CASE
CONSTRUCTION

HYDRAULIC EXCAVATOR
CX700B

Engine Horsepower	345 kW - 463 hp
Operating weight (max.)	68900 kg
Bucket capacity	1.7 m^3 to 4.55 m^3

EFFICIENT PERFORMANCE

Powerful common rail diesel engine offers high output with reduced fuel consumption and low emissions, already prepared for Tier 4 regulations. Pilot fuel injection contributes to reduced noise levels, while Superpower mode offers speed priority when required.
Environmental responsibility. Maximum productivity.

ADVANCED CONTROL

Larger B series cab offers three times the structural rigidity with slimmer pillars and improved visibility, plus improved working environment for the operator. High performance multiple-mode hydraulic system ensures perfect match of power and performance for every application.
Total control. Operator acceptance.

SERVICE ACCESS

Wide catwalks provide safe access to all service areas. Filters and fill points easily reached from wide access doors. Anti-drop green drain plugs and remote engine oil filters prevent contamination of the ground during regular maintenance. Synthetic hydraulic oil filter extends oil change intervals up to 5,000 hours. Standard 100 litre/min refuelling pump with auto cut-off.
Planned maintenance. Minimum downtime.

MAXIMUM PRODUCTION

Superpower mode provides speed priority when required. Heavy working mode optimises productivity and fuel efficiency. Class leading digging forces ensure maximum performance. Automatic high dump mode reduces cycle times, while advanced engine throttle combines with mode selector to provide the operator with total control of the machine.
Complete precision. Power to perform.

OPERATOR SATISFACTION

B Series cab offers increased space and comfort, up to 60mm more foot area. Cab structure three times more rigid, contributes to reduced noise and vibration levels. Standard climate control air conditioning ensures the perfect working environment. Short joysticks offer excellent controllability with minimum operator effort, reducing fatigue and boosting productivity.
Complete comfort. Total performance.

FINANCIAL BENEFIT

Synthetic hydraulic filter offers 5,000 hour hydraulic oil changes, contributing to extended service intervals for increased uptime. Extended Maintenance System (EMS) bushes on all attachment linkages except the bucket extend lubrication intervals to 1,000 hours. Resin shims in boom foot and dipper linkage reduce friction and prevent wear, extending service life. Electronically-controlled common rail diesel engine ensures lowest fuel consumption.
Extended service. Reduced costs.

ROBUST COMPONENTS

EMS chrome plated pins and brass bushes for maximum durability, provide 1,000 hour greasing on boom and arm pins (except bucket). 80 tonne class undercarriage components ensure durability and reliability in arduous ground conditions.
Reduced downtime. Investment protected.

CASE DURABILITY

Track components sourced from 80 tonne class machine for total reliability. Heavy duty boom design, with cast boom foot and stress relief points reinforced with additional plates, for maximum durability. Mass excavation dipper sticks constructed of extra thick material with additional reinforcing ensure long service life. reinforced slew frame for optimised stress relief.
Built by Case. Built to perform.

RAPID TRAVEL

Heavy duty undercarriage main frame with extra thick plate. Three-piece undercarriage cover to protect hydraulic lines, with all hoses routed through the main and side frames. Narrow track frame design protects the covers during operation.
Rapid relocation. Reassuring stability.

ENGINE

The Case CX700B is equipped with an electronically-controlled Isuzu diesel engine. With high pressure common rail fuel injection, fuel cooling and Exhaust Gas recirculation (EGR) this motor easily meets the requirements of the EU directive 97/68/EC Tier 3A on engine emissions and is well prepared for the future move to Tier 4. Electronic control, working in combination with the Case hydraulic Intelligent Computer Command Control System (ICCCS) optimises the engine output to meet the load on the hydraulic system. This results in a high level of response and maximum controllability for the operator, along with reduced consumption and emissions. The engine incorporates an automatic and one-touch idle system on the joystick to maximise fuel efficiency.

UNDERCARRIAGE/TRANSMISSION

The Case tradition of building strong, durable excavators is continued in the CX700B. A sturdy carbody, welded internally for added strength, features a reinforced slew frame for maximum strength and durability. This provides the strength to perform in the toughest conditions. Standard two speed travel motors facilitate easy repositioning on the job site. The motors downshift automatically when required and compact high torque final drives ensure traction on the steepest grades and in the deepest mud.

HYDRAULIC SYSTEM

Case excavators have the power and speed to perform in tough digging applications. Using an Intelligent Computer Command Control System (ICCCS), the CX700B provides the operator with optimum balance of speed, power and fuel efficiency, whatever the task.

