# **320D2 GC** Hydraulic Excavator 2017





Engine			Weights		
Engine Model	Cat <sup>®</sup> C4.4	ACERT™	Minimum Operating Weight	20 100 kg	44,300 lb
Engine Power (ISO 14396)	93 kW	124 hp	Maximum Operating Weight	20 800 kg	45,900 lb
Net Power (SAE J1349/ISO 9249)	85 kW	115 hp			

#### 320D2 GC Features

#### **Engine and Hydraulics**

Powered by a Cat C4.4 ACERT engine that meets U.S. EPA Tier 3/EU Stage IIIA equivalent and China Nonroad Stage III emission standards combined with a highly efficient hydraulic system, the 320D2 GC delivers competitive performance with low fuel consumption and less sensitivity to low quality fuel.

#### **Structures**

Caterpillar design and manufacturing techniques assure you get outstanding durability and service life in the right applications.

#### **Operator Station**

The spacious cab features excellent visibility and easy-to-access switches. The monitor features a full-color graphical display that is user intuitive and highly visual. Overall, the cab provides you with a comfortable working environment for maximum production and efficiency.

#### **Reduced Service and Maintenance Cost**

Routine service and maintenance can be completed quickly and easily to help you reduce ownership costs. Convenient access points, standard service intervals, and advanced filtration help keep downtime to a minimum.

#### **Complete Customer Support**

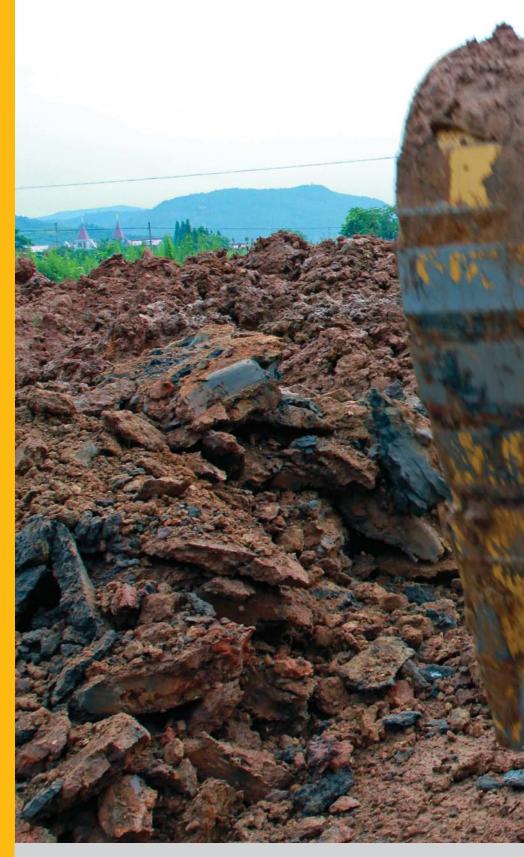
Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

#### **Cat 320D2 GC Total Solutions**

Caterpillar and its extensive dealer network offer a wide variety of solutions designed to meet the unique needs of your business.

#### **Contents**

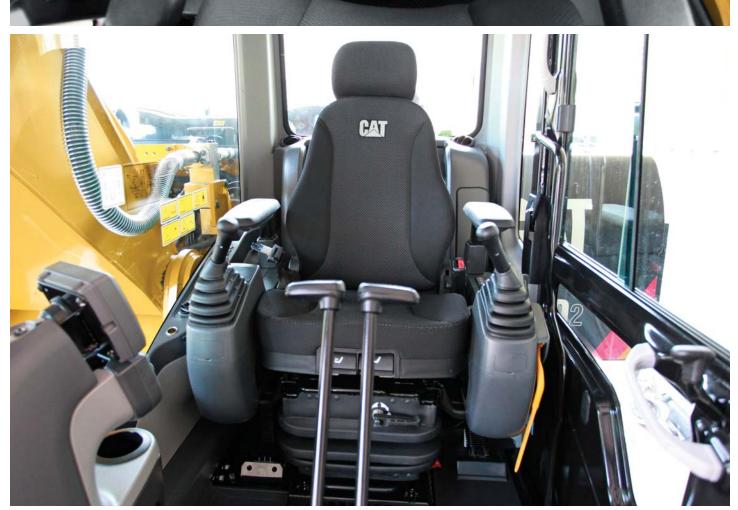
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The new Cat 320D2 GC hydraulic excavator is engineered for low owning and operating costs, simple routine maintenance, high productivity and long-term durability. Equipped with a four-cylinder, turbocharged Cat C4.4 ACERT engine, the new model is exceptionally fuel efficient; the fuel saving is up to 17%, compared with 320D2. Fuel saving results may vary depending on applications, conditions, operator behavior, and other external factors.

