

CX B-SERIES HYDRAULIC EXCAVATORS
CX290B

CASE
CONSTRUCTION



MAXIMUM POWER
AND COMFORT

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EXPERTS FOR THE REAL WORLD
SINCE 1842

MAXIMUM POWER AND COMFORT

BUILT TO WORK

Inherent durability is instantly obvious in all Case excavators. Robust upper structure and revised boom and dipper design with forged brackets offer strength and reliability. EMS bushes further increase durability, cutting ownership costs and boosting uptime working in difficult conditions. High performance synthetic fibre hydraulic filter protects the system and components, with no need for separate filters when the machine is used with a hydraulic breaker. Strength to perform. Designed to keep working.





SMOOTH OPERATOR

Responsive hydraulic system with three working modes matches the power and speed to every application. Increased digging forces available with advanced Auto mode and Super Power mode. Rapid slew speeds and high swing torque result in fast cycle times and increased productivity. Tier III compliant common rail engine combines fuel efficiency with increased horsepower. In combination with advanced hydraulic system results in significant fuel saving, cutting ownership costs and boosting profitability. High Efficiency. Low Operating Cost.

STRIKING DESIGN

Tough, powerful appearance popular with operators, promoting high degree of satisfaction and boosting performance. New cab structure offers exceptional levels of comfort with ease of operation. Combined with advanced engine and hydraulic mode selection system, results in high productivity with reduced operator effort. Tier III emissions compliant engine uses less fuel and cuts gaseous emissions, improving the environment for all. Ease of Operation. Environmentally friendly design.

LOWER OPERATING COSTS

The CX290B benefits from a larger fuel tank with a high flow auto stop refuelling pump. Combined with the common rail engine's lower fuel consumption and the highly efficient hydraulic system, this results in longer working periods between refills, of at least two days, boosting productivity. Extended Maintenance System (EMS) bushes offer 1,000 hour greasing intervals on the majority of pins, reducing downtime. Easy to maintain coolers, mounted side by side, and ground access centralised filter bank reduces service time, keeping your machine working. Low friction resin side shims on boom and dipper reduce wear and increase operator comfort through smoother operation. Reduced ownership costs. Increased profitability.

OPERATOR COMFORT

Revised cab design provides additional leg and foot space. Significant increase in glass area contributes to spacious feeling for the operator. Reclining seat and air conditioning with multiple vents allows any operator to remain comfortable throughout the day. Storage includes hot/cold box, cup holder, mobile phone pocket and large box behind the operator's seat. Temperature controlled cab is mounted on viscous couplings to reduce vibration and noise. With smooth intuitive controls this contributes to increase comfort and reduced operator stress. Operator satisfaction. Maximum productivity.

INHERENT STRENGTH

New cab structure three times stronger yet has greater glass area for improved visibility all round, increasing safety inside the cab and outside on the job site. Single piece window to the operator's right offers excellent view to that side of the machine. Simple operating console makes the machine easier to work, with smooth responsive controls and easy to reach switches reducing operator fatigue and boosting productivity. Safety first. Inside and out.

CX B-SERIES HYDRAULIC EXCAVATORS



ENGINE

High pressure common rail engine exceeds Tier III emissions standards and is already equipped for the future move to Euro IV standards. Robust ladder frame design, with low speed torque, boosts durability for all components. Low engine speed contributes to lower noise output and improvement in fuel consumption. Large capacity exhaust muffler and large diameter low rev engine cooling fan further reduce engine noise.

Standard fuel cooler helps to reduce fuel consumption, while four valve per cylinder engine design, using advanced exhaust gas recirculation (EGR) reduces gaseous emissions. Auto and one-touch idle speed allows the operator to control the engine for maximum efficiency.

HYDRAULICS

The CX290B builds on the Case heritage of excavator design. The machine has highly efficient piston type pumps to maximise pressure and flow. These are controlled by a variable control pump torque system that matches engine output to hydraulic demand, ensuring high productivity by rapidly reacting to servo lever movement. A high performance Super Fine synthetic fibre hydraulic filter ensures a high contamination catch, protecting valuable components. When the machine is used with a hydraulic breaker there is now no need for additional filters to be used, cutting cost for the customer.



