

# 330D L 330D LN

Hydraulic Excavators



#### Cat® C9 Diesel Engine with ACERT™ Technology

##### Net Power (ISO 9249) at 1800 rpm

Standard 184 kW/250 hp

Optional (high power) 200 kW/270 hp

Operating Weight 35 300 to 37 700 kg

Maximum Travel Speed 5 km/h

Maximum Reach at Ground Level 11 830 mm

Maximum Digging Depth 8090 mm

# 330D L and 330D LN Hydraulic Excavators

*The D Series incorporates innovations for improved performance, controllability and versatility.*

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## Engine

- ✓ The Cat® C9 engine with ACERT™ Technology offers better fuel efficiency and reduced wear. It works at the point of combustion to optimize engine performance and provide low exhaust emissions. By combining ACERT Technology with the new Economy Mode and Power Management, customers can balance the demands of performance and fuel economy to suit their requirements and application. **pg. 4**

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## Hydraulics

- ✓ The hydraulic system has been designed to provide reliability and outstanding controllability with increased digging forces, lifting capacity and drawbar pull. The Cat Tool Control System provides enhanced flexibility. The Heavy Lift Mode maximizes lifting performance and maintains excellent stability. **pg. 5**

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## Operator Station

- ✓ Provides maximum space, wider visibility and easy access to switches. The monitor is a full-color graphical display that allows the operator to understand the machine information easily. Overall, the new cab provides a comfortable environment for the operator. **pg. 6**

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## Environmentally Responsible Design

- ✓ Quieter operation, lower engine emissions, less fluid disposal and cleaner service can help you meet or exceed worldwide regulations and protect the environment. **pg. 4**

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## SmartBoom™

More productive. Faster cycle times for truck loading and rock scraping. Maintains optimum hammering frequency for effective, steady productivity. **pg. 5**

*Excellent controllability and reliability, impressive lift capacity, better fuel efficiency, simplified service and a more comfortable operator station to increase your productivity and lower your operating costs.*

✓ *New feature*



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### Electronic Control System

- ✓ The compact, full-color, graphical display monitor displays machine, maintenance, diagnostic and prognostic information in twenty different languages. The new Economy Mode and Power Management is also selected from the monitor. To minimize sun glare, the monitor angle is adjustable. **pg. 7**

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### Booms, Sticks and Linkage

- ✓ Caterpillar excavator booms and sticks are built for performance and long service life. Three types of booms and six sticks are available, offering a range of configurations suitable for a wide variety of applications. The bucket linkage pins have been enlarged to improve reliability and durability. All booms and sticks are stress relieved. **pg. 10**

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### Structures

- ✓ Caterpillar design and manufacturing techniques assure outstanding durability and service life from these important components. The 330D comes standard with grease lubricated tracks. Cat designed excavator undercarriage is stable, durable and low maintenance for good machine stability and transportability. **pg. 8**



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### Work Tools and GET

A variety of work tools, including buckets, couplers, hammers, crushers, pulverizers, multiprocessors, shears and grapples are available. **pg. 11**

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### Service and Maintenance

- ✓ Fast, easy service has been designed with extended service intervals, advanced filtration, convenient filter access, auto-cleaning and cooling package, user-friendly electronic diagnostics for increased productivity and reduced maintenance costs. **pg. 9**

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### Complete Customer Support

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement. **pg. 9**

## Engine

*Built for power, reliability, economy and low emissions.  
Meeting regulations... Exceeding expectations.*



**Performance.** The Cat C9 engine with ACERT Technology offers more engine power, and runs at lower speeds for better fuel efficiency and reduced wear. The 330D is available with two engine power versions:

- Standard power (184 kW)
- Optional High power (200 kW)

**Power Management.** Optimal machine performance for each type of application. The operator can change the engine power on the monitor from standard

to high. The high power mode is recommended for extremely productive areas and for hard digging applications.

### **Automatic Engine Speed Control.**

The two-stage, one-touch control maximizes fuel efficiency and reduces sound levels.

Engine Controller. ADEM A4™ (Advanced Diesel Engine Management) electronic control module manages fuel delivery to get the best performance per liter of fuel. The controller uses sensors in fuel, air intake, exhaust and cooling systems and provides flexible fuel mapping, allowing the engine to respond quickly to varying application needs. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

**Fuel Delivery.** The Cat C9 features electronic controls that govern the mechanically actuated unit fuel injection system. Multiple injection

fuel delivery involves a high degree of precision. Precisely shaping the combustion cycle lowers combustion chamber temperatures, generating fewer emissions and optimizing fuel combustion. This translates into more work output for your fuel cost.

**Cooling System.** To reduce fan noise, the cooling fan is driven from a viscous clutch which is electrically controlled by the machine ECM. It calculates optimum fan speed based on the target engine speed, coolant temperature, hydraulic oil temperature and actual fan speed. The Cat C9 delivers a completely new layout that separates the cooling system from the engine compartment.

**Air Cleaner.** The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulates above a preset level.

## Environmentally Responsible Design

*Caterpillar machines not only help you build a better world, they help maintain and preserve the fragile environment.*



**Emissions.** The Cat C9 with ACERT Technology introduces a series of evolutionary, incremental improvements that provide breakthrough engine technology built on systems and components developed by Caterpillar with proven reliability. The technology capitalizes on Cat expertise in four core engine systems: fuel, air, electronics and after treatment. By combining ACERT Technology with the new Economy Mode, customers can balance the demands of performance and fuel economy to suit their requirements and application. ACERT engines meet EC Stage IIIA emissions regulation.

**Fewer Leaks and Spills.** Engine oil and encapsulated hydraulic oil filters are positioned vertically and are easy to reach to minimize spillage. Service intervals are extended to reduce the times fluids are changed and handled. The hydraulic oil fine filtration system attachment extends the service interval from 2000 to 5000 hours. Compatible with Cat HEES hydraulic bio-oil for ecologically sensitive applications. Hydraulic oil service interval can be extended to 8000 hours with the S•O•S. program. Finally, the Cat Extended Life Coolant extends service up to 8000 h so there is less need for fluid disposal.

# Hydraulics

*Cat hydraulics deliver power and precise control to keep material moving.*



**Component Layout.** The 330D hydraulic system and component locations have been designed to provide a high level of system efficiency. The main pumps, control valves and hydraulic tank are located close together to allow for shorter tubes and lines between components, which reduce friction loss, and pressure drops in the lines. The layout further provides greater operator comfort by placing the radiator on the cab side of the upper structure. This allows incoming air to enter the engine compartment from the operator side and hot air and corresponding engine sound to exit on the opposite side away from the operator. This reduces engine compartment heat and sound being transmitted to the operator.



**Heavy Lift Mode.** Maximizing lifting performance and boosting the lifting capability. Heavy loads can be easily moved in the full working range of the machine maintaining excellent stability.

**Hydraulic Cross Sensing System.** The hydraulic cross sensing system utilizes each of two hydraulic pumps to 100%, under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns.

**Pilot System.** The pilot pump is independent from the main pumps and controls the front linkage, swing and travel operations.

**Boom and Stick Regeneration Circuit.** Boom and stick regeneration circuit saves energy during boom-down and stick-in operation which increases efficiency, reduces cycle times and pressure loss for higher productivity, lower operating costs and increased fuel efficiency.



### Electronic Control System.

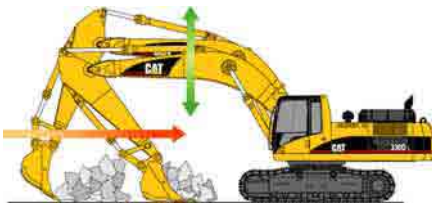
Ten hydraulic pump flow and pressure settings can be preset, eliminating the need to adjust the hydraulics each time a tool is changed.

**Auxiliary Valve.** The auxiliary valve is standard. Control circuits are optional, allowing for operation of high and medium pressure tools such as shears, grapples, hammers, pulverizers, etc.

### Hydraulic Cylinder Snubbers.

Located at the rod-end of the boom cylinders and both ends of the stick cylinders to cushion shocks while reducing sound levels and extending component life.

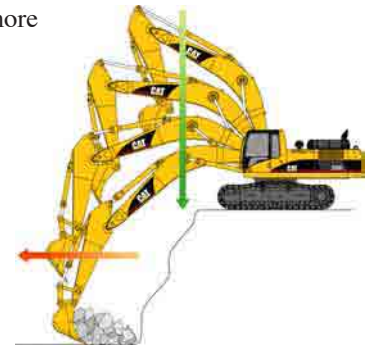
**SmartBoom.** Reduces stress and vibrations transmitted to the machine and provides a more comfortable environment.



**Rock Scraping.** Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows the operator to concentrate on stick and bucket, while boom freely goes up and down without using pump flow.



**Hammer Work.** The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plates.



**Truck Loading.** Loading trucks from a bench is more productive and fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.

## Operator Station

*Designed for simple, easy operation and comfort, the 330D allows the operator to focus on production.*



**Operator Station.** The workstation is spacious, quiet and comfortable, assuring high productivity during a long workday. The air conditioner and attachment switches are conveniently located on the right-hand wall, and the key switch and throttle dial are on the right-hand console. The monitor is easy to see and maximizes visibility.