The CX700B features a Superpower mode, for speed priority when needed, while the heavy working mode optimises productivity and fuel efficiency. Class-leading digging forces and reduced cycle time contribute to the high performance that can be achieved with this latest Case machine.

The hydraulic system benefits from total protection, thanks to a synthetic filter, which ensures the lowest possible contamination. This advanced filter allows hydraulic oil change intervals of up to 5,000 hours, reducing downtime and operating costs for the customer.

OPERATOR'S CAB

In line with other B series machines, the CX700B benefits from a new cab that has a three times stiffer structure, despite thinner pillars that offer increased visibility. This inherent strength, along with viscous cab mountings, contributes to reduced noise and vibration levels in the cab. The operator has up to 60mm of increased foot space and the foot rests and pedals have been positioned for maximum comfort. Climate control air conditioning, with nine air inlets, provides optimal heating and ventilation for the operator, creating the ideal working environment. Increased glass area, including a single piece right hand window provides an improved view around the machine, resulting in safer operation on site. Short joysticks with independent adjustment, provide total controllability with low operator effort, reducing fatigue and boosting productivity.

ATTACHMENTS/BUCKETS

As a heavy duty earthmoving machine the CX700B has robust boom and dipper stick construction, with reinforcing plates at high stress points. The boom foot is cast for maximum strength and durability. Standard and short dippers are reinforced at the cylinder linkage to ensure complete reliability.

Mass excavation dipper sticks are constructed of extra thick material with additional reinforcing around high stress points. All boom pins (except the bucket pins) are Extended Maintenance System (EMS) chrome plated for increased hardness, with lubricated brass bushings fitted through the boom and dipper. Dust seals are double structured to prevent the ingress of dirt and dust on site. This combination makes it possible to extend lubrication intervals on the boom pins to six months/1,000 hours of operation, cutting downtime and ensuring that the machine remains working longer.

MAINTENANCE/ACCESSIBILITY

There are large, wide opening doors to both sides of the machine, which are easily accessed by 300mm wide catwalks, making it easy for technicians to access the engine and hydraulic componentry. All filters are carefully grouped for ease of access, with engine oil draining by green anti-drop plug.

The CX700B is equipped with a hydraulically-driven cooling fan, which can be reversed on start-up to blow dust and debris away from the excavator's cooling pack. Thermostatically-controlled, the hydrostatic fan runs at a maximum of 1,600rpm, contributing to low noise levels in line with EU noise regulation stage 2. An auto-stop electric fuel pump is fitted as standard, providing rapid 100 litre/min flow to reduce refuelling times and cut work for the operator.

VISIBILITY

Slim, structurally strong cab pillars allo maximum glazing in the B series cab, with a single piece right hand window to provide unrivalled visibility to the excavating and loading area, including across to the right hand track. The low right hand console, compact main monitor console and floor to ceiling glass allow an unobstructed view from the cab, improving safety on site and boosting productivity.


CASE
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CASE


CX700B
CASE

SPECIFICATIONS

ENGINE

Model _____ ISUZU AH-6WG1XYSS,Tier III certified
Type _____ Water cooled, 4-cycle diesel, turbocharged with air cooled intercooler
Cylinders _____ 6
Bore/Stroke _____ 147 x 154 mm
Displacement _____ 15700 cc
Fuel injection _____ Direct-Electronic
Fuel _____ Diesel
Fuel filter _____ In-line strainer
Cooling _____ Liquid

Horsepower per SAE J1349
Net _____ 463 hp (345 kW) @ 1800 rpm

Maximum torque @ 1500 rpm
Net _____ 1980 Nm

HYDRAULIC SYSTEM

Pumps _____ (2) Variable displacement axial piston design

Capacity
Maximum _____ 2x440 l/min

System relief pressure
Standard _____ 31.4 MPa
Power Boost _____ 34.3 MPa

Control valves
4-spool section for right track travel, boom, bucket, arm
5-spool section for left track travel, boom, auxiliary, swing and arm
Boom and arm anti-drift valves

Pilot control hydraulic system
Pump (1) _____ Gear design
Maximum capacity _____ 27 l/min
Relief pressure _____ 4.4 MPa

Swing
Motor (1) _____ Fixed displacement axial piston design
Speed _____ 0-6.5 rpm
Brake _____ Mechanical brake hydraulically released with dual cushion relief
Swing torque _____ 241 kNm