CONSOLE, ENGINE THROTTLE

Fully adjustable right hand console includes advanced engine throttle control, for working mode selection. A luminosity sensor in the console display ensures that the graphics are clear and easy to read in bright sunlight. Centralised layout of switches makes operation easier, while short lever joysticks further improve controllability.

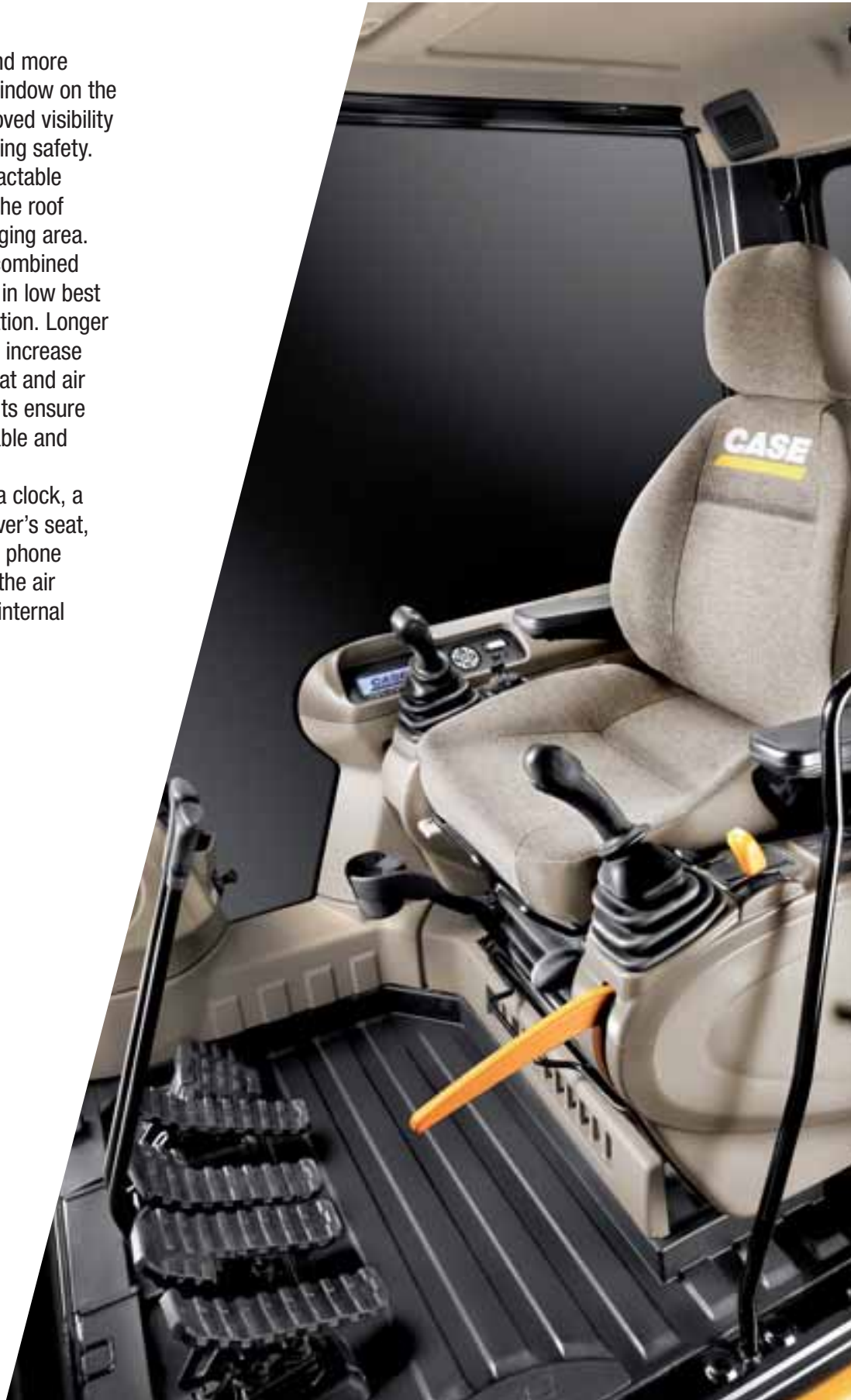
Advanced hydraulic system with up to 10 auxiliary hydraulic flow settings programmed into the memory, making it possible to use up to 10 attachments with no manual adjustment to hydraulic circuit. This means that the operator can change from a breaker setting of flow and pressure, to a shear setting from the seat.



