#### **B-SERIES CRAWLER EXCAVATORS** CX470B





# **BUILT STRONG**

EXPERTS FOR THE REAL WORLD SINCE 1842

## **LOWER OPERATING COSTS**

The CX470B features a high pressure common rail fuel injection engine, engine with exhaust gas recirculation (EGR) electronically controlled. This results in Tier 3 emissions levels and lower fuel consumption than competitive machines. The B-series variable pump torque design adapts the hydraulics to maintain engine revolutions to a constant level even under heavy load.

### **MAINTENANCE OPTIMISED**

Large wide opening access doors and sturdy non-slip walkways on both sides of the machine provide ease of maintenance for technicians. All filters are centrally grouped with green oil drain facilities for engine oil. A hydraulically-driven cooling fan can be reversed on start up to blow out dust and debris.



## **BUILT TO PERFORM**

An efficient design suits the most powerful forces and an increased lifting capacity providing productivity gains and greater ease of operation.

The electronic management of speed and power lowers fuel consumption and offers considerable productivity benefits in terms of outputs. The advanced hydraulic system has three working modes and the Power boost function is automatically engaged.

### **HEAVY DUTY**

A sturdy boom construction with cast boom foot and heavy duty thickness of steel ensures strong performance and long operating life. Special mass excavation attachment available with additional strength and reinforced components.





### **PRECISION AND CONTROL**

The adjustable operating console and the ergonomic joysticks reduce fatigue and further boost the machine performance. Total control. Reduced effort. The advanced Case hydraulic system allows up to 10 auxiliary hydraulic flow settings to be programmed into the machine, making it possible for the operator to use up to 10 different attachments with no manual adjustment to the hydraulic circuit.

This results in reduced downtime during attachments changes and an increase in productivity for the customer.



### **OPERATOR'S COMFORT AND SAFETY**

Proven B series Case cab structure is up to three times stronger, yet benefits from increased glass area and reduced profile pillars for improved visibility. Single window to the operator's right offers unobstructed view to the tracks and across the machine, for improved safety on site and increased productivity.

B series cab offers increased leg and foot space and an incredible 60 % increase in glazed area, contributing to a light and spacious feeling for the operator.

Easy to clean surfaces, a reclining seat, glass roof hatch and air conditioning with nine vents are standard, promoting comfortable and productive operation throughout the day.

Viscous fluid cab mountings reduce vibration and internal noise levels, while smooth intuitive controls and improved ergonomics contribute to greater operator comfort and satisfaction. In-cab storage includes a hot and cold box for drinks, a cup holder, mobile phone storage and a large compartment behind the operator's seat. Operator comfort. Productivity gain.



#### ENGINE

The CX470B features a proven six cylinder common rail engine meeting Tier 3 emissions standards. Low revs with high torque output provides unstressed productivity with longevity and reliability. Low engine speed and hydraulically-driven cooling fan contribute to lower noise output and improvements in fuel consumption.

The CX470B excavator is equipped with hot climates cooling system (Tropical Package) to face temperatures above 45°.



### **HYDRAULICS**

The machine is equipped with highly efficient piston-type pumps to maximise pressure and flow under all operating conditions. Control is by a variable control pump torque system that perfectly matches engine output to hydraulic demand. High swing torque and increased slew speed allow in reduced cycle times in repetitive loading operations. A high performance synthetic fibre filter provides 5,000 hours of protection for hydraulic components.



## **CONTROLS**

All the B series crawler excavators features an intuitive hydraulic system mode selection (three working modes available), set through an advanced engine throttle control, easy reachable form the operator in the fully adjustable right hand console:

- A-MODE: for grading, lifting and precision work.
- H-MODE: the best balance between productivity and fuel economy.
- SP-MODE: extra speed and power for the most demanding jobs that require maximum productivity.

The fully adjustable right hand console includes the machine's advanced engine throttle control, enabling working mode selection.

The console display features a luminosity sensor, to ensure that the graphics remain clear and easy to rear in all light conditions. Operation is made easier thanks to a centralised layout of switches, while short lever joysticks further improve controllability and reduce operator effort.

CASE

### **ULTIMATE ENVIRONMENT**

The Case CXB range of hydraulic excavators feature one of the largest, most comfortable cabs in the business. Class-leading levels of visibility, thanks to larger glazed areas and slim pillars, provide the operator with an unparalleled view to the working area. A comfortable fully reclining operator's seat, standard air conditioning with nine outlet louvres to distribute heat and ventilation ensure that the driver remains comfortable throughout the working day. Cup holders, a clock, a mobile phone holder, a built-in coolbox and numerous storage compartments make the Case cab the ideal environment to ensure maximum productivity. The cab sits on isolating mountings that reduce noise and vibration, improving the working environment for the operator and boosting productivity.