**Seat.** An optional air suspension seat is available in the 330D. The standard and optional seats provide a variety of adjustments to suit the operator's size and weight including fore/aft, height and weight. Wide adjustable armrests and a retractable seat belt are also included.

**Climate Control.** Positive filtered ventilation with a pressurized cab is standard. Fresh air or re-circulated air can be selected with a switch on the right console.

### **Hydraulic Activation Control Lever.**

For added safety, this lever must be in the operate position to activate the machine control functions.

**Controls.** The 330D uses pilot operated control levers, positioned so the operator can operate with arms on the armrests. The vertical stroke is longer than the horizontal, reducing operator fatigue. The control lever grips are shaped to fit into the operator's hands. The horn switch and one-touch low idle switch are positioned on the left and right grip.

**Implement Controls.** Easy to handle joysticks with integrated push buttons and sliding switches control all implement and swing functions. The sliding switches provide modulated control for hydro-mechanical tools and are designed to increase operator comfort and reduce operator fatigue.



**Skylight.** A unique large polycarbonate skylight provides very good upward visibility, especially useful in above ground applications.

**Windows.** To maximize visibility, all glass is affixed directly to the cab eliminating the use of window frames. Choice of fixed or easy-to-open split front windshield meet operator preference and application conditions.

- 50/50 split front windshield allows both upper and lower portions to be stored in an overhead position.
- 70/30 split front windshield stores the upper portion above the operator. The lower front windshield features a rounded design to maximize downward visibility and improves wiper coverage.
- Both openable versions feature a one-touch action release system.
- The fixed front windshield is available in standard duty laminated glass or high impact resistant laminated glass.

**Wiper.** Designed to maximize visibility in poor weather conditions. The parallel wiper system covers almost the complete front window without leaving unwiped areas in the immediate line of sight of the operator.

**Cab Exterior.** The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance of fatigue and vibration. This design allows the FOGS to be bolted directly to the cab, at the factory or as an attachment later, enabling the machine to meet specifications and job site requirements.

## Electronic Control System

*Manages the engine and hydraulics for maximum performance.*



**Consoles.** Redesigned consoles feature a simple, functional design to reduce operator fatigue, ease of switch operation and excellent visibility. Both consoles have attached armrests with height adjustments.

**Cab Mounts.** The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort.

**Standard Cab Equipment.** To enhance operator comfort and productivity, the cab includes a lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment.

**Monitor Display Screen.** The monitor is a full color 400x234 pixels Liquid Crystal Display (LCD) graphic display. The Master Caution Lamp blinks ON and OFF when one of the critical conditions below occurs:

- Engine oil pressure low
  - Coolant temperature high
  - Hydraulic oil temperature high
- Under normal conditions or the default condition, the monitor display screen is divided into four areas; clock and throttle dial, gauge, event display and multi-information display.

**Clock and Throttle Dial Area.** The clock and the throttle dial position are in this area and the gas-station icon with green color is also displayed.

**Gauge Area.** Three analog gauges, fuel level, hydraulic oil temperature and coolant temperature, are displayed in this area.

**Event Display Area.** Machine information is displayed in this area with the icon and language.

**Multi-information Display Area.** This area is reserved for displaying information that is convenient for the operator. The “CAT” logo mark is displayed when information to display does not exist.

**Keypad.** The keypad allows operator to select machine operation conditions and to set view preferences.



## Structure

*330D structural components and undercarriage are the backbone of the machine's durability.*



**Tracks.** The 330D comes standard with grease lubricated tracks. The track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise and extend service life lowering operating costs.

**Structures.** Proven structural manufacturing techniques, assure outstanding durability and service life from these important components.

**Robotic Welding.** Up to 95% of the structural welds on a Caterpillar Excavator are completed by robots. Robotic welds achieve over three times the penetration of manual welds.

**Carbody Design and Track Roller Frames.** X-shaped, box-section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are press-formed, pentagonal units to deliver exceptional strength and service life.

**Undercarriage.** Durable Cat undercarriage absorbs stresses and provides excellent stability.

**Rollers and Idlers.** Sealed and lubricated track rollers, carrier rollers, and idlers provide excellent service life, to keep the machine in the field longer.

**Undercarriage Options.** Two undercarriage options, long (L) and long narrow (LN) allow you to choose the best machine for your application and business needs.

**Long Undercarriage.** The long undercarriage (L) maximizes stability and lift capacity. A long, wide and sturdy undercarriage offers a very stable work platform.

### **Long Narrow Undercarriage.**

The long and narrow undercarriage (LN) provides the best choice when ease of transport is important while maintaining excellent lift capacity.



## Service and Maintenance

*Simplified service and maintenance save you time and money.*



**Air Filter Compartment.** The air filter features a double-element construction for superior cleaning efficiency. When the air cleaner plugs, a warning is displayed on the monitor screen inside the cab.

**Ground Level Service.** The design and layout of the 330D was made with the service technician in mind. Many service locations are easily accessible at ground level allowing critical maintenance to get done quickly and efficiently.

**Pump Compartment.** A service door on the right side of the upper structure allows ground-level access to the pump and pilot filter.

**Capsule Filter.** The hydraulic return filter, a capsule filter, is situated outside the hydraulic tank. This filter prevents contaminants from entering the system when hydraulic oil is changed and keeps the operation clean.

**Diagnostics and Monitoring.** Equipped with S•O•S<sup>SM</sup> sampling ports and hydraulic test ports for the hydraulic system, engine oil, and coolant. Electronic Technician (ET) tool is located behind the cab.

**Anti-Skid Plate.** Anti-skid plate covers top of storage box and upper structure to prevent slipping during maintenance.

**Fan Guard.** Engine radiator fan is completely enclosed by fine wire mesh, reducing the risk of an accident.

**Greasing Points.** A remote greasing block on the boom delivers grease to hard-to-reach locations on the front.

**Radiator Compartment.** Easy access to radiator, oil cooler, air-to-air aftercooler. Reserve tank and drain cock are attached to the radiator for simplified maintenance.

**Auto-Cleaning Attachment.** Automatically cleans the cooling package from dirt and fine debris by reversing the fan.



**Extended Service Intervals.** 330D service and maintenance intervals have been extended to reduce machine service time and increase machine availability.

## Complete Customer Support

*Cat dealer services help you operate longer with lower costs.*



**Machine Selection.** Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours? What production is needed? Your Cat dealer can provide recommendations.

**Purchase.** Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

### **Customer Support Agreements.**

Cat dealers offer a variety of product support agreements, and work with customers to develop a plan the best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer's investment.

**Operation.** Improving operating techniques can boost your profits. Your cat dealer has videotapes, literature and other ideas to help you increase productivity, and Caterpillar offers certified operator training classes to help maximize the return on your investment.

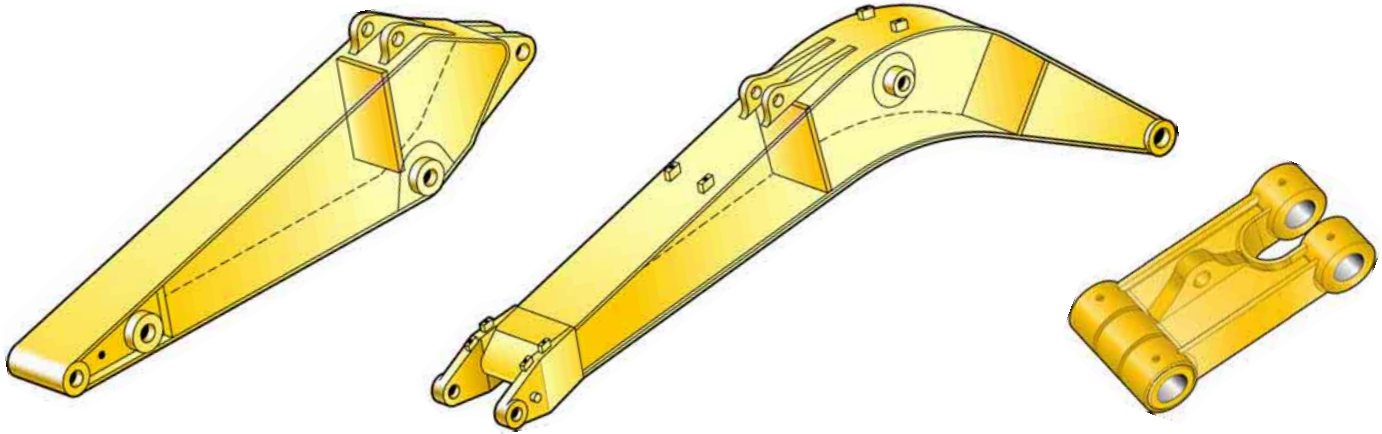
**Product Support.** You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can save money with Cat remanufactured components.