Travel
Motor (2) _____ Two-speed axial piston design
Final drive _____ Planetary gear reduction
Drawbar pull _____ 462 kN

Travel Speeds - Auto shift high to low

	Forward/Reverse
Low	3.0 km/h
High	4.1 km/h

HYDRAULIC CYLINDERS

Boom cylinders (2)
Bore diameter _____ 190 mm
Rod diameter _____ 130 mm
Stroke _____ 1805 mm

Arm cylinder (1)
Bore diameter _____ 200 mm
Rod diameter _____ 140 mm
Stroke _____ 2125*/2025 mm

Bucket cylinder (1)
Bore diameter _____ 180 mm
Rod diameter _____ 125 mm
Stroke _____ 1450*/1465 mm

ELECTRICAL SYSTEM

Voltage _____ 24 volts, negative ground
Alternator _____ 50 amp
Batteries (2) _____ Low-maintenance 140 Ah (5 hr rate)

UNDERCARRIAGE

Number of rollers
Top, each track _____ 3
Bottom, each track _____ 8

Number of shoes
Double grouser - each side _____ 47
Link pitch _____ 260.35 mm
Width of shoes _____ 650 mm
Grade-ability _____ 70% (35°)
Trackguard _____ Full track guard

SERVICE CAPACITIES

Hydraulic tank
Refill capacity _____ 310 l
Total system _____ 650 l
Final drive (per side) _____ 15 l
Swing drive _____ 13.5 l

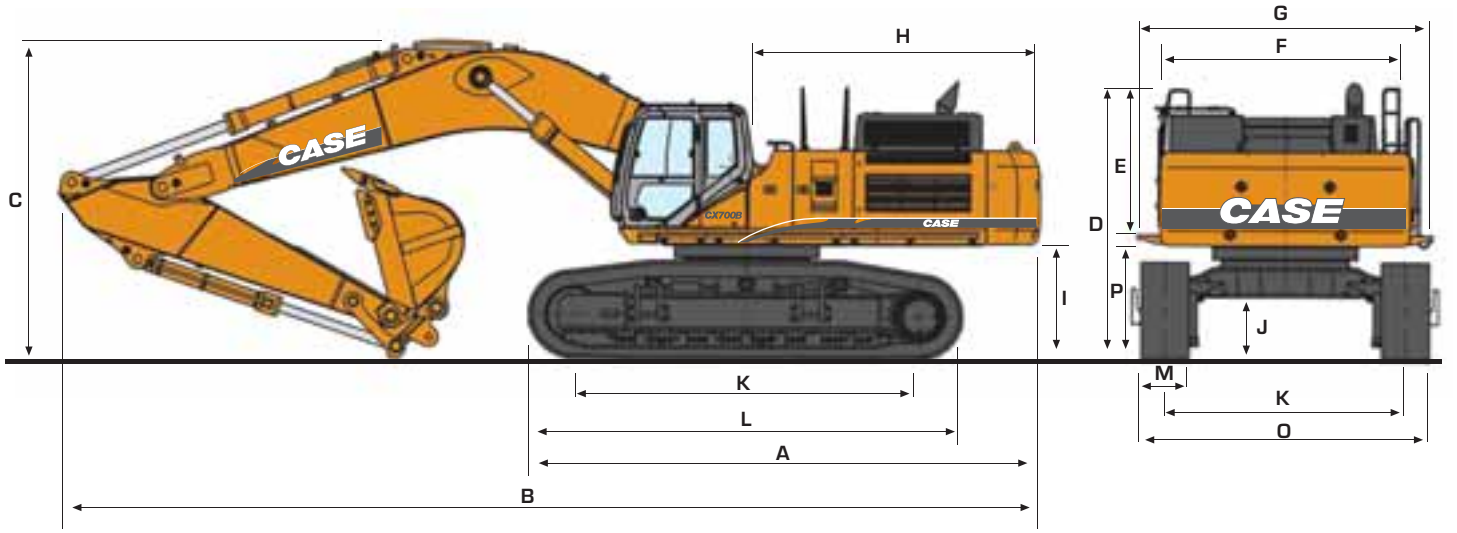
Engine
w/filter change _____ 52 l
Fuel _____ 900 l
Radiator _____ 108 l

OPERATING WEIGHT

With 3.55 m arm, 7.7 m boom, 900 mm track shoes, 3000 kg bucket, 79 kg operator, full fuel and standard equipment 69581 kg
Shipping mass _____ 65300 kg
Counterweight mass _____ 10400 kg