#### **MAINTENANCE SIMPLICITY**

The CX470B continues a long Case tradition structural integrity and accessibility for maintenance simplicity, resulting in extended operation and longevity.

Engine and hydraulic oil filters are centralised and remote mounted within easy to access panels, allowing ground level maintenance and reducing service time. Case excavators achieve the lowest score in SAE Maintenance score system tests, minimising downtime and reducing operating costs for the customer. The large 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 with no risk of spillage during maintenance. The standard high flow electric refuelling pump is twice as fast as previous models, with an auto stop function to make refilling easier.



#### **UNDERCARRIAGE**

Heavy duty Case undercarriage design ensures long component life and low operating costs. The CX470B has an outstanding undercarriage for maximum stability, with a narrow trackframe design for maximum component protection. Sideframe steps are bolted on to allow rapid removal for transportation or repair. The undercarriage is available in both LC and retractable chassis versions. All hydraulic lines are fully protected within the main and side frames to increase durability.

#### **IMPROVED PIN AND BUSHING LIFE**

Low maintenance Extended Maintenance Bushings (EMS) provide 1,000 hour/six month greasing intervals, greatly reducing daily and weekly maintenance for the operator. The bucket pins retain a 250 hour greasing interval. Fitted as standard, anti-friction shims in the boom foot and head reduce noise and cut free play.



EMS chrome plated pins with brass bushing





### **MASS EXCAVATION**

A dedicated model for mass excavation which provides outstanding breakout force performance. With a special heavy duty attachment and optimized kinematics the 470B ME works with a bucket 60% larger than the standard 470B. This makes the 470B ME the ideal combination when loading trucks combining industry leading speed, productivity and efficiency. As an alternative to the LC chassis a retractable undercarriage is available for easy transportation to your jobsite.

## CX B-SERIES HYDRAULIC EXCAVATORS

## **SPECIFICATIONS**

| ENGINE  | GX4/UD   |
|---|--|
| Engine<br>Make  | ISUZU  |
|   | AH-6UZ1XYSS  |
| Type<br>Emission levels   |  |
|   | Tier 3   |
| Common rail, turbo, intercooler, fuel cooler,<br>EGR (Exhaust Gas Recirculator) | Yes  |
| Direct injection  | Electronically controlled  |
| Number of cylinders   | 6  |
| Bore - Stroke (mm)  | 120 x 145  |
| Cubic capacity (cc)   | 9839   |
| Max power (kW/hp) EEC80/1269  | 270/367  |
| (@rpm)  | 1800   |
| Maximum Torque (Nm)   | 1435   |
| (@rpm)  | 1950   |
| HYDRAULIC SYSTEM  |  |
| Max output (I/min)  | 2 x 360  |
| (@ rpm)   | 1980   |
| 2 variable displacement axial piston pumps with regulating system               | Yes  |
| Attachment/Power Boost (bar)  | 314/343  |
| Upperstructure swing (bar)  | 294  |
| Travel (bar)  | 343  |
| Oil filtration  | 6 micron   |
| Type of oil filter  | Synthetic fiber super fine high catch                                  |
| SWING   |  |
| Max upperstructure swing speed (rpm)  | 10.2   |
| Swing torque (kN-m)   | 150  |
| TRAVEL  | The travel circuit is equipped with axial piston, variable flow motors |
| Max travel speed (km/h)   | 5.3  |
| Low travel speed (km/h)   | 3.1  |
| Speed change is controlled from the instrument panel                            |  |
| Automatic downshifting  | Yes  |
| Gradeability  | 70% (35)   |
| Tractive (daN)  | 23320  |
| ELECTRICAL SYSTEM   |  |
| Circuit (V)   | 24   |
| Batteries (V - A/h)   | 2 x 12 - 128   |
| Circuit equipped with water-proof connectors                                    | Yes  |
| Alternator (V - Amp)  | 24 - 50  |
| UNDERCARRIAGE   |  |
| Upper rollers   | 2  |
| Lower rollers   | 9  |
| Number of track pads  | 50   |
| Type of shoes   | Triple grouser   |
| Track pad with standard (mm)  | 700  |
| CIRCUIT AND COMPONENT CAPACITIES  |  |
| Fuel tank LC (I)  | 650  |
| Hydraulic reservoir LC (I)  | 230  |
| Hydraulic system (I)  | 460  |
| Travel reduction gear (per side) (I)  | 15   |
| Swing reduction gear (I)  | 10   |
| Engine cooling system (I)   | 38   |
|   |  |

