



# Cat<sup>®</sup> 320D2 L

## Hydraulic Excavator with C7.1 engine

***The 320D2 L carries long time proven features and is configured for heavy construction, will deliver great fuel savings and productivity in truck loading, trenching and lifting.***

### **Performance**

- Powerful, efficient Cat<sup>®</sup> C7.1 mechanically-controlled engine meets U.S. EPA Tier 3, EU Stage IIIA equivalent emission standards.
- Low pressure fuel system allows the engine to be more robust in areas with low quality fuel
- New higher efficiency main pump increases hydraulic system efficiency, pumps deliver superior power for best in class performance
- Economy mode burns less fuel than the previous generation 320D2 L with same lifting and digging force
- Variable fan with viscous clutch reduces fuel consumption

### **Versatility**

- Multiple front linkage configurations developed to meet all application needs
- Multiple auxiliary hydraulic options meet all application needs
- Cat buckets and tips are designed and matched to optimize the machine's performance
- Multiple hydro-mechanical quick couplers and work tools are offered

### **Safety**

- Safely home everyday with a Cat excavator
- Hydraulic activation lever safely locks out all hydraulic functions
- Anti-skid plating and countersunk bolts reduce slipping in severe conditions during routine checks
- Full length firewall separates the pump compartment from the engine
- Ground level fuel cut off switch shuts down the engine in an emergency

### **Reliability/Durability**

- Typically the largest structure in the industry
- Modified X-frame structure provides long life and durability
- Robotically welded heavy duty boom and stick are standard
- Grease and Lubricated Tracks (GLT) provide longer life

### **Ease of Operation**

- Ergonomically designed cab with easy to operate controls
- Multiple seat and joystick adjustment options enhance comfort
- Excellent work site visibility from the cab enhances productivity and safety
- Optimized low effort joystick controls reduce operator fatigue
- Improved operator comfort with reduced machine noise

### **Serviceability**

- Most service locations can be accessed at ground level
- Number of fuel filters are reduced from four/three to two with remaining 500 hours service intervals which lowers operational cost
- Remote mounted filters reduce the time taken to service the machine
- Pressure taps and S-O-S<sup>SM</sup> ports help maximize uptime

### **Technology**

- Integrated Cat technology solutions increase production and minimize operating costs
- Product Link<sup>™</sup> reports key information from the machine to any location



# Cat® 320D2 L Hydraulic Excavator with C7.1 engine

## Engine

Engine Model	Cat C7.1	
Engine Power – ISO 14396	112 kW	150 hp
Net Power – SAE J1349	109 kW	146 hp
Bore	105 mm	4.13 in
Stroke	135 mm	5.31 in
Displacement	7.01 L	428 in <sup>3</sup>
<ul style="list-style-type: none"> <li>• The 320D2 L meets Tier 3, Stage IIIA equivalent emission standards.</li> <li>• Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.</li> <li>• The altitude capability (without aid) of 320D2 L is up to 4000 m (13,123 ft) with natural power derate above sea level.</li> <li>• Rating at 1,800 rpm.</li> </ul>		

## Weights

Long Undercarriage		
Maximum Operating Weight*	22 300 kg	49,200 lb
Minimum Operating Weight**	21 600 kg	47,600 lb
*R5.7 (18'8") HD Reach Boom, R2.9 (9'6") B1 HD Reach stick, HD 1.2 m <sup>3</sup> (1.57 yd <sup>3</sup> ) bucket and 790 mm (31") TG shoes.		
**R5.7 (18'8") HD Reach Boom, R2.5 (8'2") B1 HD Reach stick, HD 1.2 m <sup>3</sup> (1.57 yd <sup>3</sup> ) bucket and 600 mm (24") shoes.		

## Swing Mechanism

Swing Speed	10.9 rpm	
Swing Torque	61.8 kN·m	45,581 lbf-ft

## Drive

Maximum Travel Speed – High	5.4 km/h	3.4 mph
Maximum Drawbar Pull	205 kN	46,086 lbf

## Hydraulic System

Main System – Maximum Flow (Total)	404 L/min	106.7 gal/min
Maximum Pressure – Equipment	35 MPa	5,076 psi
Maximum Pressure – Travel	35 MPa	5,076 psi
Maximum Pressure – Swing	25 MPa	3,626 psi

## Engine RPM

Operation	1,700 rpm
Travel	1,800 rpm

## Service Refill Capacities

Fuel Tank Capacity	410 L	108.3 gal
Cooling System	25 L	6.6 gal
Engine Oil	22 L	5.8 gal
Swing Drive	8 L	2.1 gal
Final Drive	8 L	2.1 gal
Hydraulic System (Including Tank)	260 L	68.7 gal
Hydraulic Tank	138 L	36.5 gal

## Sound Performance

ISO 6395 (External)	102 dB(A)
ISO 6396 (Inside Cab)	72 dB(A)
<ul style="list-style-type: none"> <li>• When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.</li> <li>• 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 a noisy environment.</li> </ul>	

## Standards

Brakes	SAE J1026/APR90
Cab/FOGS	SAE J1356 FEB88 ISO 10262

## Working Ranges

Boom Options	HD Reach Boom 5.7 m (18'8")		HD Reach Boom 5.7 m (18'8")		Super Long Reach 8.85 m (29'0")	
Stick Options	R2.9 (9'6") B1 HD		R2.5 (8'2") B1 HD		Super Long Reach 6.28 m (20'7")	
Bucket Tip Radius	1560 mm	5'1"	1560 mm	5'1"	1230 mm	4'0"
Maximum Digging Depth	6720 mm	22'1"	6300 mm	20'8"	11 880 mm	38'12"
Maximum Reach at Ground Line	9890 mm	32'5"	9470 mm	31'1"	15 730 mm	51'7"
Maximum Loading Height	6490 mm	21'4"	6290 mm	20'8"	11 010 mm	36'1"

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