OPERATOR'S CAB

Upgraded cab has slim pillars and more glass, including a single piece window on the right hand side, promoting improved visibility all round the machine and boosting safety. The main windscreen has a retractable sun visor and can be lifted into the roof space for a clear view of the digging area. Improvements in cab strength, combined with viscous cab mounts, result in low best in class levels of noise and vibration. Longer seat slides, adjustable consoles, increase in foot space, a fully reclining seat and air conditioning with nine outlet vents ensure that the operator stays comfortable and productive.

The cab is well appointed, with 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.



CX B-SERIES HYDRAULIC EXCAVATORS

MAINTENANCE

Filters are centralised and remote mounted within large access panels, allowing ground level maintenance and reducing service time. Case excavators achieve the lowest score in SAE Maintenance score system, minimising downtime. The fuel tank has both a drain cock and a removable service plate, to allow for easy cleaning in the case of fuel contamination. A green engine oil drainer helps reduce environmental impact as there is no risk of spillage during draining. High flow electric refuelling pump is twice as fast as previous models, with an auto stop function to make refilling easier. Centralised greasing systems are available as an option.



UNDERCARRIAGE

Case undercarriage design has always promised long component life and low operating costs. The CX290B has heat treated drive sprockets for extended operation. Robust track guides and improved track links, with new M shaped seals and increased pin hardness, further boost durability and reliability. The track rollers have a revised profile for lower wear, and the O-ring design prevents the ingress of abrasive material, further extending longevity.



IMPROVED PIN AND BUSHING LIFE

Extended Maintenance Bushings (EMS) are now fitted as standard on all CXB excavators. Low maintenance EMS bushings provide 1,000 hour greasing intervals, greatly reducing daily and weekly servicing for the operator. The bucket pins retain a 250 hour greasing interval. Anti-friction shims in the boom foot and head reduce noise and cut free play, further increasing the Case reputation for durability and reducing ownership and operating costs.



EMS chrome plated pins with brass bushing

Antifriction shims





ATTACHMENTS/BUCKETS

CX290B 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 0.47m³ - 1.70 m³, there is a configuration to meet the requirements of every customer's job site.

CX C-SERIES **HYDRAULIC EXCAVATORS**





SPECIFICATIONS

ENGINE

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

Make _____ ISUZU
 Type _____ AH-6HK1XYSS
 Common rail, turbo, intercooler, fuel cooler GR (Exhaust Gas Recirculator) Yes
 Direct injection _____ Electronically controlled
 Number of cylinders _____ 6
 Bore - Stroke _____ 115 x 125 mm
 Cubic capacity _____ 7790 cc
 Horsepower EEC80/1269 _____ 154 kw/206 hp @ 1800 rpm
 Maximum Torque _____ 850 Nm @ 1500 rpm

HYDRAULIC SYSTEM

Max output _____ 2 x 243 l/min @ 1800 rpm
 2 axial piston, variable flow pumps _____ Yes
 Attachment/Power Boost _____ 343/373 bar
 Upperstructure swing _____ 294 bar
 Travel _____ 343 bar
 Oil filtration _____ 6 micron
 Synthetic fiber _____
 Type of oil filter _____ Super fine High catch

SWING

Max upperstructure swing speed _____ 10.2 rpm
 Swing torque _____ 9250 daN

TRAVEL

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

Max travel speed _____ 5.6 km/h
 Low travel speed _____ 3.2 km/h
 Speed change is controlled from the instrument panel
 Automatic downshifting _____ Yes
 Gradeability _____ 70% (35°)
 Tractive force _____ 2332 daN

BUCKETS

GENERAL PURPOSE

SAE capacity (l)	475	640	810	940	1060	1180	1300	1430	1550	1700
Width (mm)	600	750	900	1000	1100	1200	1300	1400	1500	1600

HEAVY DUTY

SAE capacity (l)	475	640	810	940	1060	1180	1300	1430	1550	1700
Width (mm)	600	750	900	1000	1100	1200	1300	1400	1500	1600