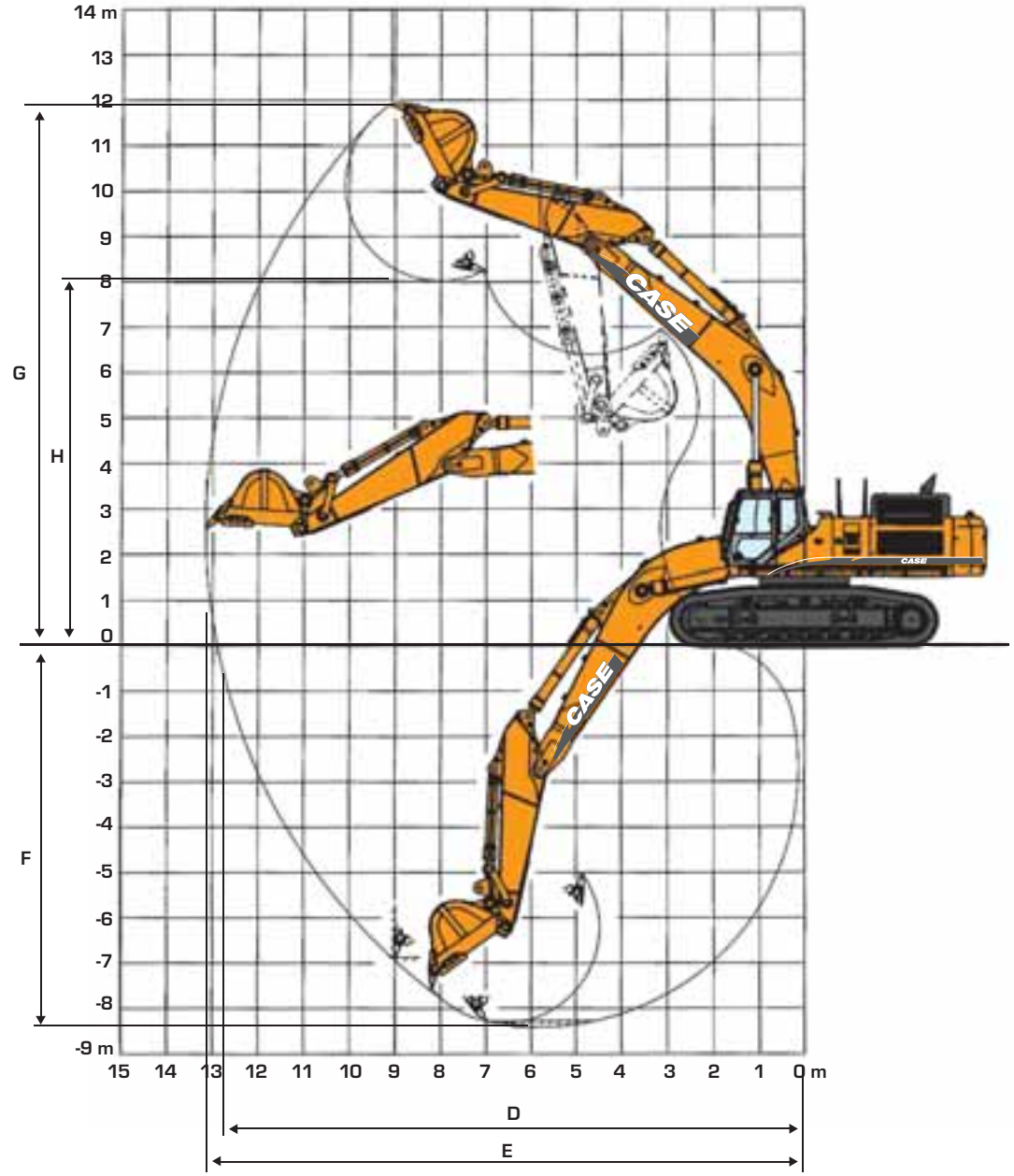
* ME - attachment

GENERAL DIMENSIONS
WITH 7.70 m STANDARD BOOM



DIPPER LENGTH		3.55 m	3.02 m	4.11 m	5.00 m
A Overall length (without attachment)	mm	6910	6910	6910	6910
B Overall length (with attachment)	mm	13290	13250	13300	13170
C Overall height (with attachment)	mm	4300	4370	4470	5160
D Overall height (without attachment)	mm	3790	3790	3790	3790
E Cab height	mm	3480	3480	3480	3480
F Upper structure overall width (without catwalks)	mm	3390	3390	3390	3390
G Upper structure overall width (with catwalks)	mm	3990	3990	3990	3990
H Swing (rear end) radius	mm	4000	4000	4000	4000
I Clearance height under upper structure	mm	1510	1510	1510	1510
J Minimum ground clearance	mm	825	825	825	825
K Wheel base (Center to center of wheels)	mm	4700	4700	4700	4700
L Crawler overall length	mm	5880	5880	5880	5880
M Track gauge (Extended)	mm	3250	3250	3250	3250
Track gauge (Retracted)	mm	2740	2740	2740	2740
O Undercarriage overall width (Extended) 650 mm shoes	mm	3900/4140	3900/4140	3900/4140	3900/4140
Undercarriage overall width (Retracted) 650 mm shoes	mm	3630	3630	3630	3630
P Crawler tracks height	mm	1340	1340	1340	1340

PERFORMANCE DATA
WITH 7.70 m STANDARD BOOM



DIPPER LENGTH		3.55 m	3.02 m	4.11 m	5.00 m
A Boom length	mm	7700	7700	7700	7700
B Bucket radius	mm	2100	2100	2100	2100
C Bucket wrist action		175°	175°	175°	175°
D Maximum reach at GRP	mm	12900	12600	13400	14300
E Maximum reach	mm	13160	12870	13650	14600
F Max. digging depth	mm	8400	7870	8970	9850
G Max. digging height	mm	11920	12400	12040	12700
H Max. dumping height	mm	8020	8330	8160	8710
Arm digging force	kN	224	244	202	175
With auto power up	kN	245	267	221	192
Bucket digging force	kN	290	290	290	290
With auto power up	kN	317	317	317	317