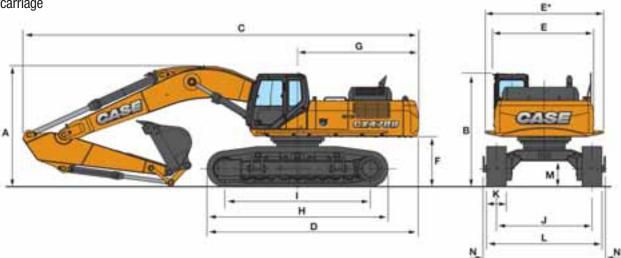
## **SPECIFICATIONS**



## CX B-SERIES HYDRAULIC EXCAVATORS

## **GENERAL DIMENSIONS**

LC undercarriage



|    |  |   | STAN       | DARD       | MASS EXCAVATION |
|----|--|---|------------|------------|-----------------|
|    |  |   | ARM 2.53 m | ARM 3.38 m | ARM 2.53 m      |
| А  | Overall height (with attachment)                 | m | 3.64       | 3.60       | 3.76            |
| В  | Height   | m | 3.29       | 3.29       | 3.29            |
| С  | Overall length (with attachment)                 | m | 12.06      | 12.01      | 11.64           |
| D  | Overall length (without attachment)              | m | 6.39       | 6.39       | 6.39            |
| Е  | Width of upperstructure                          | m | 3.06       | 3.06       | 3.06            |
| Ε* | Width of upperstructure (with optional walkways) | m | 3.59       | 3.59       | 3.59            |
| F  | Upperstructure ground clearance                  | m | 1.33       | 1.33       | 1.33            |
| G  | Swing radius (rear end)                          | m | 3.67       | 3.67       | 3.67            |
| Н  | Track overall length                             | m | 5.45       | 5.45       | 5.45            |
| I  | Centre idler to centre sprocket                  | m | 4.40       | 4.40       | 4.40            |
| J  | Track gauge                                      | m | 2.75       | 2.75       | 2.75            |
| Κ  | Track shoe width (standard track pads)           | m | 0.60       | 0.60       | 0.60            |
| L  | Track overall width                              | m |            |            |                 |
|    | - 600 mm track pads                              | m | 3.35       | 3.35       | 3.35            |
|    | - 750 mm track pads                              | m | 3.50       | 3.50       | 3.50            |
|    | - 900 mm track pads                              | m | 3.65       | 3.65       | 3.65            |
| М  | Ground clearance                                 | m | 0.54       | 0.54       | 0.54            |

\*\* Transport position

## **STANDARD BOOM BUCKETS**

#### Buckets from 1.8 to 3 m<sup>3</sup> available

#### **GENERAL PURPOSE AND HEAVY DUTY**

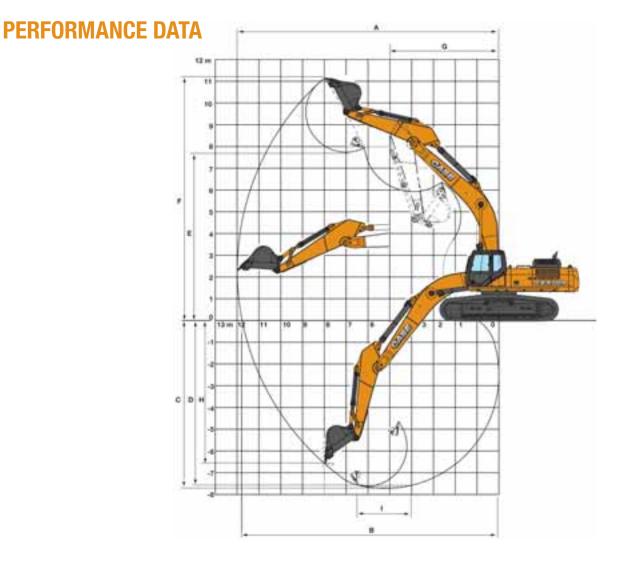
| SAE Heaped Capacity (I) | 1120 | 1380 | 1630 | 1880 | 2150 | 2410 | 2580 |
|-------------------------|------|------|------|------|------|------|------|
| Width (mm)              | 900  | 1050 | 1200 | 1350 | 1500 | 1650 | 1750 |