DITCH WITH BLADE

SAE capacity (l)	1010	1250	1210
Width (mm)	2200	2200	2400

HEAVY VERY DUTY

SAE capacity (l)	1300
Width (mm)	1300

ELECTRICAL SYSTEM

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

UNDERCARRIAGE

Upper rollers _____ 2
 Lower rollers _____ 9
 Number of track pads _____ 50
 Type of shoes _____ Triple grouser
 Track pad width Standard _____ LC/NLC - 700/600 mm
 Track guard _____ Front and 1 central

CIRCUIT AND COMPONENT CAPACITIES

Fuel tank _____ 450 l
 Hydraulic reservoir _____ 147 l
 Hydraulic system _____ 300 l
 Travel reduction gear (per side) _____ 9.1 l
 Swing reduction gear _____ 6 l
 Engine (including filter change) _____ 38 l
 Engine cooling system _____ 29 l

DITCH WITH TEETH

SAE capacity (l)	1010	1250	1210
Width (mm)	2200	2200	2400

QUARRY

SAE capacity (l)	1500
Width (mm)	1500

STANDARD AND OPTIONS

STANDARD

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
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 visibility 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
Windscreen with lockable opening
Windscreen washer and wiper
Removable lower front windscreen with storage location in cab
Glass cab roof window and sliding 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 seat including double acting hydraulic damper
Adjustable head rest
Adjustable seat back angle with fully flat seat reclining
Adjustable arm rest
Adjustable lombar position
Height/fore & aft adjustment
Safety belt

OPTIONS

Bucket/clamshell hydraulic circuit
Electrical refuel pump with automatic stop
Rain deflector
Fully adjustable low frequency air suspension seat including double acting

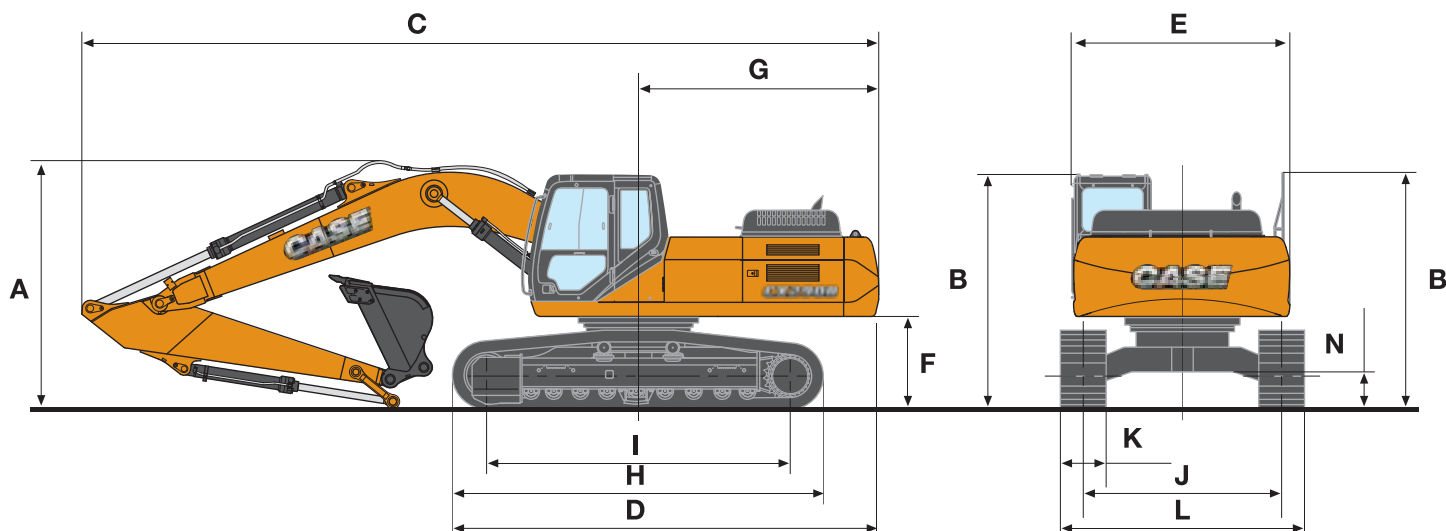
Hammer hydraulic circuit
Hammer/shear hydraulic circuit
Additional track guides (3 guides & front instead of 1 guide & front)
Track width (600mm - 700mm - 800mm

depending on the version)
Windscreen protection
Cab protection
Centralized greasing system automatically actuated by an electrical grease pump

Standard and optional equipment shown can vary by country.

