940	3940	4220	2420			2990*	1870	6.99
-3.0 m	13640*	7340	6720	3750	4180*	2390			4030*	2370	6.05

3.05 m dipper 600 mm shoes and bucket of 0.51 m³ - 440 kg

6.0 m			3540*	3540*	3070*	3070*			1810*	1810*	6.81
4.5 m			4130*	4130*	3540*	3130	1930*	1930*	1760*	1760*	7.55
3.0 m	7940*	7940*	5120*	4790	3830*	3070	2890*	1940	1810*	1700	7.95
1.5 m	13160*	8550	6510*	4580	4320*	2930	3120*	1860	1960*	1590	8.05
0 m	13640*	8170	7070	4340	4450	2710	3030	1760	2240*	1600	7.86
-1.5 m	13910*	7580	7010	4030	4310	2500			2780*	1760	7.36
-3.0 m	14000*	7390	6790	3820	4210	2410			3750	2160	6.48
-4.5 m	10010*	7370	4970*	3840					4610*	3700	4.61

■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 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 table to calculate the real lift capacity

CX160B

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

Engine control
- Common rail engine Tier III European Standards
- Electronic control of the injection system
- Automatic engine pre-heating
- Automatic/manual engine return to idle
- Exhaust Gas Recirculator
- Emergency stop
- Electrical refuel pump with automatic stop
- Fuel filter with water separator

Hydraulic control
- Auto/Heavy/Super Power working modes
- Pump torque variable control
- Automatic Power boost control
- Swing brake control
- High performance "Super Fine" synthetic fiber hydraulic filter (high contamination catch)
- Hydraulic safety valves on boom and dipper
- 2 travel speeds with auto down shifting

Operator environment
- High visibilty cab with safety glass
- Adjustable and retractable armrest console with position memory
- Safety lever
- Self adjusting Air conditioning and heating system
- Cup holder
- High visibility side monitor display with automatic brightness
- Messages (function, temperature, safety, ...) on the display
- Integrated diagnostic system
- Working modes (Auto/Heavy/Super Power) combined with engine throttle
- Anti-theft device
- Hourmeter
- Selectable auxiliary hydraulic flow pre-settings
- RH front console with clock and cell phone holder
- High capacity shock absorbers on cab with 4 points fluid mountings
- Rain deflector
- Windscreen with lockable opening
- Windscreen washer and wiper
- Removable lower front windscreen with storage location in cab
- Glass cab roof window and slidding sun shade
- ISO control pattern low effort & short joysticks
- Adjustable sun visor
- Washable cab floor mat
- Rear view mirror and safety mirrors
- Storage compartments
- Integrated cool box
- 12V and 24V DC accessory sockets
- Hammer/Shear change selected from the cab
- Fore & aft adjustment of the whole seat & console

Electrical system
- Water proof connectors
- Double horn
- 2 working light on the cab
- Working light on the fuel tank
- Working light on the boom

Equipment
- EMS (Extended Maintenance System) pins and bushings as Standard (1000 hours lubrication interval for all, except buckets pins at 250 hours)
- Low friction resin side shims on boom and dipper
- Sealed and lubricated tracks
- Track guides (1 guide & front)
- Large tool box
- Pre-disposal for the optional cab protection

Operator seat
- Fully adjustable low frequency mechanical suspension seat including double acting hydraulic damper
- Weight adjustment
- Height/fore & aft adjustment
- Adjustable head rest
- Adjustable seat back angle with fully flat seat reclining
- Adjustable arm rest
- Safety belt

OPTIONS

- Bucket/clamshell hydraulic circuit
- Hammer hydraulic circuit
- Hammer/shear hydraulic circuit
- Additional track guides (3 guides & front instead of 1 guide & front)
- Track width (500 mm - 600 mm - 700 mm depending on the version)
- Windscreen prtection
- Cab protection
- GPS (Global Positioning System) by satellite
- Centralized greasing system automatically actuated by an electrical grease pump

Standard and optional equipment shown can vary by country.

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Worldwide Case Construction Equipment Contact Information

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NORTH AMERICA/MEXICO:
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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 Customer Assistance
00800-2273-7373

The call is free from a land line. Check in advance with your Mobile Operator if you will be charged.

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
Unit 4,
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