**Maintenance Services.** Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

**Replacement.** Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

## Booms, Sticks and Linkage

*Designed for flexibility, high productivity, and efficiency in a variety of applications.*



**Front Linkage Attachments.** Select the right combination of front linkage with your Cat dealer to ensure high productivity from the very start of your job. Three types of booms and four sticks are available, offering a range of configurations suitable for a wide variety of applications and offer a large combination of reach and digging forces for optimum versatility. All booms and sticks undergo a stress relieving process for greater durability.

**Boom Construction.** The booms have large cross-sections and internal baffle plates to provide long life durability.

**Reach Boom.** The reach boom (6500 mm) is designed to balance reach, digging force bucket capacity, offering a wide range of applications as digging, loading, trenching and working with hydraulic tools.

**Mass Excavation Boom.** The mass boom (6180 mm) is designed to provide maximum digging forces, bucket capacity and truck loading productivity.

**Variable Adjustable Boom.** It offers superb flexibility and versatility in the working envelope. Boom position can be adjusted from 102° when fully retracted to 158° when fully extended. With full extension, the working range gives both maximum dig depth, reach and working height. Equally, when the VA boom is retracted, it can work closer to its tracks, increase lifting capacity and work in confined areas.

**Stick Construction.** Sticks are made of high-tensile strength steel using a large box section design with interior baffle plates and an additional bottom guard to protect against damage.

**Reach Sticks.** Four lengths of reach sticks are available to suite a variety of applications. Reach sticks use DB and TB linkages.

- R3.9DB. Suited for high-capacity buckets used in trenching, excavation, and general construction work. Designed with enough reach and depth to match a large-capacity bucket and high digging force.
- R3.2DB. This stick provides the most versatile front linkage.
- R2.8DB. Suitable for the high-capacity buckets used in trenching, excavation and general construction work.
- R2.1TB1. This stick was designed for large capacity-construction work.

**Mass Sticks.** Two mass excavation sticks are available for higher digging forces and increased bucket capacity.

- M2.5TB1 and M2.1TB1. Designed for high volume earth moving, they deliver outstanding productivity.

**Reach Sticks with VA Boom.** The 3900, 3200, 2800 and 2150 mm sticks provide the necessary strength in digging, lifting and hammering applications with the VA boom.



**Bucket Linkage.** Two bucket linkages (DB and TB) are available, with lifting eye on the power link.

**Power Link.** The new power link improves durability, increases machine-lifting capability in key lifting positions, and is easier to use compared to the previous lift bar design.

**Linkage Pins.** All pins used in front linkages have thick chrome plating, giving them high wear and corrosion resistance. The large diameter pins smoothly distribute the shear and bending loads to help ensure long pin, boom and stick life.

## Work Tools and GET

A wide variety of Work Tools help optimize machine performance. Purpose designed and built to Caterpillar's high durability standards.



### Caterpillar K Series™ Tooth System



**Rationalized Bucket Line.** Optimized design matches machine configuration perfectly. Improved balance between performance and durability. Buckets feature the new Caterpillar K Series Tooth System.

**1 Excavation (X).** Digs and loads soft to medium materials such as clay and earth. Features weld on tip adapters, wear resistant steel alloy cutting edge and wear plates, and high grade steel side bars.

**2 Extreme Excavation (EX).** Digs and loads compact/abrasive materials like earth/rock, sand/clay, sand/gravel, coal, chalk and low abrasion ores. Features bigger ground engaging tools, plus all wear resistant steel alloy cutting edge, wear plates and side bars.

**3 Rock (R).** Digs and loads mixed earth/rock soils containing high percentage of rock or other abrasive materials. Features V-spade cutting edge, thicker base and wear surfaces.

**K Series Tip Selection.** The new Caterpillar K Series Tooth System holds tighter, changes easier and stays sharper.

- 10 General Duty
- 11 Extra Duty
- 12 Penetration
- 13 Penetration Plus
- 14 Heavy Penetration
- 15 Heavy Abrasion
- 16 Wide
- 17 Spike
- 18 Double Spike

### 4 Buckets for Special Applications.

Choose from a variety of buckets such as ditch cleaning buckets (tiltable), skeleton buckets (heavy duty) and trapezoidal buckets. Each of these buckets enhances the performance in special applications. Ask your dealer representative to recommend the optimum solution for your material and operation.

**5 Ripper.** The Caterpillar TR-series ripper provides a powerful single point of penetration force to break out rock and other difficult to excavate material. Usage with the quick coupler and a compatible rock bucket facilitates the "Rip & Load" technique to supplement or replace blasting to prepare rock material prior to truck loading.

**6 Quick Coupler.** Caterpillar quick couplers enable the operator to simply release one work tool and pick up another. Your hydraulic excavator becomes highly versatile. The dedicated CW-Series quick coupler enables a quick tool exchange while maintaining top machine performance. A lifting hook is added for maximum lift capacity.



**Work Tools.** Choose from a variety of work tools such as hammers, crushers, pulverizers, shears, multi-processors and grapples.

**Tool Control.** Ten hydraulic pump flow and pressure settings can be preset on the monitor (Electronic Control System), eliminating the need to adjust the hydraulics each time a tool is changed. Selecting the proper setting from the monitor's menu instantly provides the operator with the correct amount of flow and pressure for the tool. The unique Cat proportional sliding switches provide modulation to the tool and make precision work easy.

# Bucket Specifications

						Reach boom 6500 mm								ME 6180 mm								
						Linkage	Width	Weight*	Capacity (ISO)	Fill Factor	330D L				330D LN				330D L		330D LN	
											2150 mm	2800 mm	3200 mm	3900 mm	2150 mm	2800 mm	3200 mm	3900 mm	2150 mm	2550 mm	2150 mm	2550 mm
Without Quick Coupler						mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm				
Excavation	DB	1000	1128	1.11	100	×					×				×	×	×	×				
	DB	1350	1337	1.62	100	×					×				×	×	×	×				
	DB	1500	1448	1.84	100	×					×				×	×	×	×				
	DB	1600	1506	1.99	100	×					×			N	×	×	×	×				
	DB	1650	1535	2.07	100	×					×			N	×	×	×	×				
	DB	1700	1563	2.14	100	×					×			N	×	×	×	×				
	DB	1800	1621	2.29	100	×			N		×		N	N	×	×	×	×				
	TB	1500	1728	1.93	100		×	×	×	×		×	×	×								
TB	1700	1906	2.24	100		×	×	×	×		×	×	×									
Extreme Excavation	DB	1350	1470	1.62	100	×				×				×	×	×	×					
	DB	1500	1565	1.84	100	×				×			N	×	×	×	×					
	DB	1600	1667	1.99	100	×				×			N	×	×	×	×					
	DB	1650	1698	2.07	100	×				×			N	×	×	×	×					
	DB	1700	1730	2.14	100	×			N		×		N	×	×	×	×					
	TB	1700	1933	2.24	100		×	×	×	×		×	×	×								
Rock	DB	1000	1326	1.11	90	×				×				×	×	×	×					
	DB	1650	1840	2.07	90	×				×			N	×	×	×	×					
	TB	1500	1885	1.93	90		×	×	×		×	×	×									
	TB	1800	2156	2.40	90		×	×	×		×	×	×									
Maximum load in kg (payload plus bucket)						5571	5013	4723	4123	4977	4470	4232	3680	6052	5511	5420	4914					
<b>With Quick Coupler</b>																						
Excavation	DB	1000	1112	1.11	100	×				×				×	×	×	×					
	DB	1350	1318	1.62	100	×				×				×	×	×	×					
	DB	1500	1428	1.84	100	×				×			N	×	×	×	×					
	DB	1600	1487	1.99	100	×			N		×		N	N	×	×	×	×				
	DB	1650	1516	2.07	100	×			N		×		N	N	×	×	×	×				
	DB	1700	1544	2.14	100	×			N		×	N	N	N	×	×	×	×				
	DB	1800	1601	2.29	100	×			N	N	×	N	N	N	×	×	×	×				
	TB	1500	1627	1.93	100		×	×	×	×		×	×	×								
TB	1700	1801	2.24	100		×	×	×	×		×	×	×									
Extreme Excavation	DB	1350	1451	1.62	100	×				×			N	×	×	×	×					
	DB	1500	1546	1.84	100	×				×			N	×	×	×	×					
	DB	1600	1648	1.99	100	×				×			N	×	×	×	×					
	DB	1650	1680	2.07	100	×				×	N	N	N	×	×	×	×					
	DB	1700	1710	2.14	100	×				×	N	N	N	×	×	×	×					
	TB	1700	1822	2.24	100		×	×	×	×		×	×	×			N					
Rock	DB	1000	1309	1.11	90	×				×				×	×	×	×					
	DB	1650	1821	2.07	90	×			N		×		N	×	×	×	×					
	TB	1500	1772	1.93	90		×	×	×		×	×	×									
	TB	1800	2043	2.40	90		×	×	×		N	×	×	×			N					
Maximum load in kg (payload plus bucket)						5071	4543	4253	4653	4477	4000	3762	3210	5552	5011	4920	4414					