CX C-SERIES HYDRAULIC EXCAVATORS

GENERAL DIMENSIONS



DIPPER LENGTH	CX290B LC MONO			290B NLC MONO		
	2.65 m	3.18 m	3.60 m	2.65 m	3.18 m	3.60 m
A Overall height (with attachment)	3.34	3.26	3.46	3.34	3.26	3.46
B Height (cab/handrail)	3.07/3.11	3.07/3.11	3.07/3.11	3.07/3.11	3.07/3.11	3.07/3.11
C Overall length (with attachment)	10.48	10.45	10.47	10.48	10.45	10.47
D Overall length (without attachment)	5.59	5.59	5.59	5.59	5.59	5.59
E Width of upperstructure	2.87	2.87	2.87	2.87	2.87	2.87
F Upperstructure ground clearance	1.19	1.19	1.19	1.19	1.19	1.19
G Swing radius (rear end)	3.15	3.15	3.15	3.15	3.15	3.15
H Track overall length	4.85	4.85	4.85	4.85	4.85	4.85
I Centre idler to centre sprocket	3.98	3.98	3.98	3.98	3.98	3.98
J Track gauge	2.60	2.60	2.60	2.39	2.39	2.39
K Track shoe width standard	700	700	700	600	600	600
L Track overall width - 600 mm shoes	3.20	3.20	3.20	2.99	2.99	2.99
- 700 mm shoes	3.30	3.30	3.30	-	-	-
- 800 mm shoes	3.40	3.40	3.40	-	-	-
N Ground clearance	0.47	0.47	0.47	0.47	0.47	0.47

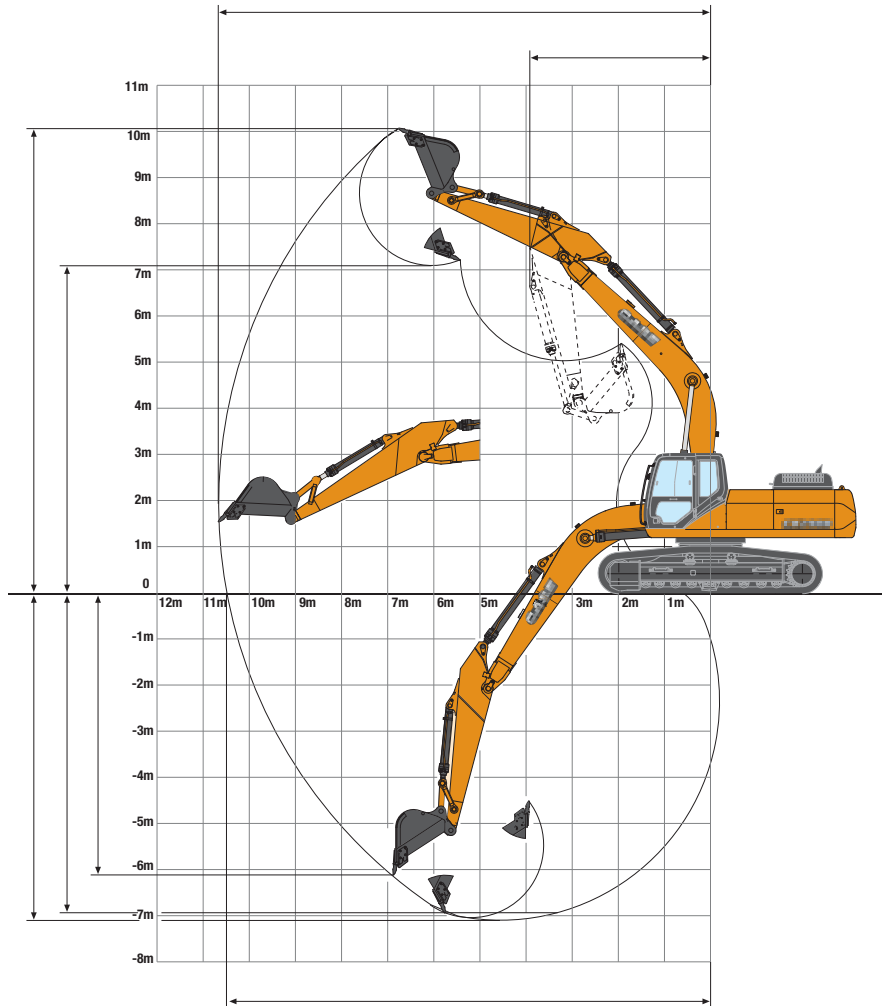
WEIGHT AND GROUND PRESSURE

With 6.15 m standard monoboomb 3.18 m dipper 880 kg, 1.1 m³ bucket operator and full fuel tank