CX700B

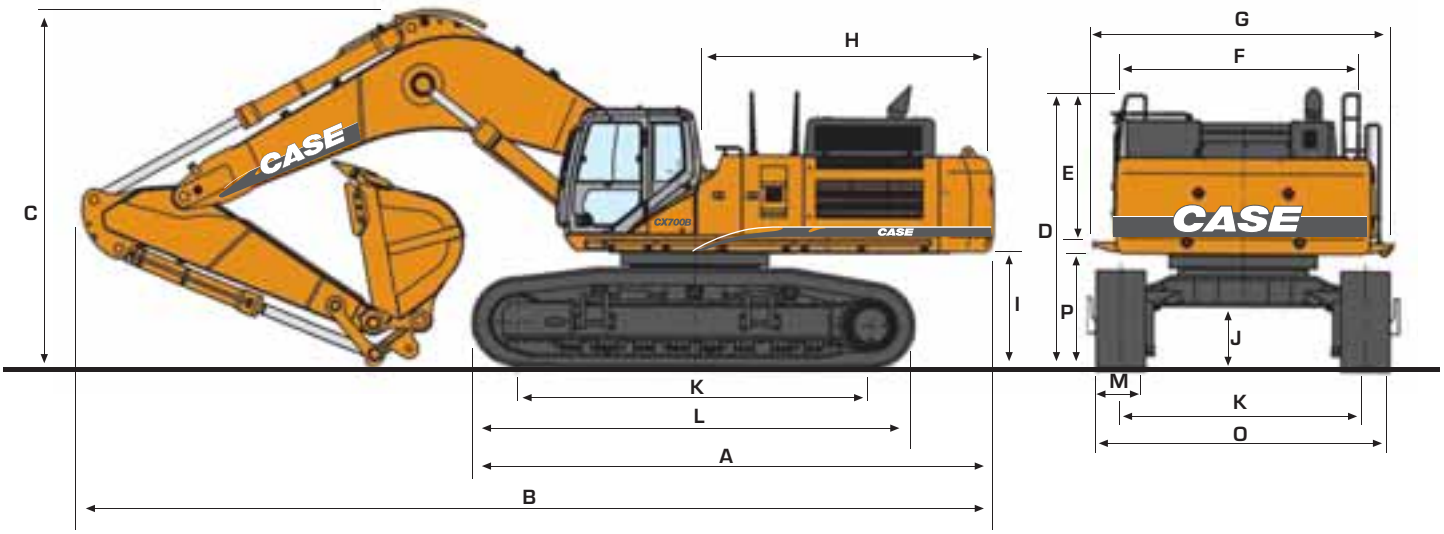
LIFTING CAPACITY
WITH STANDARD BOOM

Values are expressed in kilos

Front / 360°	REACH																	
	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		At max reach		m	
With 3.55 m arm length and 2919 kg bucket																		
9.0 m															8764*	8764*	8.81	
7.5 m									11099*	11099*					7787*	7787*	9.96	
6.0 m									12315*	11330	8487*	8348			7973*	7973*	10.59	
4.5 m			26726*	26726*	19216*	19216*	15456*	14810	13232*	10783	11278*	8063			8401*	7378	10.97	
3.0 m			20712*	20712*	22208*	19700	17152*	13830	14215*	10205	12149	7733			9105*	6908	11.13	
1.5 m			15324*	15324*	24316*	18381	18516*	13010	15042*	9694	11823	7429			10179*	6728	11.09	
0 m			18296*	18296*	25161*	17641*	19265*	12449	14869	9317	11587	7209			11015	6835	10.83	
-1.5 m	14310*	14310*	24193*	24193*	24806*	17353	19236*	12163	14648	9114					11748	7285	10.35	
-3.0 m	21443*	21443*	30368*	28713	23307*	17397	18276*	12134	14492*	9116					13095*	8242	9.61	
-4.5 m	29860*	29860*	26112*	26112*	20458*	17735	16031*	12375							13273*	10141	8.54	
-6.0 m			19629*	19629*	15512*	15512*									12804*	12804*	6.99	
-7.5 m																		
With 3.02 m arm length and 2919 kg bucket																		
9.0 m																		
7.5 m									12403*	11565					9865*	9865*	9.68	
6.0 m							14617*	14617*	12951*	11184					8883*	8292	10.46	
4.5 m			29018*	29018*	20332*	20332*	16187*	14580	13786*	10663	12093*	7988			9183*	7479	10.84	
3.0 m					23102*	19281	17750*	13640	14667*	10118	12107	7697			9754*	7032	11.01	
1.5 m					24819*	18117	18922*	12886	15227	9650	11826	7435			10663*	6886	1097	
0 m			13744*	13744*	25222*	17541	19431*	12406	14874	9326	11646	7268			11293	7040	10.71	
-1.5 m			21659*	21659*	24457*	17386	19124*	12203	14722	9187					12111	7557	10.22	
-3.0 m	20683*	20683*	28708*	28708*	22555*	17538	17816*	12261	13998*	9277					12787*	8620	9.47	
-4.5 m	29345*	29345*	23989*	23989*	19197*	17990	15001*	12618							12470*	10719	8.38	
-6.0 m			16694*	16694*	13270*	13270*									11008*	11008*	6.79	
-7.5 m																		