\* Bucket weight including penetration plus tips



Max. Material Density  
1200 kg/m<sup>3</sup>



Max. Material Density  
1500 kg/m<sup>3</sup>



Max. Material Density  
1800 kg/m<sup>3</sup>



Not recommended



Not compatible

# Work Tools Matching Guide

Without quick coupler		Reach boom 6500 mm								ME 6180 mm			
		330D L				330D LN				330D L		330D LN	
		mm	2150	2800	3200	3900	2150	2800	3200	3900	2150	2550	2150
Hammers	H130 s, H140D s												
	H160D s												
Multiprocessors	MP20 CC, CR, PP, PS, S, TS	N				N				N	N	N	N
	MP30 CC, CR, S				N								
	MP30 PP				N		N	N	N				
	MP30 PS				N			N	N				
	MP30 TS			N	N	N	N	N	N				N
Crushers and Pulverizers	VHC-40	N				N				N	N	N	N
	VHC-50				N								
	VHP-40	N				N				N	N	N	N
	VHP-50				N								
Hydraulic Shears	S325	N				N					N	N	N
	S340	N	N	N	N	N	N	N	N		N	N	N
	S365B*												
Mechanical Grapples	G115	N				N				N	N	N	N
	G125				N				N	N			
Multi Grapples	G320	N				N				N	N	N	N
	G330				N								
Vibratory Plate Compactor	CVP110												
Clamshell Buckets (rehandling)	GOS-45 970												
	GOS-45 1120												
	GOS-45 1270												
	GOS-45 1580												
	GOS-45 1710												
	GOS-45 2020									N			
	GOS-45 2340				N		N	N	N				
	GOS-50 1200												
	GOS-50 1450									N			
	GOS-50 1700				N			N	N				
	GOS-50 1950			N	N		N	N	N				
	GOS-50 2200		N	N	N	N	N	N	N				N
	GOS-50 2450	N	N	N	N	N	N	N	N		N	N	N
Orange Peel Grapples	5 tines	GSH22B 600											
		GSH22B 800											
		GSH22B 1000								N			
		GSH22B 1250								N			
	4 tines	GSH22H 600, 800											
		GSH22H 1000											
		GSH22H 1250											

\* Boom mounted

## With quick coupler

Quick Couplers	CW-45												
	CW-45S												
Multiprocessors	MP20 CC, CR, S	N				N				N	N	N	N
	MP20 PP, PS, TS	N				N					N	N	N
	MP30 CC, CR, S			N	N	N	N	N	N				N
	MP30 PP		N	N	N	N	N	N	N			N	N
	MP30 PS		N	N	N	N	N	N	N				N
	MP30 TS	N	N	N	N	N	N	N	N		N	N	N
Crushers and Pulverizers	VHC-40	N				N				N	N	N	N
	VHC-50			N	N	N	N	N	N				N
	VHP-40	N				N				N	N	N	N
	VHP-50				N		N	N	N				N
Hydraulic Shears	S325	N			N	N				N	N	N	
Mechanical Grapples	G115	N				N				N	N	N	N
	G125			N	N	N	N	N	N				N
Multi Grapples	G320	N			N	N				N	N	N	N
	G330				N		N	N	N				
Vibratory Plate Compactor	CVP110												

360° Working range

Quick coupler match

Max. Material Density 1200 kg/m³

Over the front only

N Not recommended

Max. Material Density 1800 kg/m³

Max. Material Density 3000 kg/m³

## Engine

Cat C9 with ACERT Technology

Standard Net Power at 1800 rpm

ISO 9249	184 kW/250 hp
----------	---------------

80/1269/EEC	184 kW/250 hp
-------------	---------------

Optional Net Power at 1800 rpm

ISO 9249	200 kW/270 hp
----------	---------------

80/1269/EEC	200 kW/270 hp
-------------	---------------

Bore	112 mm
------	--------

Stroke	149 mm
--------	--------

Displacement	8.8 liters
--------------	------------

- All engine horsepower (hp) are metric including front page.
- The C9 engine meets Stage IIIA emission requirements.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- Full engine net power up to 2300 m altitude (engine derating required above 2300 m).

## Sound

### Operator Sound

- The operator sound level measured according to the procedures specified in ISO 6394:1998 is 78 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

### Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 105 dB(A).

## Cab/FOGS

Cab/FOGS meets ISO 10262.

## Hydraulic System

### Main System

Maximum flow	2 x 280 l/min
--------------	---------------

### Maximum pressure

Normal	350 bar
--------	---------

Heavy lift	360 bar
------------	---------

Travel	350 bar
--------	---------

Swing	280 bar
-------	---------

### Pilot System

Maximum flow	43 l/min
--------------	----------

Maximum pressure	39 bar
------------------	--------

### Boom Cylinder

Bore	150 mm
------	--------

Stroke	1440 mm
--------	---------

### Stick Cylinder

Bore	170 mm
------	--------

Stroke	1738 mm
--------	---------

### DB Family Bucket Cylinder

Bore	150 mm
------	--------

Stroke	1151 mm
--------	---------

### TB1 Family Bucket Cylinder

Bore	160 mm
------	--------

Stroke	1356 mm
--------	---------

## Machine and Major Component Weights

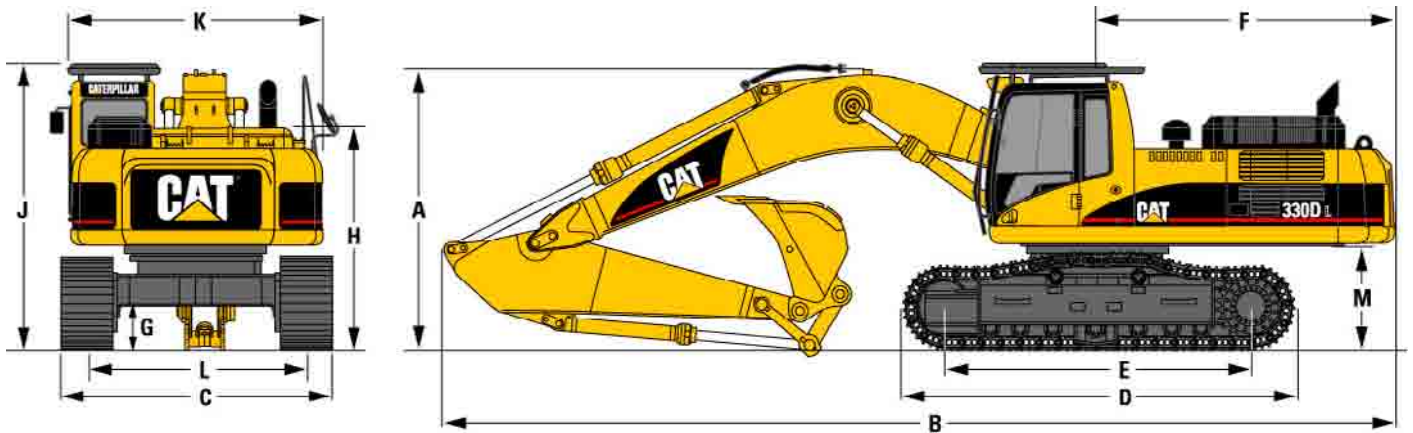
Actual weights and ground pressures will depend on final machine configuration.

		Reach boom 6500 mm				ME boom 6180 mm		VA boom 6520 mm			
		R2.1TB	R2.8DB	R3.2DB	R3.9DB	M2.1TB	M2.5TB	R2.1TB	R2.8DB	R3.2DB	R3.9DB
Stick type											
Stick length	mm	2150	2800	3200	3900	2150	2550	2150	2800	3200	3900
Bucket weight	kg	1627	1318	1318	1112	1772	1772	1627	1318	1318	1112
Bucket capacity	m <sup>3</sup>	1.9	1.6	1.6	1.1	1.9	1.9	1.9	1.6	1.6	1.1
Bucket width/type	mm	1500/X	1350/X	1350/X	1000/X	1500/R	1500/R	1500/X	1350/X	1350/X	1000/X
Operating weight*											
330D L (700 mm shoes)	kg	36 310	35 740	35 820	35 760	36 480	36 550	37 720	37 150	37 220	37 160
330D LN (600 mm shoes)	kg	35 860	35 290	35 370	35 310	36 030	36 100	37 270	36 700	36 440	36 710
Ground pressure											
330D L (700 mm shoes)	bar	0.59	0.58	0.58	0.58	0.59	0.59	0.57	0.57	0.56	0.56
330D LN (600 mm shoes)	bar	0.68	0.67	0.67	0.67	0.68	0.68	0.69	0.69	0.69	0.96
Stick weight (without bucket cylinder)	kg	1140	1104	1184	1320	1140	1216	1140	1104	1184	1320
Boom weight (without stick cylinder)	kg	2780				2800		3950			
Upperstructure (without counterweight)	kg	8710				8710		8710			
Undercarriage											
330D L (700 mm shoes)	kg	13 215				13 215		13 215			
330D LN (600 mm shoes)	kg	12 765				12 765		12 765			
Counterweight	kg	6260				6260		6260			

\* With counterweight, quick coupler, bucket, operator and full fuel.

