

C-SERIES HYDRAULIC EXCAVATORS
CX490C / CX500C

CASE
CONSTRUCTION



IT'S TIME
FOR MORE

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EXPERTS FOR THE REAL WORLD
SINCE 1842

MAIN REASONS TO CHOOSE THE C-SERIES



HIGH PRECISION AND CONTROLLABILITY

High performance.

Smooth control.

Fuel saving.

With CASE Intelligent Hydraulic System.



HIGH RELIABILITY

Robust design.

Increased durability.

Lower cost of ownership.

**With the CASE top manufacturing quality
and heavy duty arm/boom.**



HIGH VERSATILITY

The perfect machine for every application.

CX500C Mass Excavation for
«ultra heavy-duty» applications.

**With 3 power modes and 10 auxiliary
hydraulic settings.**



HIGH EFFICIENCY

Up to **8%** more fuel efficiency.

Constant consumption monitoring.

**With the 5 Energy Saving Controls, Isuzu Tier III engine
and the new ECO gauge function.**





FAST CYCLES

Higher breakout force.
Continuous operations.
Up to **10%** higher digging capability.
**With H/SP modes and
Auto Power boost.**



OUTSTANDING VISIBILITY

Safe and fast operations.
More comfort.
**With wider glazed area and
rear cameras*.**
(* Rear cameras are optional)



COMFORT AND SAFETY

Spacious and safe cab.
Low noise and vibrations.
Ergonomic workstation.
Real time parameters monitoring.



LOW TOTAL COST OF OWNERSHIP

Longer service intervals.
Reduced downtimes.
Fast, easy and safe maintenance operations.
**With the EMS bushings, high quality components
and service points accessible from the ground.**

C-SERIES

HYDRAULIC EXCAVATORS



HIGH PRECISION AND CONTROLLABILITY

The proven CASE Intelligent Hydraulic System (CIHS) delivers impressive machine control with unrivalled energy and fuel savings in all cycle time phases.



HIGH EFFICIENCY

CASE advanced energy management consists of **5 Energy Saving Controls**:

- **Torque Control**: electronic control of the hydraulic oil flow to prevent engine overloads.
- **Boom Economy Control (BEC)**: increased fuel efficiency in boom lowering/swinging operations.
- **Swing Relief Control (SWC)**: optimized hydraulic power distribution in slewing operations to deliver the most efficient flow and pressure.
- **Spool Stroke Control (SSC)**: automatic pressure adjustment during digging and levelling operations.
- **Idle functions**:
 - **Auto Idle**: lowers engine rpm after 5 seconds of lever inactivity;
 - **Idle Shutdown**: shuts the engine down after a pre-set time.

The C-series models are powered by **Tier III Isuzu engines**, designed to boost machine performance and optimize fuel economy.

Fuel consumption can be constantly monitored by the operator throughout the **new ECO gauge function**, that displays in real time the energy saving fuel utilized.





HIGH RELIABILITY

Heavy Duty or Mass Excavation: durability is in the CASE DNA.

- CX490C is equipped with Heavy Duty boom and arms as standard, to grant a long-lasting durability in every working conditions.
- For the toughest applications or when a massive production is required (for instance in quarry or mining applications), CX500C is the ideal machine: thanks to the shorter dimensions and the ultra-heavy duty design of both monoboom and arm, the bigger bucket cylinder and the optimized kinematics, CX500C ME works with bigger buckets and provides bigger breakout forces, delivering industry leading speed, productivity and efficiency.

Accurate, simple and robust design for high durability.

- The C-Series delivers leading design solutions and manufacturing quality.
- Boom and arm feature forged brackets and reduced tolerances for increased component life, minimizing downtime.
- The anti-friction resin shims in the boom foot and head reduce noise and free play, increasing **durability and reliability for the customer.**
- New synthetic hydraulic filter reduces system contamination, **cutting service costs and boosting machine longevity.**
- New high strength casting parts with joined hinge flanges **reduce stress on components.**
- The 'sloped' Lower frame design reduces the time needed to clean the undercarriage.