With 4.11 m arm length and 2652.6 kg bucket																		
9.0 m															6735*	6735*	9.58	
7.5 m											6459*	6459*			6406*	6406*	10.51	
6.0 m									11705*	11631	8909*	8601			6534*	6534*	11.1	
4.5 m							14702*	14702*	12702*	11057	10966*	8275			6852*	6852*	11.47	
3.0 m			30614*	30614*	210204*	20318	16532*	14189	13788*	10445	12011*	7909			7383*	6476	11.63	
1.5 m			18997*	18997*	23705*	18834	18099*	13293	14755*	9885	11963	7564			8189*	6301	11.58	
0 m	8177*	8177*	19278*	19278*	25026*	17908	19107*	12641	15008	9449	11673	7292			9399*	6371	11.34	
-1.5 m	13567*	13567*	23375*	23375*	25136*	17465	19380*	12260	14714	9178	11508	7139			10875	6731	10.88	
-3.0 m	19425*	19425*	29839*	28567	24097*	17383	18783*	12138	14626	9098					12073	7500	10.18	
-4.5 m	26394*	26394*	28348*	28348*	21790*	17602	17067*	12271	13271*	9252					12822*	8980	9.18	
-6.0 m	29558*	29558*	22699*	22699*	17715*	17715*	13522*	12726							12798*	12084	7.76	
-7.5 m																		
With 5.00 m arm length and 2434.3 kg bucket																		
9.0 m											5669*	5669*			5222*	5222*	10.68	
7.5 m											7052*	7052*	4659*	4659*			11.61	
6.0 m											8144*	8144*	5232*	5232*	4684*	4684*	12.14	
4.5 m									11042*	11042*	9516*	8459	6604*	6384	4837*	4837*	12.48	
3.0 m			26738*	26738*	19066*	19066*	15122*	14617	12756*	10676	11199*	8035	7658*	6133	5125*	5125*	12.62	
1.5 m			24635*	24635*	22101*	19412	16972*	13588	13915*	10031	11908*	7623	8410*	5883	5575*	5333	12.58	
0 m	7747*	7747*	19610*	19610*	24118*	18174	18358*	12778	14820*	9496	11665	7274	8441*	5678	6242*	5364	12.36	
-1.5 m	11397*	11397*	21250*	21250*	24954*	17460	19081*	12239	14661	9117	11401	7029			7236*	5606	11.94	
-3.0 m	15873*	15873*	25644*	25644*	24641*	17162	19016*	11967	14444	8918	11286	6922			8779*	6129	11.31	
-4.5 m	21347*	21347*	30916*	28365	23145*	17193	18002*	11946	14262*	8920					11244*	7093	10.42	
-6.0 m	28442*	28442*	26497*	29497*	20196*	17533	15669*	12192	11884*	9187					11378*	8898	9.20	
-7.5 m	25897*	25897*	19573*	19573*	14995*	14995*									10944*	10944*	7.47	