## Dimensions

All dimensions are approximate.



	mm		mm		mm
<b>A</b> Shipping height (with bucket)		<b>B</b> Shipping length		<b>C</b> Track width	
Reach boom		Reach boom		330D L (700 mm shoes)	3290
2150 mm stick	3560	2150 mm stick	11 450	330D LN (600 mm shoes)	2990
2800 mm stick	3540	2800 mm stick	11 210	<b>D</b> Track length	5020
3200 mm stick	3340	3200 mm stick	11 150	<b>E</b> Length to centers of rollers	4040
3900 mm stick	3670	3900 mm stick	11 200	<b>F</b> Tail swing radius	3500
Mass Excavation boom		Mass Excavation boom		<b>G</b> Ground clearance	510
2150 mm stick	3590	2150 mm stick	11 140	<b>H</b> Body height	2740
2550 mm stick	3560	2550 mm stick	10 900	<b>J</b> Cab height	3280
VA boom		VA boom		<b>K</b> Body width	2990
2150 mm stick	3550	2150 mm stick	11 500	<b>L</b> Track gauge	
2800 mm stick	3630	2800 mm stick	11 230	330D L	2590
3200 mm stick	3560	3200 mm stick	11 215	330D LN	2390
3900 mm stick	3750	3900 mm stick	11 200	<b>M</b> Counterweight clearance	1220

## Track Width

Standard Undercarriage with triple grouser shoes	
Long (L)	700 mm
Long Narrow (LN)	600 mm
Optional Undercarriage with triple grouser shoes	
Long (L)	600 mm, 850 mm
	600 mm HD, 750 mm HD
Long Narrow (LN)	600 mm HD

## Drive

Maximum Travel Speed	5.0 km/h
Maximum Drawbar Pull	300 kN

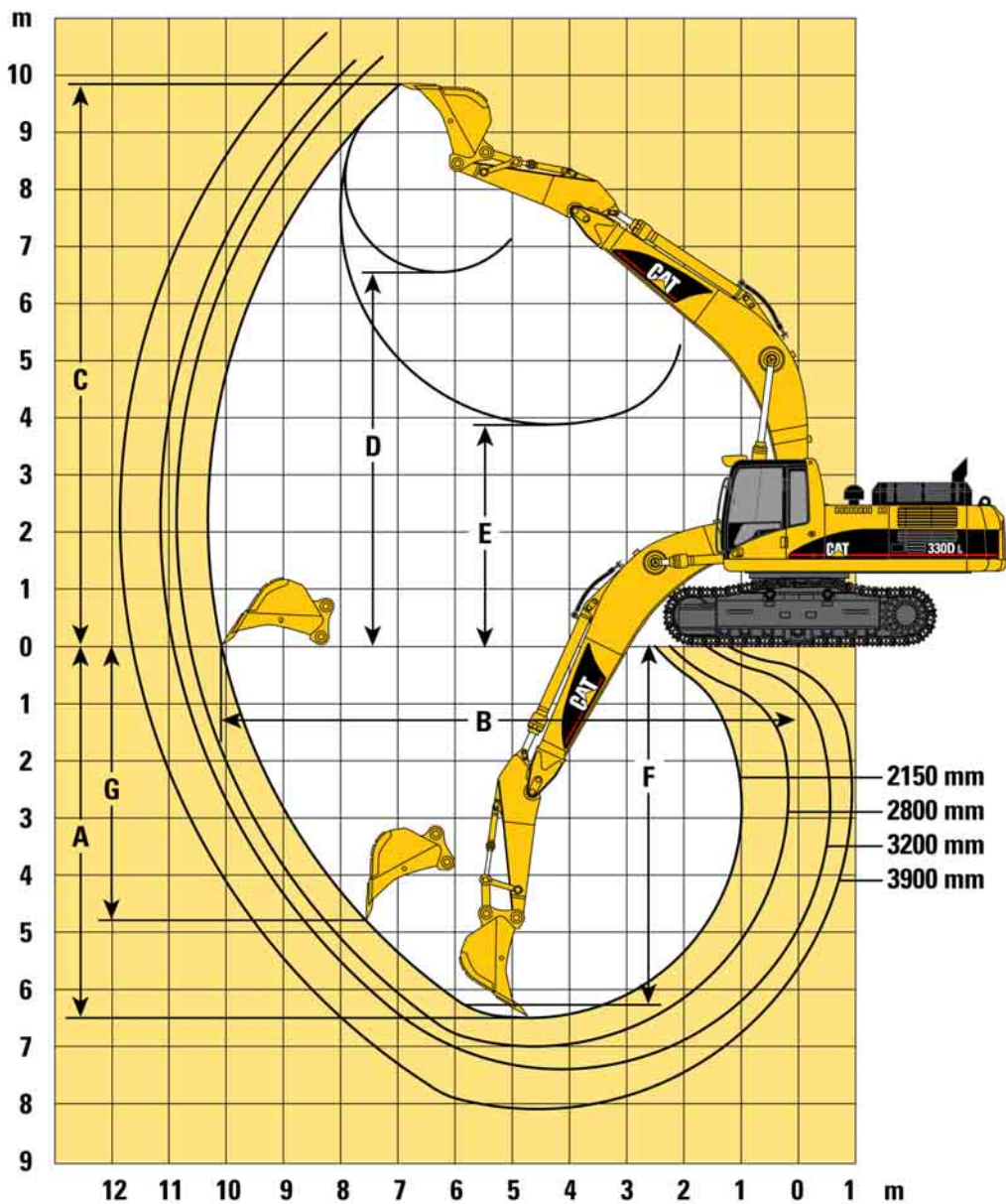
## Swing Mechanism

Swing Speed	10 rpm
Swing Torque	108.6 kNm

## Service Refill Capacities

	Liters
Fuel Tank	620
Cooling System	40
Engine Oil	40
Swing Drive (each)	19
Final Drive (each)	8
Hydraulic system (including tank)	410
Hydraulic tank	310

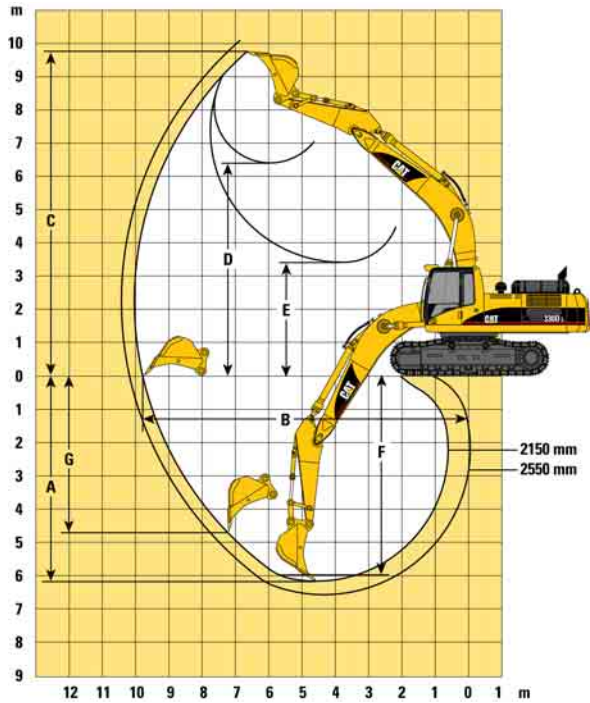
## Working Ranges – Reach Boom (6500 mm)



		R2.1TB	R2.8DB	R3.2DB	R3.9DB
Stick Length	mm	2150	2800	3200	3900
<b>A</b> Maximum Digging Depth	mm	-6500	-6990	-7390	-8090
<b>B</b> Maximum Reach at Ground Level	mm	10 070	10 620	10 920	11 640
<b>C</b> Maximum Cutting Height	mm	9820	10 300	10 240	10 710
<b>D</b> Maximum Loading Height	mm	6530	7200	7200	7640
<b>E</b> Minimum Loading Height	mm	3590	3110	2710	2010
<b>F</b> Maximum Digging Depth 2500 mm Level Bottom	mm	-6280	-6820	-7230	-7960
<b>G</b> Maximum Vertical Wall Digging Depth	mm	-4650	-4470	-4450	-6700
Bucket Tip Radius	mm	1897	1761	1761	1761
Bucket Forces (ISO 6015)	kN	269	204	194	184
Stick Forces (ISO 6015)	kN	235	194	177	158