# **Operator Station** Enhance your comfort, operation, and visibility.



### **Operator Station**

The ergonomically designed operator station is spacious, quiet, and comfortable, assuring high productivity during a long work day. All switches are located on the right-hand console for convenient access. HAVC console is under the left hand armrest.

#### Monitor

The new monitor consists of the master caution lamp, buzzer, monitor display screen, and keypad. It has the capability of displaying information in 42 languages.

# **Joystick Control**

Low-effort pilot-operated joystick controls are designed to match your natural wrist and arm position for maximum comfort and minimum fatigue.

### Seat

The suspension seat provides a variety of adjustments to accommodate a wide range of operators. All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt adjustments to meet operator needs for comfort and productivity.

The head rest can be adjusted to meet individual height preferences, improving operator comfort and productivity during the course of a day.

# **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 left console.

# **Cab Structure and Mounts**

The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort. Thick steel tubing along the bottom perimeter of the cab improves resistance to fatigue and vibration.

#### Windows

To maximize visibility, all glass is affixed directly to the cab, eliminating window frames. The upper front windshield opens, closes, and stores on the roof above the operator with a one-touch release system.

# Wipers

Pillar-mounted wipers increase your operator's viewing area and offer continuous and intermittent modes.









# Engine

A powerful engine with excellent reliability and low fuel consumption delivering more while boosting your bottom line.



The Cat C4.4 ACERT engine with four cylinders has been designed to meet U.S. EPA Tier 3/EU Stage IIIA equivalent and China Nonroad Stage III emission standards. The proven C4.4 ACERT engine incorporates robust components and precision manufacturing you can count on for reliable and efficient operation. Less sensitive to low quality fuel, it boasts improved reliability while delivering reduced fuel consumption.

#### **Automatic Engine Control**

Automatic engine control is activated during no-load conditions; it reduces engine speed to minimize fuel consumption.

# **Electric Priming Pump**

This pump reduces the risk of fuel contamination by preventing unfiltered fuel from being backfilled during filter changes as was possible with a manual hand priming pump.

# **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.

#### **Filtration System**

The fuel system features three filters to protect the machine from low-quality fuel. The benefit to you is greater reliability and uptime.

#### Low Sound, Low Vibration

The Cat C4.4 ACERT engine improves operator comfort by reducing sound and vibration.



# **Hydraulic System**

Hydraulic system pressure of 35 000 kPa (5,076 psi) with 428 L/min (113.1 gal/min) flow from the two hydraulic pumps increases digging performance and productivity. Faster swing and travel speed were improved than last generation product.

#### **Pilot System**

An independent pilot pump enables smooth, precise control for the front linkage, swing, and travel operations.

#### **Component Layout**

The 320D2 GC 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.

#### **Boom and Stick Regeneration Circuits**

Boom and stick regeneration circuits save energy during boom-down and stick-in operation to increase efficiency, reduce cycle times and pressure loss for higher productivity, lower operating costs, and increased fuel efficiency.

# **Hydraulic Cylinder Snubbers**

Snubbers are 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.

#### **Return Capsule Filter**

The return capsule filter has a cartridge inside in order to avoid any contamination when accessing, enabling changing without oil spillage. The capsule filter with little micro meter mesh size is capable of filtering out impurities. A sensor indicates if the filter is clogged and sounds a warning to the operator through the monitor.



# **Undercarriage and Structures** Strong and durable, all you expect from Cat excavators.

#### **Main Frame**

The rugged main frame is extremely durable and designed for the toughest applications.

#### **Standard Undercarriage**

Durable Cat undercarriage absorbs stresses and provides excellent stability. The standard undercarriage is well suited for applications that require frequent repositioning of the machine, restricted work space, or uneven rocky terrain.

#### **Carbody Design and Track Roller Frames**

The 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.