* Hydraulic capacity 87%

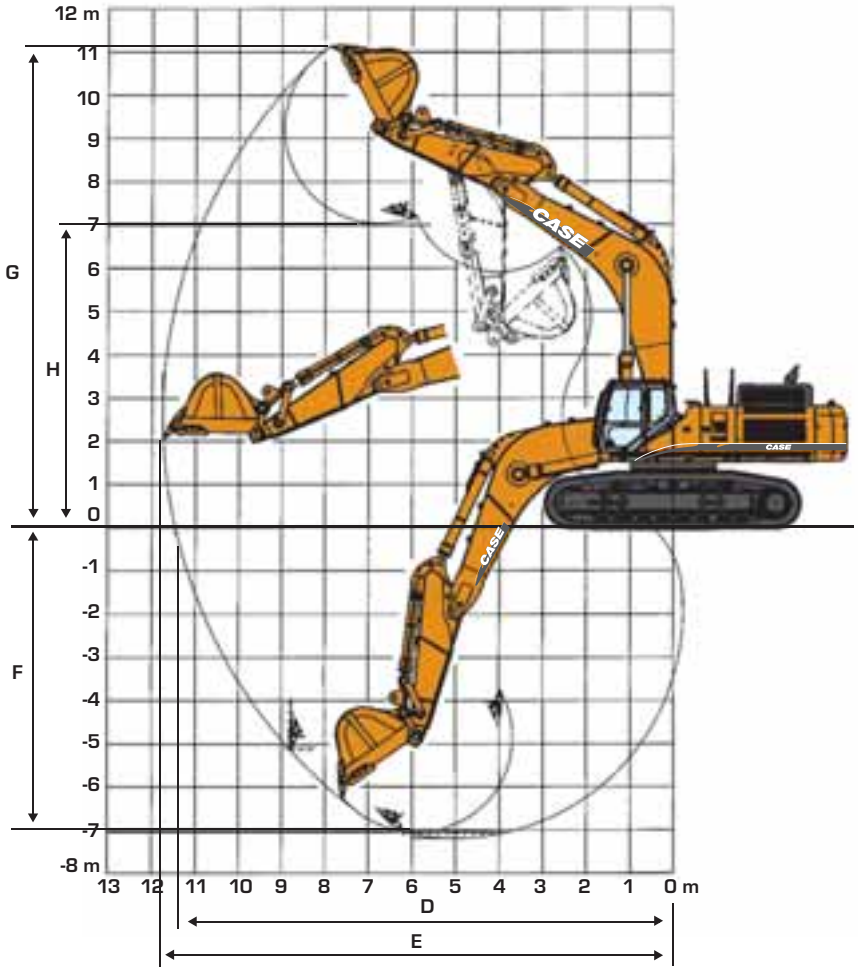
GENERAL DIMENSIONS
WITH 6.58 m MASS EXCAVATION BOOM - 3.00 m DIPPER



DIPPER LENGTH			3.02 m
A	Overall length (without attachment)	mm	6910
B	Overall length (with attachment)	mm	12280
C	Overall height (with attachment)	mm	5030
D	Overall height (without attachment)	mm	3790
E	Cab height	mm	3480
F	Upper structure overall width (without catwalks)	mm	3390
G	Upper structure overall width (with catwalks)	mm	3990
H	Swing (rear end) radius	mm	4000
I	Clearance height under upper structure	mm	1510
J	Minimum ground clearance	mm	825
K	Wheel base (Center to center of wheels)	mm	4700
L	Crawler overall length	mm	5880
M	Track gauge (Extended)	mm	3250
	Track gauge (Retracted)	mm	2740
O	Undercarriage overall width (Extended) with 650 mm shoes	mm	4140
	Undercarriage overall width (Retracted) with 650 mm shoes	mm	3630
P	Crawler tracks height	mm	1340
	Height in transport position without bucket, dippercylinder loosened	mm	4225