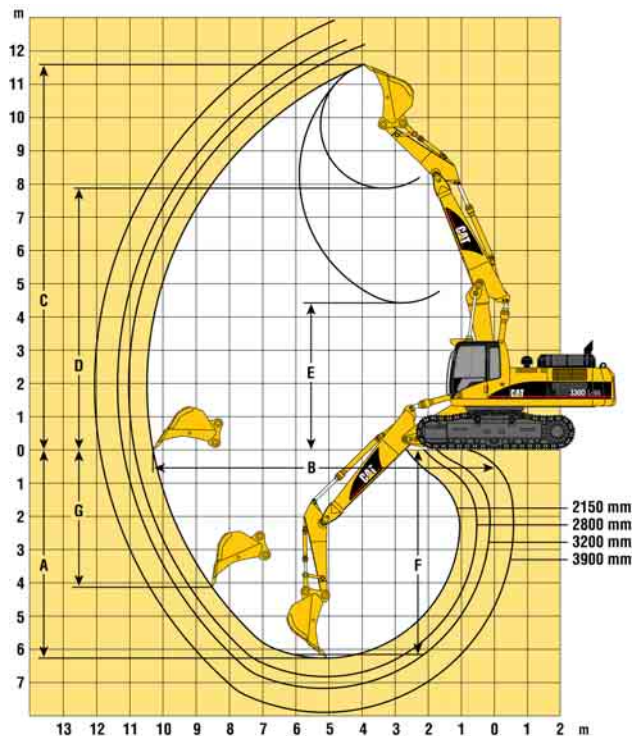


## Working Range – Mass Excavation Boom (6180 mm)



		<b>M2.1TB</b>	<b>M2.5TB</b>
Stick Length	mm	2150	2550
<b>A</b> Maximum Digging Depth	mm	-6170	-6570
<b>B</b> Maximum Reach at Ground Level	mm	9760	10 180
<b>C</b> Maximum Cutting Height	mm	9740	10 070
<b>D</b> Maximum Loading Height	mm	6410	6690
<b>E</b> Minimum Loading Height	mm	3400	3000
<b>F</b> Maximum Digging Depth 2500 mm Level Bottom	mm	-5970	-6400
<b>G</b> Maximum Vertical Wall Digging Depth	mm	-4310	-4370
Bucket Tip Radius	mm	1897	1897
Bucket Forces (ISO 6015)	kN	249	233
Stick Forces (ISO 6015)	kN	235	208

## Working Ranges – Variable Adjustable Boom (6520 mm)



		<b>R2.1TB</b>	<b>R2.8DB</b>	<b>R3.2DB</b>	<b>R3.9DB</b>
Stick Length	mm	2150	2800	3200	3900
<b>A</b> Maximum Digging Depth	mm	-6263	-6818	-7177	-7892
<b>B</b> Maximum Reach at Ground Level	mm	10 222	10 799	11 113	11 834
<b>C</b> Maximum Cutting Height	mm	11 594	12 187	12 323	12 946
<b>D</b> Maximum Loading Height	mm	7898	8684	8843	9450
<b>E</b> Minimum Loading Height	mm	4424	3932	3449	2783
<b>F</b> Maximum Digging Depth 2500 mm Level Bottom	mm	-6160	-6723	-7085	-7806
<b>G</b> Maximum Vertical Wall Digging Depth	mm	-4135	-4567	-4939	-5589
Bucket Tip Radius	mm	1897	1761	1761	1761
Bucket Forces (ISO 6015)	kN	252	206	196	187
Stick Forces (ISO 6015)	kN	237	197	180	161

















# Lift Capacities – Reach Boom (6500 mm)

All weights are in kg, without bucket, with quick coupler, heavy lift on.

## 330D L

**Short Stick**  
2150 mm

















**Shoes**  
700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
7.5 m														*8470	7670	6.91
6.0 m							*9070	*9070	*8380	6560				*8330	5980	7.88
4.5 m					*13 230	*13 230	*10 270	9070	*8850	6340				8290	5120	8.48
3.0 m					*16 400	12 750	*11 700	8450	*9540	6050				7660	4680	8.79
1.5 m					*17 270	11 920	*12 870	7950	9580	5770				7470	4520	8.82
0 m					*18 310	11 700	13 220	7680	9390	5600				7670	4610	8.6
-1.5 m			*14 510	*14 510	*17 500	11 750	13 140	7610	9340	5560				8380	5020	8.09
-3.0 m			*18 600	*18 600	*15 770	11 980	*12 100	7730						*9550	5980	7.24
-4.5 m			*15 980	*15 980	*12 540	12 460								*9410	8360	5.89

## 330D L

**Medium Short Stick**  
2800 mm

















**Shoes**  
700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
9.0 m														*7930	*7930	6.41
7.5 m									*7820	6890				*7210	6460	7.75
6.0 m									*7910	6840				*6950	5280	8.63
4.5 m					*12 210	*12 210	*9770	9450	*8520	6610	7710	4820	*6960	4640	9.18	
3.0 m					*15 550	13 570	*11 350	8860	*9340	6310	7580	4700	6970	4300	9.46	
1.5 m					*17 970	12 590	*12 750	8340	9850	6030	7420	4560	6820	4180	9.5	
0 m					*18 780	12 170	*13 570	8010	9620	5830	7320	4460	6890	4260	9.29	
-1.5 m			*12 220	*12 220	*18 420	12 100	13 410	7870	9510	5730				7510	4570	8.82
-3.0 m			*18 630	*18 640	*17 080	12 220	*12 930	7910	9560	5770				8660	5270	8.05
-4.5 m			*19 280	*19 280	*14 450	12 550	*10 870	8140						*8840	6790	6.86

## 330D L

**Medium Stick**  
3200 mm


















**Shoes**  
700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
9.0 m														*6180	*6180	6.84
7.5 m									*7230	7020				*5710	*5710	8.11
6.0 m									*7450	6920				*5560	5000	8.95
4.5 m							*9190	*9190	*8110	6670	*7530	4870	*5600	4410	9.48	
3.0 m					*14 610	13 850	*10 840	8970	*8980	6360	7600	4720	*5820	4090	9.76	
1.5 m					*17 340	12 750	*12 350	8410	*9840	6050	7430	4560	*6240	3970	9.76	
0 m			*7490	*7490	*18 590	12 200	*13 350	8020	9610	5820	7290	4430	6630	4020	9.59	
-1.5 m	*8820	*8820	*12 890	*12 890	*18 580	12 030	*13 380	7830	9470	5690	7240	4380	7080	4290	9.14	
-3.0 m	*14 220	*14 220	*18 970	*18 970	*17 540	12 090	*13 160	7820	9470	5690				8060	4880	8.39
-4.5 m					*15 310	12 370	*11 550	7990						*8840	6140	7.26
-6.0 m					*10 920	*10 920								*8470	*8470	5.52

















## 330D L

**Long Stick**  
3900 mm

















**Shoes**  
700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				
																m	
9.0 m															*4790	*4790	7.84
7.5 m															*4440	*4440	8.97
6.0 m											*6550	5060			*4310	*4310	9.73
4.5 m									*7340	6790	*6880	4940			*4320	3860	10.22
3.0 m			*20 710	*20 710	*12 860	*12 860	*9840	9170	*8290	6440	*7390	4750			*4450	3600	10.48
1.5 m					*16 040	13 080	*11 540	8530	*9270	6090	7430	4650	*4760	3490	*4710	3490	10.51
0 m			*8120	*8120	*17 960	12 280	*12 820	8050	9610	5800	7250	4390			*5140	3520	10.32
-1.5 m	*7440	*7440	*11 680	*11 680	*18 560	11 940	13 320	7770	9400	5610	7140	4280			*5830	3720	9.9
-3.0 m	*11 680	*11 680	*16 520	*16 520	*18 080	11 890	13 210	7680	9330	5550	7140	4280			*6900	4150	9.22
-4.5 m	*16 980	*16 680	*21 400	*21 400	*16 480	12 060	*12 340	7760	*9400	5630					*8060	5000	8.21
-6.0 m			*18 380	*18 380	*13 280	12 470	*9720	8070							*8050	6910	6.72

















**330D LN**  
**Short Stick**  
 2150 mm  
**Shoes**  
 600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m		
																	
7.5 m															*8470	6990	6.91
6.0 m							*9070	8760	*8380	5970					*8330	5430	7.88
4.5 m					*13 230	12 800	*10 270	8230	*8850	5750					8180	4630	8.48
3.0 m					*16 400	11 400	*11 700	7630	*9540	5460					7560	4210	8.79
1.5 m					*17 270	10 600	*12 870	7140	9460	5190					7370	4050	8.82
0 m					*18 310	10 390	13 050	6870	9260	5020					7570	4130	8.6
-1.5 m			*14 510	*14 510	*17 500	10 440	12 970	6800	9220	4980					8270	4500	8.09
-3.0 m			*18 600	*18 600	*15 770	10 660	*12 100	6920							*9550	5370	7.24
-4.5 m			*15 980	*15 980	*12 540	11 120									*9410	7520	5.89

















**330D LN**  
**Medium Short Stick**  
 2800 mm  
**Shoes**  
 600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m		
																	
9.0 m															*7930	*7930	6.41
7.5 m									*7820	6300					*7210	5890	7.75
6.0 m									*7910	3240					*6950	4800	8.63
4.5 m					*12 210	*12 210	*9770	8610	*8520	6020	7610	4370	*6960	4200	9.18		
3.0 m					*15 550	12 200	*11 350	8030	*9340	5730	7480	4250	6880	3880	9.46		
1.5 m					*17 970	11 260	*12 750	7530	9720	5450	7330	4110	6730	3760	9.5		
0 m					*18 780	10 850	13 400	7200	9490	5240	7220	4010	6890	3830	9.29		
-1.5 m			*12 220	*12 220	*18 420	10 780	13 240	7060	9390	5150					7410	4110	8.82
-3.0 m			*18 630	*18 640	*17 080	10 900	*12 930	7100	9440	5200					8550	4740	8.05
-4.5 m			*19 280	*19 280	*14 450	11 200	*10 870	7330							*8840	6120	6.86