#### **Rollers and Idlers**

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



# Front Linkage Reliable and durable to meet all your application needs.

Cat front linkages are designed for maximum versatility, productivity, and high efficiency.

### **Boom and Sticks**

The 320D2 GC is offered with a 5.7 m (18'8") reach boom and two stick configurations to meet your application requirements:

- The 2.5 m (8'2") stick is designed for large, high-volume earthmoving work.
- The 2.9 m (9'6") stick is a very good fit for truck loading and trenching applications.

# Attachments Efficient for your work.





1) Utility Buckets (UD) 2) General Duty Buckets (GD)

#### **Buckets**

Cat buckets and Cat Ground Engaging Tools (GET) are designed and matched to the machine to ensure optimal performance and fuel efficiency.

# **Utility Buckets (UD)**

These buckets are for digging in low-impact, low-abrasive material such as dirt, loam, and clay.

# General Duty Buckets (GD)

These buckets are designed for digging in low-impact, moderately abrasive materials such as dirt, loam, gravel, and clay.

#### **E Series Hammers**

E Series hydraulic hammers for Cat excavators, and backhoes are matched to Cat machines for optimum performance and durability in a wide variety of demolition and construction applications.

#### **B Series Hammers**

B Series hammers have outstanding field-proven reliability and durability for tough applications. High-grade steel and heat-treatment provides high output and good productivity.



# **Cat Connect Technologies**

Monitor, manage, and enhance job site operations.



Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technologyequipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:



**Equipment Management** – increase uptime and reduce operating costs.



**Productivity** – monitor production and manage job site efficiency.



**Safety** – enhance job site awareness to keep your people and equipment safe.

# **Cat Connect LINK Technologies**

LINK technologies wirelessly connect you to your equipment, giving you access to essential information you need to know to run your business. Link data can give you valuable insight into how your machine or fleet is performing so you can make timely, fact-based decisions that can boost job site efficiency and productivity.

# Product Link<sup>™</sup>/VisionLink<sup>®</sup>

Product Link is deeply integrated into your machine, helping to take the guesswork out of equipment management. Easy access to timely information like machine location, hours, fuel usage, idle time and event codes via the online VisionLink user interface can help you effectively manage your fleet and lower operating costs.



# **Service and Maintenance**

Simplified service and maintenance features save you time and money.



### **Ground-Level Service**

The design and layout of the 320D2 GC was made with the service technician in mind. Most service locations are easily accessible at ground level to allow service and maintenance to get completed quickly and efficiently.

# **Air Filter Compartment**

The air filter features a double-element construction for superior cleaning efficiency. When the air filter plugs, a warning is displayed on the cab monitor. Maintenance-free batteries are standard along with a battery disconnect switch.

# **Pump Compartment**

A service door on the right side of the upper structure allows ground-level access to the hydraulic pumps, hydraulic filters, engine oil filter, and fuel filters.

### **Radiator Compartment**

The left rear service door allows easy access to the engine radiator, hydraulic oil cooler, air-to-air aftercooler, and AC condenser. A reserve tank and drain cock are attached to the radiator for ground level maintenance.

# **Greasing Points**

A concentrated remote greasing block on the boom allows the greasing of hard-to-reach locations on the boom and stick.

#### **Diagnostics and Monitoring**

The 320D2 GC is equipped with Scheduled Oil Sampling (S $\cdot O \cdot S^{SM}$ ) ports for the hydraulic system, engine oil, and coolant. Standard hydraulic test ports enable a service technician to quickly and easily find a problem in the event of service issue.



#### **Product Support**

Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can also save money with our line of remanufactured components.

#### **Machine Selection**

Your Cat dealers can provide specific recommendations with detailed comparisons of the Cat machines you are considering before you buy. This ensures you get the right size machine and appropriate work tools to meet all of your application needs.

#### **Maintenance Services**

Repair option programs guarantee the cost of repairs up front. Condition monitoring services and diagnostic programs such as scheduled oil sampling, coolant sampling, and technical analysis help you avoid unscheduled repairs.

#### **Customer Support Agreements**

Cat dealers offer a variety of product support agreements which can be tailored to meet your specific needs. These plans can cover the entire machine – including attachments – to help protect your investment.

#### Replacement

Repair, rebuild, or replace? Your Cat dealers can help you evaluate the costs involved so you can make the right choice.