CX700B

PERFORMANCE DATA
WITH 6.58 m MASS EXCAVATION BOOM - 3.00 m DIPPER



DIPPER LENGTH		3.02 m
A Boom length	mm	6580
B Bucket radius	mm	2200
C Bucket wrist action		170°
D Maximum reach at GRP	mm	11310
E Maximum reach	mm	11600
F Max. digging depth	mm	7080
G Max. digging height	mm	10880
H Max. dumping height	mm	6860
Arm digging force	kN	281
With auto power up	kN	307
Bucket digging force	kN	334
With auto power up	kN	365

LIFTING CAPACITY

Values are expressed in kilos

With 2.92 m arm length and 3388.3 kg bucket

Front / 360°	REACH 3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At max reach		m
6.0 m							15028*	15028*			14182*	12289*	8.58
4.5 m					19658*	19658*	16405*	15115	14498*	10813	12463*	9974	9.38
3.0 m			31924*	31924*	22606*	20637	17964*	14270	15238*	10378	13583*	9258	9.57
1.5 m			35411*	30768	24853*	19317	19252*	13520	15610	9967	14196	9037	9.52
0 m			35859*	29804	25802*	18513	19863*	12998	15301	9683	14713	9308	9.22
-1.5 m	26231*	26231*	34119*	29639	25242*	18199	19425*	12768			16001*	10224	8.65
-3.0 m	38756*	38756*	30334*	29998	22898*	18315	17308*	12886			16455*	12283	7.74
-4,5 m	30846*	30846*	23686*	23686*	17710*	17710*					16312*	16312*	6.36

* Hydraulic capacity 87%

CX700B

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

Operator's compartment
- Sliding front window - storable
- LCD monitor display
- Skylight
- Cab with Isomount® system
- Adjustable deluxe seat with
- 76 mm retractable seat belt
- Safety glass - all windows
- Climate Control System
- AM/FM Radio w/auto tuner
- Windshield wiper w/washer
- Anti-theft device
- Sun visor
- Rain deflector

Engine
- AH-6WG1XYSS turbocharged diesel
- Tier III certified
- Warm up mode
- Selectable one touch or auto accelerator/decelerator
- Dial type throttle control
- Emergency stop
- Auto engine derate
- Auto and one touch idle

Electrical
- Batteries (2)
- Electronic Systems Monitor
- Boom worklight
- Turntable worklight

Hydraulics
- ISO pattern pilot controls
- Work mode selector: SP, H & Auto
- Power Boost - automatic
- 2 Variable flow piston pumps
- Auxiliary attachment mode
- Neutral pump destroke
- Auxiliary hydraulic valve
- Boom and arm anti-drift valves
- Attachment cushion control for boom and arm
- 100% return oil filtration
- Boom priority
- Hydraulic reversing cooling fan

Undercarriage
- Shoes: 650 mm 2-bar, 47 per side
- Track length: 5.88 m
- Track gauge: 3.25 m
- Sealed and lubed track

Track drive
- 2-speed hydrostatic travel
- Straight tracking travel priority
- Disc-type parking brakes

Upperstructure
- Boom: 7.70 m or 6.58 ME-boom
- Hammer adaptable
- Swing brake

Other
- Counterweight: 10400 kg
- Single key lockup

OPTIONS

Upperstructure
- Arms for standard excavation: 3.02 m, 3.55 m, 4.11 m, 5.00 m
- Arm for mass excavation: 2.92 m
- FOPS guard level 2
- Front stone guard
- Front grill guard
- See through skylight

Hydraulics
- Auxiliary hydraulics
- Single acting, one pump
- Double acting, single or dual pump (includes heavy- duty bucket linkage)
- Double acting general purpose for use with thumb kit
- Control pattern selector valve

Other
- Air suspension seat
- Load holding control devices,cylinder mounted
- Esco-Loc* Hydraulic Coupler
- Counterweight removal device
- Tracks 750 mm and 900 mm

Standard and optional equipment shown can vary by country.

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Worldwide Case Construction Equipment Contact Information

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6902 Paradiso - SWITZERLAND

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LATIN AMERICA:
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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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