**330D LN**  
**Medium Stick**  
 3200 mm  
**Shoes**  
 600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m		
																	
9.0 m															*6180	*6180	6.84
7.5 m									*7230	6420					*5710	5510	8.11
6.0 m									*7450	6320					*5560	4540	8.95
4.5 m							*9190	8730	*8110	6080	*7530	4420	*5600	3990	9.48		
3.0 m					*14 610	12 480	*10 840	8140	*8980	5770	7510	4270	*5820	3690	9.76		
1.5 m					*17 340	11 410	*12 350	7590	9750	5470	7330	4110	*6240	3570	9.79		
0 m			*7490	*7490	*18 590	10 870	*13 350	7210	9490	5230	7190	3980	6540	3610	9.59		
-1.5 m	*8820	*8820	*12 890	*12 890	*18 580	10 710	*13 210	7020	9340	5110	7140	3930	6990	3850	9.14		
-3.0 m	*14 220	14 220	*18 970	*18 970	*17 540	10 770	*13 160	7010	9350	5110				7950	4390	8.39	
-4.5 m					*15 310	11 040	*11 550	7180							*8840	5530	7.26
-6.0 m					*10 920	*10 920									*8470	*8470	5.52

**330D LN**  
**Long Stick**  
 3900 mm  
**Shoes**  
 600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
																	
9.0 m															*4790	*4790	7.84
7.5 m															*4440	*4440	8.97
6.0 m										*6550	4610				*4310	3910	9.73
4.5 m								*7340	6190	*6880	4480				*4320	3470	10.22
3.0 m			*20 710	*20 710	*12 860	*12 860	*9840	8330	*8290	5850	*7390	4300			*4450	3230	10.48
1.5 m					*16 040	11 730	*11 540	7710	*9270	5500	7340	4100	*4760	3120	*4710	3120	10.51
0 m			*8120	*8120	*17 960	10 950	*12 820	7230	9480	5220	7150	3940			*5140	3150	10.32
-1.5 m	*7440	*7440	*11 680	*11 680	*18 560	10 620	13 150	6960	9280	5030	7040	3830			*5830	3320	9.9
-3.0 m	*11 680	*11 680	*16 520	*16 520	*18 080	10 570	13 040	6870	9200	4970	7040	3830			6810	3710	9.22
-4.5 m	*16 680	*16 680	*21 400	*21 400	*16 480	10 740	*12 340	6950	9300	5050					*8060	4490	8.21
-6.0 m			*18 380	*18 380	*13 280	11 140	*9720	7260							*8050	6230	6.72



Load Point Height



Load Radius Over Front



Load Radius Over Side



Load at Maximum Reach

\* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

# Lift Capacities – Mass Excavation Boom (6180 mm)

All weights are in kg, without bucket, with quick coupler, heavy lift on.
















## 330D L

### Short Stick

2150 mm

### Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
7.5 m								*9090	*9090					*9110	8480	6.53
6.0 m								*9430	*9430	*8890	6570			*8880	6490	7.55
4.5 m					*13 220	*13 220	*10 520	9220	*9200	6410				8880	5510	8.18
3.0 m					*16 270	13 190	*11 900	8640	*9820	6150				8170	5020	8.49
1.5 m					*18 250	12 280	*13 060	8150	9720	5890				7970	4850	8.53
0 m					*18 560	11 970	*13 430	7860	9530	5730				8210	4960	8.3
-1.5 m			*17 860	*17 860	*17 700	11 970	*13 300	7780	9500	5700				9040	5440	7.77
-3.0 m			*19 080	*19 080	*15 700	12 210	*11 890	7920						*9880	6580	6.87
-4.5 m					*11 730	*11 730								*9410	*9410	5.43
















## 330D L

### Medium Stick

2550 mm

### Shoes

700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
7.5 m														*6640	*6640	7.08
6.0 m							*8820	*8820	*8330	6660				*6370	5840	8.04
4.5 m					*12 290	*12 290	*9960	9330	*8770	6460				*6390	5030	8.63
3.0 m					*15 430	13 490	*11 430	8740	*9480	6170				*6640	4610	8.92
1.5 m					*17 780	12 460	*12 730	8200	9720	5890				*7160	4460	8.96
0 m					*18 560	12 000	13 440	7860	9500	5690				7550	4550	8.74
-1.5 m			*16 430	*16 430	*18 070	11 910	13 290	7730	9420	5620				8220	4940	8.24
-3.0 m			*19 360	*19 350	*16 410	12 080	*12 350	7800						*9300	5840	7.4
-4.5 m			*17 340	*17 340	*13 070	12 500	*9340	8160						*9080	8000	6.09
















## 330D LN

### Short Stick

2150 mm

### Shoes

600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
7.5 m								*9090	9030					*9110	7740	6.53
6.0 m								*9430	8850	*8890	5980			*8880	5900	7.55
4.5 m					*13 220	13 150	*10 520	8380	*9200	5820				8770	4990	8.18
3.0 m					*16 270	11 830	*11 900	7810	*9820	5560				8070	4530	8.49
1.5 m					*18 250	10 950	*13 060	7330	9590	5310				7860	4360	8.53
0 m					*18 560	10 650	13 260	7050	9410	5140				8100	4460	8.3
-1.5 m			*17 860	*17 860	*17 700	10 650	13 170	6970	9380	5120				8920	4890	7.77
-3.0 m			*19 080	*19 080	*15 700	10 880	*11 890	7100						*9880	5920	6.87
-4.5 m					*11 730	11 390								*9410	8660	5.43
















## 330D LN

### Medium Stick

2550 mm

### Shoes

600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
															m	
7.5 m														*6640	*6640	7.08
6.0 m							*8820	*8820	*8330	6060				*6370	5300	8.04
4.5 m					*12 290	*12 290	*9960	8490	*8770	5870				*6390	4550	8.63
3.0 m					*15 430	12 110	*11 430	7900	*9480	5580				*6640	4150	8.92
1.5 m					*17 780	11 120	*12 730	7380	9600	5310				*7160	4000	8.96
0 m					*18 560	10 670	13 270	7050	9380	5110				7450	4080	8.74
-1.5 m			*16 430	*16 430	*18 070	10 590	13 120	6920	9290	5040				8110	4430	8.24
-3.0 m			*19 360	*19 350	*16 410	10 750	*12 350	6990						*9300	5240	7.4
-4.5 m			*17 340	*17 340	*13 070	11 160	*9340	7340						*9080	7200	6.09



Load Point Height



Load Radius Over Front



Load Radius Over Side



Load at Maximum Reach

















\* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.



















# Lift Capacities – Variable Adjustable Boom (6520 mm)

All weights are in kg, without bucket, with quick coupler, heavy lift on.

















**330D L**  
**Medium Stick**  
 3200 mm  
**Shoes**  
 700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m	
10.5 m																4.99
9.0 m								*8960	*8960					*6270	*6270	6.97
7.5 m								*9940	*9940	*8630	7110			*5760	*5760	8.22
6.0 m					*10 530	*10 530	*10 730	10 290	*8800	7210	*5970	4880	*5570	4820		9.05
4.5 m			*22 670	*22 670	*15 330	15 300	*11 720	10 000	*9220	7050	*7640	4900	*5580	4240		9.58
3.0 m			*23 670	*23 670	*17 520	14 650	*12 900	9570	*9880	6800	7680	4800	*5760	3920		9.85
1.5 m			*24 010	*24 010	*18 540	14 020	*13 490	9170	10 040	6560	7560	4610	*6130	3790		9.88
0 m	*12 900	*12 900	*21 710	*21 710	*18 470	13 540	*13 480	8810	9870	6260	7360	4410	6480	3840		9.68
-1.5 m	*18 070	*18 070	*21 690	*21 690	*18 620	12 850	*13 560	8380	9790	5900	7210	4270	*6590	4100		9.23
-3.0 m	*19 010	*19 010	*23 760	*23 760	*18 720	12 570	*13 650	8180	*9450	5670			*5740	4670		8.5
-4.5 m	*21 810	*21 810	*25 480	*25 480	*16 670	12 620	*10 350	7970								


