#### **VERY HEAVY DUTY**

| SAE Heaped Capacity (I) | 1880 |
|-------------------------|------|
| Width (mm)              | 1350 |
|                         |      |
| OLIARRY                 |      |

| SAE Heaped Capacity (I) | 2580 |
|-------------------------|------|
| Width (mm)              | 1750 |
|                         |      |

## **SPECIFICATIONS**



|      |   |   | STANDARD B | 00M 7.00 m | MASS EXCAVATION BOOM 6.25 m |
|------|---|---|------------|------------|-----------------------------|
| DIPP | ER LENGTH                                     |   | ARM 2.53 m | ARM 3.38 m | ARM 2.53 m                  |
| Α    | Maximum digging reach                         | m | 11.23      | 12.00      | 10.81                       |
| В    | Maximum digging reach at ground level         | m | 10.99      | 11.77      | 10.56                       |
| С    | Maximum digging depth                         | m | 6.87       | 7.72       | 6.49                        |
| D    | Maximum digging depth over a length of 2.44 m | m | 6.69       | 7.58       | 6.32                        |
| Е    | Maximum dump height                           | m | 7.42       | 7.74       | 7.18                        |
| F    | Maximum working height                        | m | 10.82      | 11.14      | 10.52                       |
| G    | Minimum attachment swing radius               | m | 5.14       | 4.99       | 4.80                        |
| Н    | Maximum digging depth on a vertical face      | m | 5.67       | 6.57       | 4.92                        |
| Ι    | Maximum length of flat-bottomed trench        | m | 2.44       | 2.44       | 2.44                        |
|      | Digging force - w/o Power Boost               | Ν | 25700      | 20900      | 25500                       |
|      | - with Power Boost                            | Ν | 28100      | 22900      | 27900                       |
|      | Breakout force - w/o Power Boost              | Ν | 24700      | 24700      | 28600                       |
|      | - with Power Boost                            | Ν | 27000      | 27000      | 31300                       |

## **WEIGHT AND GROUND PRESSURE**

|                       | CX470B STD (7.00 m boom)* | CX470B ME (6.25 m boom)* |
|-----------------------|---------------------------|--------------------------|
|                       | 3.38 ARM                  | 2.53 ME ARM              |
| Weight (kg)           | 46800                     | 47100                    |
| Ground pressure (bar) | 0.8                       | 0.81                     |

\*1.88  $m^{\scriptscriptstyle 3}$  bucket (698 kg), 600 mm shoes, operator and full fuel tank

## CX B-SERIES HYDRAULIC EXCAVATORS

| Front |       | REACH |       |          |          |    |          |    |       |  |              |  |   |  |
|-------|-------|-------|-------|----------|----------|----|----------|----|-------|--|--------------|--|---|--|
|       | 3.0 m |       | 4.5 m |          | 6.0 m    |    | 7.5 m    |    | 9.0 m |  | At max reach |  |   |  |
| Side  | ļ     | ÷.    | ų.    | <b>.</b> | <b>P</b> | ÷. | <b>P</b> | ÷- | ų.    |  | <b>P</b>     |  | m |  |

#### LC UNDERCARRIAGE - 3.38 m length, 600 mm shoes, bucket of 1.8 m<sup>3</sup> HD (1830 kg). Maximum reach 10.28 m

| 7.5 m  |        |        |        |        |        |       |        |      |       |      | 8837* | 7942  | 8.17 |
|--------|--------|--------|--------|--------|--------|-------|--------|------|-------|------|-------|-------|------|
| 6.0 m  |        |        |        |        |        |       | 9571*  | 9044 | 8831* | 6358 | 6350* | 5560  | 9.58 |
| 4.5 m  |        |        |        |        | 12556* | 12468 | 10499* | 8519 | 9260* | 6091 | 6559* | 4868  | 10.0 |
| 3.0 m  |        |        | 20429* | 17756  | 14520* | 11378 | 11558* | 7933 | 9808* | 5767 | 6987* | 4475  | 10.3 |
| 1.5 m  |        |        | 22959* | 16155  | 16092* | 10473 | 12475* | 7406 | 9868  | 5462 | 7690* | 4312  | 10.3 |
| 0 m    |        |        | 23470* | 15493  | 16866* | 9907  | 12891  | 7027 | 9616  | 5234 | 8098  | 4366  | 10.0 |
| -1.5 m | 17100* | 17100* | 22587* | 15356  | 16729* | 96662 | 12669  | 6831 | 9500  | 5129 | 8682  | 4680  | 9.55 |
| -3.0 m | 24521* | 24521* | 20583* | 15526  | 15624* | 9679  | 12105* | 6833 |       |      | 9601* | 5385  | 8.79 |
| -4.5 m | 22543* | 22543* | 17234* | 15971  | 13268* | 9948  | 9917*  | 7084 |       |      | 9532* | 6866  | 7.67 |
| -6.0 m |        |        | 11689* | 11689* |        |       |        |      |       |      | 8606* | 8606* | 5.97 |

