320D L Hydraulic Excavator

Engine

Clean, quiet operation and superior power with ACERTTM Technology. The 320D L is equipped with a Cat® C6.6 ACERTTM engine which is powerful, strong and durable meeting all of your application needs. An ECO-mode feature helps to reduce fuel consumption by up to 15% for fuel conscious customers. ACERT engines incorporate proven, robust components and precision manufacturing you can count on for reliable and efficient day-long operation.

The Cat C6.6 engine is equipped with a new fuel filtration system that significantly improves the reliability and service life of the engine by limiting the negative impact of fuel contamination.

The additional fuel cooler helps preventing fuel injectors from being coked due to high fuel temperature.





Engine	
Engine Model	Cat® C6.6 ACERT™
Gross Power – SAE J1995	111 kW
Net Power – SAE J1349/ISO 9249	103 kW
Bore	105 mm
Stroke	127 mm
Displacement	6.6 L

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No engine derating needed up to 3000 m.

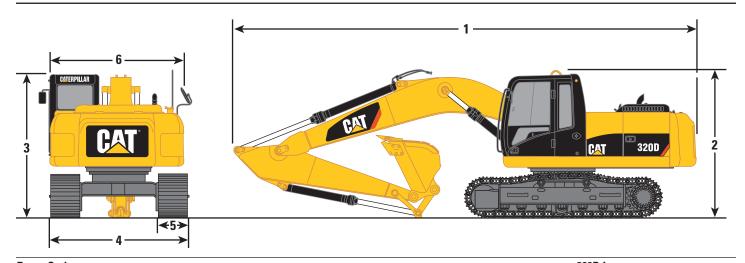
Weights	
Operating Weight	21 500 kg
• Reach Boom (HD), R2.9 Stick (HD) and 1.19 m³ bucket	, 600 mm track shoes

Service Refill Capacities	
Fuel Tank Capacity	410 L
Cooling System	29 L
Engine Oil	22 L
Swing Drive	8 L
Final Drive (each)	8 L
Hydraulic System Oil Capacity (including tank)	260 L
Hydraulic Tank Oil	120 L

Swing Mechanism						
Swing Speed	11.5 rpm					
Swing Torque	62 kN·m					
Drive						
Maximum Drawbar Pull	206 kN					
Maximum Travel Speed	5.6 km/h					
Hydraulic System						
Main Implement System – Maximum Flow (2x)	205 L/min					
Maximum Pressure – Equipment	350 bar					
Maximum Pressure – Travel	350 bar					
Maximum Pressure – Swing	250 bar					
Pilot System – Maximum Flow	32.4 L/min					
Pilot System – Maximum Pressure	39 bar					
Boom Cylinder – Bore	120 mm					
Boom Cylinder – Stroke	1260 mm					
Stick Cylinder – Bore	140 mm					
Stick Cylinder – Stroke	1504 mm					
B1 Family Bucket Cylinder – Bore	120 mm					
B1 Family Bucket Cylinder – Stroke	1104 mm					

Dimensions

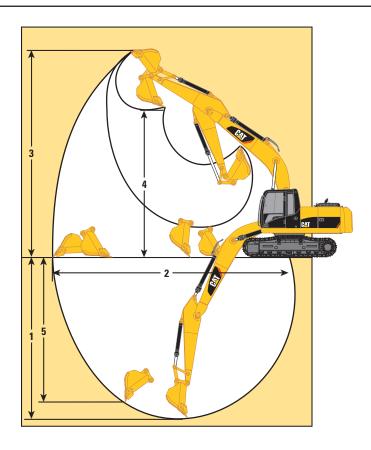
All dimensions are approximate.



Boom Options	320D L 5.7 m Reach Boom (HD)					
Stick	R2.9 (HD)					
Bucket	1.19 m³					
Shoe	600 mm					
Undercarriage	Long					
Approximate Weight	21 500 kg					
1 Shipping Length	9460 mm					
2 Shipping Height	3030 mm					
3 Cab Height	2950 mm					
4 Transport Width with 600 mm Shoes	2998 mm					
5 Track Shoe Width	600 mm					
6 Width of Upper Structure	2740 mm					
Tail Swing Radius	2750 mm					
Track Length	4455 mm					
Length to Center of Rollers	3650 mm					
Ground Clearance	475 mm					
Track Gauge	2380 mm					

Working Ranges

All dimensions are approximate.