# **Safety** Enhanced safety features.



**Anti-skid plating** covers the entire upper structure and storage box to prevent slipping during maintenance. Safety is further enhanced with the addition of countersunk bolts to reduce trip hazards.

The standard **hydraulic lockout lever** isolates all hydraulic and travel functions in the lowered position. It is specifically designed to not allow the operator to leave the cab without first lowering it.

**Three circuit breakers** protect critical electrical components to increase machine uptime.

A **battery disconnect switch** helps to deter theft by isolating the battery and enhances safety when servicing the machine.

A full length **firewall** separates the engine from the hydraulic pump and offers protection in the event of an incident.

Ground level **shut-off switch** stops all fuel to the engine when activated and shuts down the machine.

The engine radiator fan is enclosed by a steel **fan guard** that provides protection when carrying out routine service and maintenance.





#### Engine

•		
Engine Model	C4.4 ACE	RT
Engine Power – ISO 14396	93 kW	124 hp
Net Power – SAE J1349/ISO 9249	85 kW	115 hp
Engine rpm		
Operation	1,800 rpm	
Travel	1,800 rpm	
Bore	105 mm	4.13 in
Stroke	127 mm	5.00 in
Displacement	4.4 L	269 in <sup>3</sup>

 The 320D2 GC meets U.S. EPA Tier 3/EU Stage IIIA equivalent and China Nonroad Stage III emission standards.

• No engine power derating required below 3000 m (9,843 ft) altitude.

Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
Power rating at 2,200 rpm.

#### Weights

Maximum Operating Weight*	20 800 kg	45,900 lb
Minimum Operating Weight**	20 100 kg	44,300 lb

\*R5.7 (18'8") reach boom, R2.9B1 (9'6") reach stick, GD 1.00 m<sup>3</sup> (1.3 yd<sup>3</sup>) bucket and 790 mm (31") shoes.

\*\*R5.7 (18'8") reach boom, R2.5B1 (8'2") reach stick, GD 1.0 m<sup>3</sup> (1.3 yd<sup>3</sup>) bucket and 600 mm (24") shoes.

#### Track

Number of Shoes Each Side	45 pieces
Number of Track Rollers Each Side	7 pieces
Number of Carrier Rollers Each Side	2 pieces

#### Swing Mechanism

Swing Speed	11.9 rpm	
Maximum Swing Torque	74 kN∙m	54,440 lbf-ft

#### Drive

Maximum Gradeability	35°/70%	
Maximum Travel Speed		
High	5.8 km/h	3.6 mph
Low	3.6 km/h	2.2 mph
Maximum Drawbar Pull	206 kN	46,311 lb

#### **Hydraulic System**

Main System – Maximum Flow (total)	428 L/min	113.1 gal/min
Maximum Pressure	35 MPa	5,076 psi
Maximum Pressure – Swing	25 MPa	3,626 psi
Pilot System – Maximum Flow (total)	23.1 L/min	6.1 gal/min
Pilot System – Maximum Pressure	3900 kPa	566 psi
Boom Cylinder – Bore	120 mm	4.7 in
Boom Cylinder – Stroke	1260 mm	49.6 in
Stick Cylinder – Bore	140 mm	5.5 in
Stick Cylinder – Stroke	1504 mm	59.2 in
Bucket Cylinder – Bore	120 mm	4.7 in
Bucket Cylinder – Stroke	1104 mm	43.5 in

#### **Service Refill Capacities**

Fuel Tank Capacity	410 L	108.3 gal
Cooling System	25 L	6.6 gal
Engine Oil	16 L	4.2 gal
Swing Drive	8 L	2.1 gal
Final Drive	8 L	2.1 gal
Hydraulic System Oil (including tank)	260 L	68.7 gal
Hydraulic Tank Oil	138 L	36.5 gal

#### **Sound Performance**

ISO 6395 (External Sound Power Level) 101 dB(A)

ISO 6396 (Interior Sound Pressure Level) 69 dB(A)

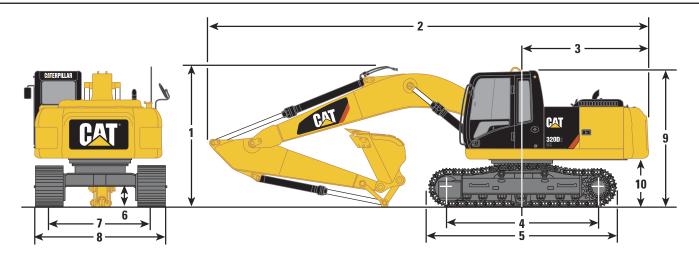
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/ windows open) for extended periods or in a noisy environment.