#### LC UNDERCARRIAGE - 2.53 m arm length, 600 mm shoes, bucket of 2.0 m<sup>3</sup> HD (1930 kg). Maximum reach 9.48 m

| 7.5 m  |        |        |        |        |        |       |        |      |        |      | 10320* | 9570 | 7.3  |
|--------|--------|--------|--------|--------|--------|-------|--------|------|--------|------|--------|------|------|
| 6.0 m  |        |        |        |        |        |       | 10647* | 8792 |        |      | 9695*  | 6595 | 8.71 |
| 4.5 m  |        |        | 18958* | 18910  | 13939* | 12006 | 11452* | 8305 | 10029* | 5971 | 9887*  | 5701 | 9.21 |
| 3.0 m  |        |        | 22555* | 16625  | 15662* | 10983 | 12341* | 7772 | 10130  | 5708 | 9318   | 5220 | 9.45 |
| 1.5 m  |        |        | 18799* | 15629  | 16799* | 10233 | 13014* | 7325 | 9865   | 5468 | 9127   | 5042 | 9.44 |
| 0 m    |        |        | 22847* | 15455  | 17031* | 9850  | 12899  | 7045 | 9102   | 5321 | 9396   | 5152 | 9.19 |
| -1.5 m |        |        | 21202* | 15571  | 16332* | 9769  | 12750* | 6960 |        |      | 10259  | 5621 | 8.67 |
| -3.0 m | 22548* | 22548* | 18551* | 15913  | 14591* | 9939  | 11237* | 7104 |        |      | 10505* | 6689 | 7.83 |
| -4.5 m |        |        | 14325* | 14325* | 11205* | 10410 |        |      |        |      | 9955*  | 9172 | 6.54 |

#### LC UNDERCARRIAGE - Mass Excavation boom, 2.53 m length, 600 mm shoes, bucket of 3.0 m<sup>3</sup> (2400 kg). Maximum reach 9.15 m

| 6.0 m  |        |        |        |        |        |       | 10540* | 8427 |      |      | 10199* | 7285  | 8.06 |
|--------|--------|--------|--------|--------|--------|-------|--------|------|------|------|--------|-------|------|
| 4.5 m  |        |        | 18008* | 18008* | 13559* | 11912 | 11254* | 8016 |      |      | 8413*  | 5744  | 8.87 |
| 3.0 m  |        |        | 21684* | 17197  | 15295* | 10948 | 12109* | 7528 | 9765 | 5353 | 9091*  | 5213  | 9.12 |
| 1.5 m  |        |        | 23452* | 15896  | 16531* | 10177 | 12771* | 7095 | 9531 | 5141 | 9332   | 5025  | 9.11 |
| 0 m    |        |        | 23128* | 15469  | 16852* | 9736  | 12666  | 6809 |      |      | 9655   | 5163  | 8.85 |
| -1.5 m | 22802* | 22802* | 21446* | 15483  | 16113* | 9607  | 12317* | 6719 |      |      | 10563* | 5717  | 8.31 |
| -3.0 m | 23460* | 23460* | 18425* | 15795  | 14078* | 9757  |        |      |      |      | 10473* | 6997  | 7.42 |
| -4.5 m |        |        | 13341* | 13341* | 9717*  | 9717* |        |      |      |      | 9589*  | 9589* | 6.05 |

\* The above loads (kg) are compliant to the ISO standards and refer to the excavator equipped with bucket. The indicated loads are no more than 87% of hydraulic system lift capacity or 75% of static tipping load. Values marked with an asterisk (\*) are limited by the hydraulic lifting capacity rather than the tipping load.





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**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 Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.

Conforms to directive 2006/42/EC