C-SERIES

HYDRAULIC EXCAVATORS



COMFORTABLE AND SAFE CAB

The ultimate interior cab configuration

- Superior wide and roomy cab with ample legroom.
- New cushioning system to lower noise and vibration levels for the operator's ultimate comfort.
- Totally adjustable workstation with fully reclinable air-suspensioned seat.
- Air conditioning system with **25%** more airflow and **6%** better performance compared to previous models.



COMFORT RULES

FIRST CLASS CAB AND SEAT



OUTSTANDING VISIBILITY

- Wider glazed surface with single piece side window.
- New 7" LCD cluster for a more secure and safe working environment and to constantly monitor the main machine parameters.
- Standard rear view camera (optional).



C-SERIES HYDRAULIC EXCAVATORS



FAST CYCLES

The advanced hydraulic system offers higher breakout forces, improved swing speeds and greater swing torque, resulting in **faster cycle times and 5% increase in productivity.**

Power boost function is automatically engaged. The electronic management of speed and power lowers fuel consumption and offers considerable productivity benefits in terms of outputs.



HIGH VERSATILITY

3 power modes to match any customer need:

- A AUTO:** for normal digging, grading, lifting and precision work.
- H HEAVY:** for heavy operations always granting the best balance between productivity and fuel economy.
- SP SUPER POWER:** extra speed and power for the most demanding jobs that require maximum productivity.



Operators can store up to 10 auxiliary hydraulic flow settings (and pressures as optional) to easily switch among different attachments with no need of any mechanical adjustment.



LOW TOTAL COST OF OWNERSHIP

- The **Extended Maintenance Bushings (EMS)** provide longer greasing intervals, **reducing daily and weekly maintenance for the operator.**
- All filters and regular check points are grouped and easily accessible from the ground.
- Radiator and cooler are mounted side by side for more efficient cooling and easy access for cleaning.
- Standard refueling pump with auto cut off reduces downtime for regular fills.



SPECIFICATIONS

CX490C / CX500C ME

ENGINE

Model _____ ISUZU GH-6UZ1X
Type _____ Water-cooled, 4-cycle diesel, 6-cylinder in line,
electronically controlled, high pressure common rail system, turbocharger
with air cooled intercooler, without cooling fan.
Emissions certified _____ Tier III
Displacement _____ 9.84 l
Bore & stroke _____ 120 x 145 mm
ISO 14396 without Fan Pump _____ 270 kW /362 hp at 2000 min⁻¹
ISO 14396 Gross Power with Fan Pump _____ 245 kW /329 hp at 2000 min⁻¹
Maximum torque _____
ISO 14396 Gross Power _____ 1363 Nm at 1500 min⁻¹

HYDRAULIC SYSTEM

Type _____ 2 variable displacement axial piston pumps
with regulating system
Max. oil flow _____ 2 x 400 liter/min at 2000 min⁻¹
Working circuit pressure
Boom/Arm/Bucket _____ 31.4 MPa
Boom/Arm/Bucket (with auto power boost) _____ 34.3 MPa
Swing circuit _____ 29.4 MPa
Travel circuit _____ 34.3 MPa

ELECTRICAL SYSTEM

Circuit _____ 24 V
Alternator _____ 50 Amp
Starter motor _____ 5.5 kW
Battery _____ 2 x 12 V 128 Ah/5 HR

SWING

Maximum swing speed _____ 9 min⁻¹
Swing torque _____ 150,000 Nm

OPERATING WEIGHT

CX490C

With 2.53 m HD arm, 2.4 m³ HD bucket, 600 mm grouser shoe, operator (75 kg), lubricant, coolant and full fuel tank **Arm 2.53 m**

Operating mass 48,700 kg

Ground pressure 0.083 MPa

CX500C (Mass excavation)

With 2.53 m arm, 2.8 m³ HD bucket, 600 mm grouser shoe, operator, lubricant, coolant and full fuel tank **Arm 2.53 m**

Operating mass 49,300 kg

Ground pressure 0.084 MPa

FILTERS

Suction filter _____ 105 µm
Return filter _____ 6 µm
Pilot line filter _____ 8 µm

TRAVEL

Travel motor _____ Variable displacement axial piston motor
(Automatic travel speed shifting)
Max. travel speed _____ 5.3 km/h
Low travel speed _____ 3.2 km/h
Gradeability _____ 70% (35°)
Drawbar pull _____ 339 kN