Boom Options	Reach Boom 5.7 m (HD)				
Stick	2.9 m (HD)				
Bucket	1.19 m³				
1 Maximum Digging Depth	6720 mm				
2 Maximum Reach at Ground Level	10 020 mm				
3 Maximum Cutting Height	9490 mm				
4 Maximum Loading Height	6490 mm				
5 Maximum Digging (Vertical Wall)	6060 mm				

Heavy Duty Reach Boom Lift Capacities

Load Point Height Load Radius Over Front Load Radius Over Side Load at Maximum Reach

Boom - Reach HDBucket - NoneUndercarriage - LongStick - 2.9 m HDShoe - 600 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg							*4500	*4500			*3850	*3850	6.15
6.0 m	kg							*4800	*4800			*3600	*3600	7.28
4.5 m	kg							*5300	4950	*4950	3450	*3500	3050	7.98
3.0 m	kg					*7750	7150	*6050	4650	5250	3300	*3600	2800	8.35
1.5 m	kg					*9350	6600	*6900	4400	5100	3200	*3800	2650	8.44
Ground Line	kg			*6200	*6200	*10 250	6300	6950	4200	5000	3100	*4200	2700	8.26
−1.5 m	kg	*6600	*6600	*10 700	*10 700	*10 350	6200	6900	4100	5000	3050	4750	2900	7.78
−3.0 m	kg	*11 350	*11 350	*13 700	12 150	*9650	6250	6900	4150			5600	3450	6.94
−4.5 m	kg			*10 850	*10 850	*7800	6450					*5900	4800	5.60

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

320D L Hydraulic Excavator Standard Equipment

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

UPPER STRUCTURE

Electrical

Alternator, 80 Amp

Light, storage box mounted (one)

Signaling/Warning horn

Starter Motor 8 kW

Engine

C6.6 with ACERT™ Technology

3000 m altitude capability with no deration

4 fuel filtrations (4 micron)

Automatic engine speed control with one touch low idle

Standard power version with Economy mode

High ambient cooling package (-52° capability)

Radial seal air filter

Water separator in fuel line with 4 micron fuel filter

with water level indicator

Waved fin radiator with space for cleaning

Auxiliary hydraulic valve (one)

Automatic swing parking brake

Boom drift reducing valve

Boom lowering device for back-up

Capability of stackable valves for main valve

(maximum three valves)

Capability of auxiliary circuit (auxiliary pump and valves)

Capability of boom and stick lowering control device

Cat data link with capability of E.T.

Cat one key security system

Counterweight

Door locks and cap locks

Fixed type condenser core for air conditioning

Mirrors, rearview (frame-right, cab-left)

Product Link – Cellular PL 522

Regeneration circuit for boom and stick

Reverse swing damping valve

Secondary engine shutoff switch

Steel wall between engine and pump compartment

Stick drift reducing valve

Straight travel hydraulic circuit

Two speed travel

Undercarriage

Idler and center section track guiding

Towing eye on base frame

Track type undercarriage with grease lubricated seals, resin seal type 2

OPERATOR STATION

Cal

Adjustable armrest

Antenna and Harness

Ashtray and lighter

Beverage holder

Bi-Level air conditioner (automatic) with defroster

Capability of installing two additional pedals

Coat hook

Front windshield glass split 70/30

Interior lighting

Control lever joysticks

Laminated front windshield and tempered other windows

Mounting for two stereo speakers (two locations)

Neutral lever (lock out) for all controls

Openable front windshield with assist device

Openable metal roof hatch

Pillar mounted upper windshield wiper and washer

Pressurized cab (Positive filtered ventilation)

Radio mounting (DIN size)

Rear window, emergency exit

Removable lower windshield with in-cab storage bracket

Seat suspension, four way adjustable low back with

integrated, adjustable console

Electric provision for seat heater

Seat belt, retractable (51 mm, two inch width)

Sliding upper door window

Travel control pedals with removable hand levers

Washable floor mat

Monitor

Fuel

Economy mode

Full time clock

Language display – Full color and graphical display

Machine condition, error code and tool mode setting

Start-up level check for hydraulic oil, engine oil and coolant

Warning information, filter/fluid change information and

working hour

ADDITIONAL STANDARD EQUIPMENT

Front Linkage

Bucket linkage, B1-family

Heavy-duty 5.7 m reach boom (with left side light)

Heavy-duty R2.9B1 stick for heavy-duty reach boom

Tracks

600 mm triple grouser shoes

Auxiliary hydraulics and lines

High Pressure boom and stick lines

Tool control system

Hammer, 1 way only

Foot pedal operated 2P, one way circuit for hammers, pile drivers etc.

Air prefilter

Converter (2 sockets, 12V, max 10A)

Guard Package include Bottom, travel motor, swivel

Notes

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Materials and specifications are subject to change without notice.

Featured machines in photos may include additional equipment.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

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