	LC	NLC	LC	NLC
Shoes 600 mm steel	29 100	29 100	0.56	0.56
Shoes 700 mm steel	29 500	29 400	0.49	0.49
Shoes 800 mm steel	29 800	-	0.43	-

PERFORMANCE DATA

With 6.15 m standard boom - 3.18 m dipper



DIPPER LENGTH		2.65 m	3.18 m	3.60 m
A	Maximum digging reach	10.22	10.67	11.16
B	Maximum digging reach at ground level	10.04	10.50	10.99
C	Maximum digging depth	6.57	7.10	7.58
D	Digging depth - 2,44 m level bottom	6.39	6.94	7.44
E	Max dump height	6.94	7.09	7.39
F	Overall reach height	9.93	10.06	10.39
G	Minimum swing radius - attachment	4.00	3.92	4.00
H	Vertical straight wall dig depth	5.76	6.12	6.72
	Digging force - w/o Power Boost	14 020	12 160	10 980
	- with Power Boost	15 300	13 240	11 870
	Breakout force - w/o Power Boost	17 460	17 460	17 460
	- with Power Boost	19 020	19 020	19 020

CX C-SERIES

HYDRAULIC EXCAVATORS

Front 360°	REACH								
	2.0 m	3.0 m	4.0 m	5.0 m	6.0 m	7.0 m	8.0 m	9.0 m	At max. reach

LC with 3.66 m dipper, 600 mm shoes and bucket of 1.1 m³ - 872 kg

7.0 m																		3393*	3393*	8.16
6.0 m																		4872*	4817	8.71
5.0 m																				
4.0 m																				
3.0 m																				
2.0 m																				
1.0 m																				
0 m																				
-1.0 m																				
-2.0 m																				
-3.0 m																				
-4.0 m																				
-5.0 m																				
-6.0 m																				

LC with 3.18 m dipper, 600 mm shoes and bucket of 1.1 m³ - 872 kg

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2.0 m																				
1.0 m																				
0 m																				
-1.0 m																				
-2.0 m																				
-3.0 m																				
-4.0 m																				
-5.0 m																				

LC with 2.65 m dipper, 600 mm shoes and bucket of 1.1 m³ - 872 kg

6.0 m																				
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-5.0 m																				

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.

LIFTING CAPACITY

CX290B

Front 360°	REACH								
	2.0 m	3.0 m	4.0 m	5.0 m	6.0 m	7.0 m	8.0 m	9.0 m	At max. reach

NLC with 3.66 m dipper, 600 mm shoes and bucket of 1.1 m³ - 872 kg

7.0 m																		3393*	3393*	8.16
6.0 m																		4872*	4393	8.71
5.0 m										6529*	5961	5681*	4300	3755*	3429			3385*	3341	9.12
4.0 m									7851*	6819	7220*	5269	6552*	4175	4698*	3356	3468*	3083	9.4	
3.0 m			17764*	17764*	12781*	12374	10292*	8668	8816*	6490	7851*	5054	7004	4032	5470*	3265	3610*	2910	9.56	
2.0 m			10558*	10558*	15272*	11464	11798*	8149	9787*	6163	8496*	4837	6840	3886	5631	3169	3820*	2806	9.62	
1.0 m			7983*	7983*	17101*	10784	13047*	7713	10638*	5874	8287	4639	6688	3749	5531	3078	4112*	2765	9.57	
0 m	4749*	4749*	8606*	8606*	17435*	10371	13892*	7399	10378	5645	8101	4475	6560	3635	5449	3002	4519*	2787	9.42	
-1.0 m	6939*	6939*	10260*	10260*	17608*	10159	13866	7202	10193	5487	7966	4357	6467	3552	5394	2954	5091*	2880	9.15	
-2.0 m	9197*	9197*	12489*	12489*	18073*	10083	13746	7104	10088	5398	7887	4287	6417	3507			5603	3063	8.75	
-3.0 m	11661*	11661*	15257*	15257*	17263*	10105	13726	7088	10060	5374	7868	4271	6421	3510			6169	3776	8.22	
-4.0 m	14469*	14469*	18734*	16988	15900*	10213	12862*	7148	10109	5416	7920	4317					7120	3904	7.51	
-5.0 m	17829*	17829*	17367*	17367*	13832*	10414	11260*	7291	9180*	5540							8056*	4854	6.58	
-6.0 m			13193*	13193*	10694*	10694*	8578*	7555									7977*	6947	5.29	