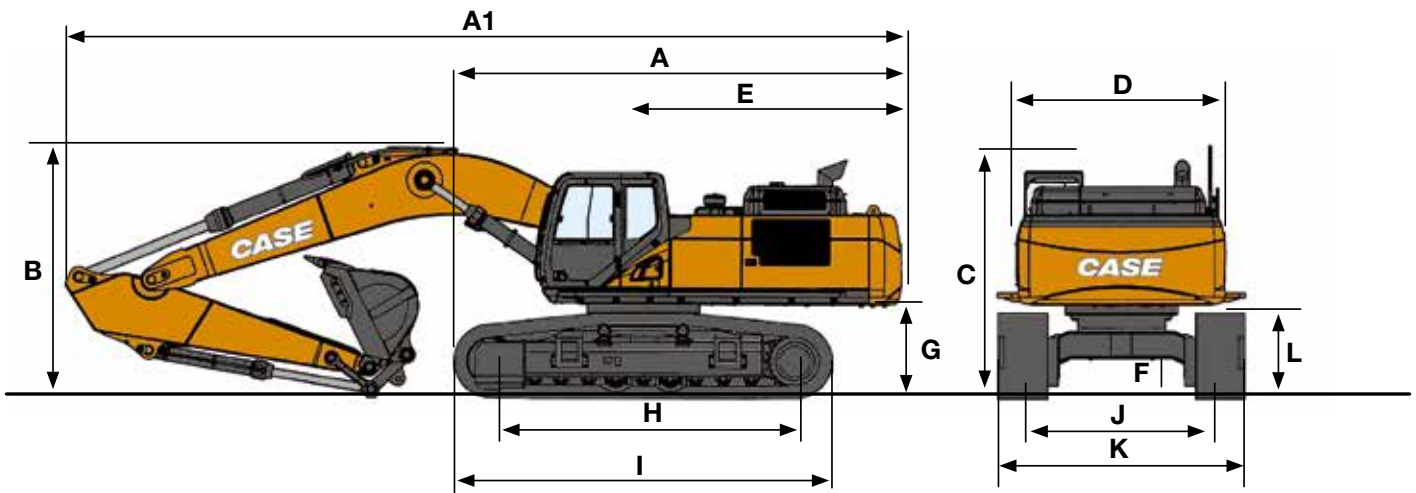
UNDERCARRIAGE

Number of carriers rollers (each side) _____ 2
Number of track rollers (each side) _____ 9
Number of shoes (each side) _____ 50
Type of shoe _____ Triple grouser shoe

CAPACITIES

Fuel tank _____ 650 l
Hydraulic system _____ 460 l
Cooling system _____ 47 l
Engine crank case _____ 36 l
Hydraulic tank _____ 230 l

C-SERIES CRAWLER EXCAVATORS

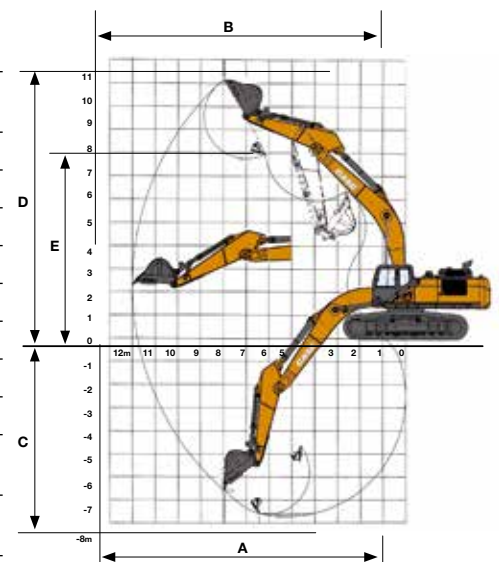


GENERAL DIMENSIONS

| | | CX490C | | CX500C |
|----|---|---------------|---------------|------------------|
| | | Arm 2.53 m | Arm 3.38 m | Arm 2.53 m HD |
| A | Overall length (without attachment) | mm | 6445 | 6445 |
| A1 | Overall length (with attachment) | mm | 12110 | 12070 |
| B | Overall height (with attachment) | mm | 3660 | 3770 |
| C | Cab height | mm | 3280 | 3280 |
| D | Upper structure overall width | mm | 3060 | 3060 |
| E | Swing (rear end radius) | mm | 3730 | 3730 |
| F | Minimum ground clearance | mm | 535 | 535 |
| G | Clearance height under upper structure | mm | 1330 | 1330 |
| H | Wheel base (Center to center of wheels) | mm | 4400 | 4400 |
| I | Crawler overall length | mm | 5450 | 5450 |
| L | Crawler tracks height | mm | 1240 | 1240 |
| J | Track gauge | mm | 2750 | 2750 |
| K | Undercarriage overall width (with 600 mm shoes) | mm | 3350 | 3350 |