**330D L**  
**Long Stick**  
 3900 mm  
**Shoes**  
 700 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m	
10.5 m																		6.31
9.0 m							*6710	*6710							*4850	*4850		7.96
7.5 m							*7870	*7870	*7770	7350	*4890	*4890			*4480	*4480		9.07
6.0 m							*8530	*8530	*8270	7330	*7030	5140			*4320	4160		9.83
4.5 m					*10 630	*10 630	*10 560	10 070	*8680	7120	*7200	5120			*4300	3700		10.32
3.0 m			*25 000	*25 000	*16 410	14 820	*12 270	9710	*9310	6860	*7500	5000	*4920	3490	*4410	3430		10.57
1.5 m	*10 700	*10 700	*23 890	*23 890	*18 110	14 240	*13 150	9240	9990	6590	7540	4800	*5440	3390	*4640	3320		10.6
0 m	*12 040	*12 040	*25 500	*25 500	*18 330	13 720	*13 370	8880	9850	6340	*7420	4530			*5020	3350		10.41
-1.5 m	*15 770	*15 770	*23 590	*23 590	*18 360	12 980	*13 350	8430	9700	6020	7240	4310			*5640	3540		10
-3.0 m	*19 520	*19 520	*24 580	*24 580	*18 650	12 520	*13 550	8120	9610	5690	*6740	4180			*5430	3960		9.32
-4.5 m	*21 640	*21 640	*27 310	25 080	*17 980	12 440	*12 520	7920	*7880	5580					*4310	*4310		8.33
-6.0 m	*27 190	*27 190	21 190	*21 190	*12 620	12 540												

**330D LN**  
**Medium Stick**  
 3200 mm  
**Shoes**  
 600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				m		
10.5 m																4.99	
9.0 m									*8960	*8960					*6270	*6270	6.97
7.5 m									*9940	9710	*8630	6520			*5760	5310	8.22
6.0 m							*10 530	*10 530	*10 730	9550	*8800	6640	*5970	4410	*5570	4350	9.05
4.5 m			*22 670	*22 670	*15 330	14 100	*11 720	9240	*9220	6500	*7640	4430	*5580	3810		9.58	
3.0 m			*23 670	*23 670	*17 520	13 470	*12 900	8840	*9880	6270	7610	4330	*5760	3510		9.85	
1.5 m			*24 010	*24 010	*18 540	12 920	*13 490	*8410	9950	6000	7460	4140	*6130	3380		9.88	
0 m	*12 900	*12 900	*21 710	*21 710	*18 470	12 140	*13 480	7960	9750	5660	7260	3950	6390	3420		9.68	
-1.5 m	*18 070	*18 070	*21 690	*21 690	*18 620	11 470	*13 560	7530	9660	5300	7110	3810	*6590	3650		9.23	
-3.0 m	*19 010	*19 010	*23 760	21 840	*18 720	11 200	*13 650	7340	9440	5070			*5740	4180		8.5	
-4.5 m	*21 810	*21 810	*25 480	22 200	*16 670	11 250	*10 350	7140									

**330D LN**  
**Long Stick**  
 3900 mm  
**Shoes**  
 600 mm

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m	
10.5 m																		6.31
9.0 m							*7910	*7910	*6470	*6470					*4850	*4850		7.96
7.5 m							*7870	*7870	*7770	6790	*4890	4550			*4480	4460		9.07
6.0 m							*8530	*8530	*8270	6790	*7030	4680			*4320	3740		9.83
4.5 m					*10 630	*10 630	*10 560	9350	*8680	*6590	*7200	4670			*4300	3310		10.32
3.0 m			*25 000	*25 000	*16 410	13 710	*12 270	8970	*9310	6340	*7500	4530	*4920	3110	*4410	3060		10.57
1.5 m	*10 700	*10 700	*23 890	*23 890	*18 110	12 960	*13 150	8540	9900	6070	7460	4330	*5440	3010	*4640	2950		10.6
0 m	*12 040	*12 040	*25 500	23 740	*18 330	12 470	*13 370	8120	9720	5730	7330	4070			*5020	2970		10.41
-1.5 m	*15 770	*15 770	*23 590	22 280	*18 360	11 600	*13 350	7590	9570	5420	7140	3850			*5640	3140		10
-3.0 m	*19 520	*19 520	*24 580	21 720	*18 650	11 150	*13 550	7280	9480	5090	*6740	3720			*5430	3520		9.32
-4.5 m	*21 640	*21 640	*27 310	21 770	*17 980	11 070	*12 520	7090	*7880	4980					*4310	4270		8.33
-6.0 m	*27 190	*27 190	*21 190	*21 190	*12 620	11 170												

## Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

### Electrical

- Alternator – 80 amp
- Heavy duty maintenance free batteries (2)
- Lights working
  - Boom, both side
  - Cab interior
  - Cab mounted, two
  - Frame mounted
- Signal/warning horn

### Engine

- Automatic engine speed control
- Caterpillar C9 engine (184 kW)
  - Altitude capability to 2300 m
- Fine swing control
- Fuel filter
- High ambient cooling
- Secondary engine shut-off switch
- Side-by-side cooling system with separately mounted AC condenser
- Water separator, with level indicator, for fuel line

### Guards

- 6 mm swivel guard on undercarriage
- Heavy duty bottom guards on upper frame
- Heavy duty travel motor guards on undercarriage

### Operator Station

- Adjustable armrest
- Air conditioner, heater and defroster with automatic climate control
- Ashtray and 24 volt lighter
- Beverage/cup holder
- Bolt-on FOGS capability
- Capability to install 2 additional pedals
- Coat hook
- Electrical provision for seat heater
- EU sound criteria package
- Floor mat, washable
- Instrument panel and gauges with full color graphical display, start-up level checks
- Laminated front windshield
- Literature compartment
- Mirrors – left and right
- Neutral lever (lock out) for all controls
- Positive filtered ventilation, pressurized cab
- Rear window, emergency exit
- Retractable seat belt
- Sliding upper door window
- Stationary skylight (polycarbonate)
- Storage compartment suitable for a lunch box
- Sunshade for windshield and skylight
- Travel control pedals with removable hand levers
- Windshield wiper and washer (upper and lower)

### Undercarriage

- Automatic swing parking brake
- Automatic travel parking brakes
- Grease lubricated track
- Hydraulic track adjusters
- Idler and center section track guards
- Long (L)
- Long Narrow (LN)
- Steps – four
- Triple grouser shoes
  - 330D L – 700 mm
  - 330D LN – 600 mm
- Two speed travel

### Other Standard Equipment

- Auxiliary hydraulic valve for hydro-mechanical tools
- Cat branded XT hoses and reusable couplings
- Cat Datalink and capability to use ET
- Caterpillar one key security system with locks for doors, cab and fuel cap
- Cross-roller type swing bearing
- Counterweight with lifting eyes
- Drive for auxiliary pump
- Heavy lift mode
- Regeneration circuit for boom and stick
- S•O•S<sup>SM</sup> quick sampling valves for engine oil, hydraulic oil and coolant
- Steel firewall between engine and hydraulic pump compartment
- Wiring provisions for Product Link

# Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

## Engine

Caterpillar C9 High power engine  
(200 kW)

## Front Linkage

Bucket linkages

DB-family for DB sticks  
with lifting eye)

TB-family for TB sticks  
with lifting eye)

Buckets and quick coupler  
(see pg.11-12)

Booms (with two working lights)

Reach

– 6500 mm

Mass excavation

– 6180 mm

VA

– 6520 mm

Sticks

For reach boom

– R2.15TB1

– R2.8DB

– R3.2DB

– R3.9DB

For mass boom

– M2.15TB1

– M2.55TB1

For VA boom

– R2.15TB1

– R2.8DB

– R3.2DB

– R3.9DB

Tips

## Shoes

Triple grouser

330D L

600 mm, 850 mm

Heavy duty – 600 mm, 750 mm

330D LN

Heavy duty – 600 mm

## Guards

FOGS, bolt-on

Full length for L and LN undercarriage  
(two piece)

Track end guide for L and LN  
undercarriage

Heavy-duty swivel protection (16 mm)

## Operator Compartment

Joysticks

Four button joystick or single action  
auxiliary control

Thumb wheel modulation joystick

Lunch box storage with lid

Machine security system with  
programmable keys

Radio

AM/FM radio mounted in right hand  
console with antenna and speakers

Radio ready mounting at rear location  
including 24V to 12V converter

Seat

Adjustable high-back seat with  
mechanical suspension

Adjustable high-back seat with  
air suspension

Adjustable high-back heated seat with  
air suspension

Straight travel pedal

Visor rain protection

Windshield

1-piece standard duty

1-piece high impact resistant

50-50 split, sliding

70-30 split, sliding

## Auxiliary Controls and Lines

Auxiliary boom lines (high pressure  
for reach and mass booms

Auxiliary stick lines (high pressure  
for reach and mass booms

Basic control arrangements:

- Single action (one way high pressure circuit for hammer application)
- Tool Control
  - Combined function (one way high pressure circuit for hammer application, function for 1-way or 2-way high pressure)
  - Medium pressure circuit
  - Tool selection (via monitor 10 tools)

Universal control group for  
quick coupler

## Miscellaneous Options

Auto-cleaning attachment

Bio hydraulic oil package

Boom lowering control device with  
SmartBoom

Cab front rain protector

Converters, 7 amp-12V

– One

– Two

Electric refueling pump with auto  
shut-off

Fine filtration filter

Jump start terminals

Starting aid for cold weather with ether

Stick lowering control device

Travel alarm with cut off switch

# 330D L and 330D LN Hydraulic Excavators

HEHH3330 (11/2005) hr

Materials and specifications are subject to change without notice.  
Featured machines in photos may include additional equipment.  
See your Caterpillar dealer for available options.

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