NLC with 3.18 m dipper, 600 mm shoes and bucket of 1.1 m³ - 872 kg

7.0 m											5414*	5414*							4152*	4152*	7.54
6.0 m											6495*	5562	4576*	4362					4133*	4133*	8.14
5.0 m										7698*	7030	7237*	5422	5923*	4286				4196*	3770	8,57
4.0 m									9680*	9046	8523*	6749	7755*	5243	7108*	4175			4334*	3465	8,87
3.0 m			16291*	16291*	14155*	12069	11170*	8539	9451*	6439	8350*	50433	7005	4046	4754*	3291	4552*	3264	9,04		
2.0 m			7109*	7109*	16447*	11246	12574*	8062	10355*	6139	8507	4846	6859	3915	5428*	3210	4866*	3147	9,10		
1.0 m			6899*	6899*	17912*	10694	13657*	7685	10635*	5882	8306	4670	6726	3796	5582	3136	5305*	3106	9,05		
0 m			8622*	8622*	16917*	10399	14120	7430	10409	5689	8148	4531	6619	3700			5628	3141	8,89		
-1.0 m	7786*	7786*	10989*	10989*	18252*	10272	13941	7285	10264	5565	8041	4437	6549	3637			5871	3263	8,6		
-2.0 m	10495*	10495*	13806	13806	17852*	10254	13873	7229	10196	5507	7990	4392	6526	3616			6312	3501	8,18		
-3.0 m	13380*	13380*	17166*	17129	16769*	10320	13574*	7250	10203	5513	8003	4403					7063	3914	7,61		
-4.0 m	16650*	16650*	18779*	17386	15105*	10467	12349*	7344	10184*	5589							8392	4637	6,84		
-5.0 m			15502*	15502*	12629*	10712	10338*	7531									8700*	6065	5,79		

NLC with 2.65 m dipper, 600 mm shoes and bucket of 1.1 m³ - 872 kg

7.0 m																			5451*	5451*	6.99
6.0 m										7773*	7144	7426*	5481*						5437*	4691	7.63
5.0 m										8368*	6921	7777*	5352	5968*	4232				5537*	4147*	8.09
4.0 m			17961*	17961*	12963*	12597	10562*	8848	9154*	6640	8249*	5181	7103	4136				5741*	3789	8,40	
3.0 m					15487*	11654	11978*	8345	10020*	6338	8668*	4990	6972	4019				6060*	3560	8.59	
2.0 m					17463*	10909	13231*	7899	10829*	6055	8458*	4086	6840	3900				6034	3431	8.65	
1.0 m					15116*	10492	14098*	7571	10565	5825	8278	4647	6724	3796				6011	3391	8.60	
0 m			7790*	7790*	16009*	10315	14043*	7371	10375	5663	8144	4530	6638	3719				6138	3442	8.43	
-1.0 m			11370*	11370*	18106*	10269	13926	7276	10268	5571	8065	4460	6594	3680				6446	3600	8.12	
-2.0 m	11778*	11778*	15165*	15165*	17227*	10308	13912	7265	10239	5547	8047	4444						7010	3904	7.68	
-3.0 m	15440*	15440*	19543*	17324	15864*	10422	13035*	7327	10289	5589	8104	4495						7999	4441	7.06	
-4.0 m	19656*	19656*	16183*	16183*	13863*	10620	11473*	7470	9403*	5716								8952*	5433	6.22	
-5.0 m					10867*	10867*	8852*	7734										8758*	7633	5.05	

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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

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.