PERFORMANCE DATA

| | | CX490C | | CX500C |
|---------------------|---|---------------|---------------|------------------|
| | | Arm 2.53 m | Arm 3.38 m | Arm 2.53 m HD |
| Boom length | mm | 6980 | 6980 | 6550 |
| Bucket radius | mm | 1860 | 1860 | 1950 |
| Bucket wrist action | ° | 176 | 176 | 160 |
| A | Maximum reach at GRP | mm | 11010 | 11800 |
| B | Maximum reach | mm | 11250 | 12020 |
| C | Max. digging depth | mm | 6890 | 7750 |
| D | Max. digging height | mm | 10820 | 11150 |
| E | Max. dumping height | mm | 7400 | 7720 |
| | Arm digging force with auto power up | kN | 281 | 229 |
| | Bucket digging force with auto power up | kN | 266 | 266 |
| | | | | 300 |



LIFTING CAPACITY

| | | REACH | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|-----|--------|--------------|---|
| Front | Side | 0 m | 1.5 m | 3.0 m | 4.5 m | 6.0 m | 7.5 m | 9 m | 10.5 m | At max reach | m |

CX490C, monoboom, 3.38 m std HD arm, bucket 2.2 m³ (2290 kg), 600 mm shoes, max reach 12 m

| | | | | | | | | | | | | | | | | | | |
|--------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| 9.0 m | | | | | | | | | | 6930* | 6930* | | | 4370* | 4370* | 9,65 | | |
| 7,5 m | | | | | | | | | | 7560* | 7280 | 4580* | 4580* | 4210* | 4210* | 10,55 | | |
| 6.0 m | | | | | | | | | 9170* | 9170* | 8290* | 7060 | 7400* | 5070 | 4150* | 4150* | 11,15 | |
| 4,5 m | | | | | | 12690* | 12690* | 10360* | 9470 | 8900* | 6750 | 7780* | 4910 | 4230* | 3920 | 11,5 | | |
| 3 m | | | | | 19740* | 19740* | 14910* | 12960 | 11590* | 8910 | 9590* | 6410 | 8090 | 4710 | 4420* | 3720 | 11,63 | |
| 1,5 m | | | | | 22420* | 18820 | 16510* | 12020 | 12560* | 8380 | 10130* | 6080 | 7930 | 4530 | 4740* | 3690 | 11,56 | |
| 0 m | | | | 10550* | 10550* | 23420* | 17900 | 17110* | 11390 | 13020* | 7970 | 10130 | 5830 | 7780 | 4390 | 5240* | 3830 | 11,27 |
| -1,5 m | | 12830* | 12830* | 14600* | 14600* | 23340* | 18010 | 16960* | 11160 | 12950* | 7750 | 9980 | 5700 | 7750 | 4370 | 6040* | 4180 | 10,76 |
| -3 m | | 15420* | 15420* | 19810* | 19810* | 21830* | 18220 | 16190* | 11250 | 12420* | 7820 | 9590* | 5810 | | | 7290* | 4820 | 10 |
| -4,5 m | | 20530* | 20530* | 26290* | 26290* | 19050* | 18230* | 14360* | 11540 | 10870* | 8100 | | | | | 7260* | 5990 | 8,93 |
| -6 m | | | | 19180* | 19180* | 14460* | 14460* | 10780* | 10780* | | | | | | | 6860* | 6860* | 7,46 |

| | | REACH | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-----|--------|--------------|---|
| Front | Side | 0 m | 3.0 m | 4.5 m | 6.0 m | 7.5 m | 9 m | 10.5 m | At max reach | m |

CX490C, monoboom, 2.53 m short HD arm, bucket 2.4 m³ (2380 kg), 600 mm shoes, max reach 11.2 m

| | | | | | | | | | | | | | | | | |
|--------|--|--------|--------|--------|--------|--------|--------|--------|-------|--------|------|------|------|-------|-------|-------|
| 9.0 m | | | | | | 5320* | 5320* | | | | | | | 6580* | 6580* | 8,67 |
| 7,5 m | | | | | | 9080* | 9080* | 8420* | 7040 | | | | | 6320* | 5920 | 9,69 |
| 6.0 m | | | | | 10850* | 10850* | 10110* | 9670 | 8880* | 6870 | | | | 6240* | 5040 | 10,34 |
| 4,5 m | | | | 17780* | 17780* | 14060* | 13350* | 11210* | 9210 | 9560* | 6600 | 8210 | 4800 | 6310* | 4540 | 10,72 |
| 3 m | | | | 21340* | 19520 | 16000* | 12530 | 12290* | 8710 | 10080* | 6300 | 8070 | 4660 | 6550* | 4310 | 10,86 |
| 1,5 m | | | | 19810* | 18000 | 17120* | 11750 | 13000* | 8260 | 10330 | 6040 | 7930 | 4530 | 6980* | 4290 | 10,78 |
| 0 m | | | | 21230* | 17590 | 17200* | 11310 | 13140* | 7940 | 10140 | 5860 | | | 7690* | 4490 | 10,47 |
| -1,5 m | | 15690* | 15690* | 22470* | 17980 | 16760* | 11290 | 12900* | 7860 | 10050 | 5840 | | | 8180* | 4970 | 9,92 |
| -3 m | | 22670* | 22670* | 20240* | 18460 | 15440* | 11480 | 11850* | 8020 | 8480* | 6020 | | | 7960* | 5870 | 9,09 |
| -4,5 m | | 21320* | 21320* | 16620* | 16620* | 12770* | 11640 | 9200* | 8220* | | | | | 7410* | 7410* | 7,91 |
| -6 m | | | | 10530* | 10530* | | | | | | | | | 7250* | 7250* | 5,96 |

| | | REACH | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-----|--------------|---|
| Front | Side | 0 m | 3.0 m | 4.5 m | 6.0 m | 7.5 m | 9 m | At max reach | m |

CX500C, short monoboom, 2.53 m short HD arm, bucket 2.8 m³ (2850 kg), 600 mm shoes, max reach 10.9 m

| | | | | | | | | | | | | | | |
|--------|--|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| 9.0 m | | | | | | 7380* | 7380* | | | | | 5680* | 5680* | 8,09 |
| 7,5 m | | | | | | 9100* | 9100* | 7200* | 6660 | 5350* | 5350* | 9,2 | | |
| 6.0 m | | | | | 10170* | 10170* | 10050* | 9520 | 8750* | 6600 | 5210* | 5210* | 9,9 | |
| 4,5 m | | | | 17330* | 17330* | 13730* | 13270 | 11040* | 9070 | 9400* | 6360 | 5260* | 4630 | 10,32 |
| 3 m | | | | 20840* | 19990 | 15750* | 12520 | 12090* | 8550 | 9900* | 6080 | 5480* | 4350 | 10,48 |
| 1,5 m | | | | 23300* | 18470 | 16920* | 11710 | 12790* | 8090 | 10120 | 5820 | 5880* | 4320 | 10,41 |
| 0 m | | 12950* | 12950* | 23650* | 17910 | 17000* | 11230 | 12900* | 7770 | 9950 | 5640 | 6540* | 4540 | 10,1 |
| -1,5 m | | 19150* | 19150* | 22470* | 18240 | 16510* | 11170 | 12530* | 7670 | 9500* | 5620 | 7620* | 5090 | 9,53 |
| -3 m | | 26810* | 26810* | 19940* | 18350 | 14930* | 11370 | 11120* | 7860 | | | 7770* | 6150 | 8,66 |
| -4,5 m | | 20340* | 20340* | 15600* | 15600* | 11540* | 11380 | | | | | 6880* | 6880* | 7,4 |

TIPPING CAPACITY (MARK:) = 75.0 (%)
HYDRAULIC CAPACITY (MARK:*) = 87.0 (%)



PARTS AND SERVICE

Wide network of customer support across the world.

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