#### **Standards**

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

### Dimensions

All dimensions are approximate.



Shipping Height**3030 mShipping Length9460 mTail Swing Radius2750 mLength to Center of Rollers3270 mTrack Length4080 mGround Clearance***450 mTrack Gauge2200 mStandard Undercarriage (shipping)2200 mTransport Width5Standard Undercarriage2800 m600 mm (24") Shoes2800 m790 mm (31") Shoes2990 mCab Height***2950 m	n Boom* n (18'8")	Reach Boom* 5.7 m (18'8")
Shipping Length9460 mFail Swing Radius2750 mLength to Center of Rollers3270 mTrack Length4080 mGround Clearance***450 mTrack Gauge5Standard Undercarriage (shipping)2200 mTransport Width5Standard Undercarriage2800 m790 mm (31") Shoes2990 mCab Height***2950 m	31 (9'6")	R2.5B1 (8'2")
Tail Swing Radius2750 mLength to Center of Rollers3270 mTrack Length4080 mGround Clearance***450 mTrack Gauge2200 mStandard Undercarriage (shipping)2200 mTransport Width5Standard Undercarriage600 mm (24") Shoes790 mm (31") Shoes2990 mCab Height***2950 m	um (9'11")	3050 mm (10'0")
Length to Center of Rollers       3270 m         Track Length       4080 m         Ground Clearance***       450 m         Track Gauge       2200 m         Standard Undercarriage (shipping)       2200 m         Transport Width       5         Standard Undercarriage       600 mm (24") Shoes         790 mm (31") Shoes       2990 m         Cab Height***       2950 m	um (31'0")	9460 mm (31'0")
Track Length4080 mGround Clearance***450 mGround Clearance***450 mTrack Gauge2200 mStandard Undercarriage (shipping)2200 mTransport Width5Standard Undercarriage600 mm (24") Shoes600 mm (24") Shoes2800 m790 mm (31") Shoes2990 mCab Height***2950 m	nm (9'0")	2750 mm (9'0")
Ground Clearance***       450 m         Track Gauge       5tandard Undercarriage (shipping)       2200 m         Transport Width       5tandard Undercarriage       600 mm (24") Shoes       2800 m         790 mm (31") Shoes       2990 m       2990 m         Cab Height***       2950 m       2950 m	um (10'9")	3270 mm (10'9")
Track Gauge       2200 m         Standard Undercarriage (shipping)       2200 m         Transport Width       5         Standard Undercarriage       600 mm (24") Shoes         600 mm (24") Shoes       2800 m         790 mm (31") Shoes       2990 m         Cab Height***       2950 m	um (13'5")	4080 mm (13'5")
Standard Undercarriage (shipping)       2200 m         Transport Width       Standard Undercarriage         600 mm (24") Shoes       2800 m         790 mm (31") Shoes       2990 m         Cab Height***       2950 m	um (1'6")	450 mm (1'6")
Transport Width     Standard Undercarriage       600 mm (24") Shoes     2800 m       790 mm (31") Shoes     2990 m       Cab Height***     2950 m		
Standard Undercarriage         2800 m           600 mm (24") Shoes         2800 m           790 mm (31") Shoes         2990 m           Cab Height***         2950 m	nm (7'3")	2200 mm (7'3")
600 mm (24") Shoes         2800 m           790 mm (31") Shoes         2990 m           Cab Height***         2950 m		
790 mm (31") Shoes         2990 m           Cab Height***         2950 m		
Cab Height*** 2950 m	nm (9'2")	2800 mm (9'2")
	um (9'10")	2990 mm (9'10")
	nm (9'8")	2950 mm (9'8")
Counterweight Clearance*** 1020 m	nm (3'4")	1020 mm (3'4")
ket Type U	JD	UD
ket Tip Radius 1490 m	um (4'11")	1560 mm (5'1")

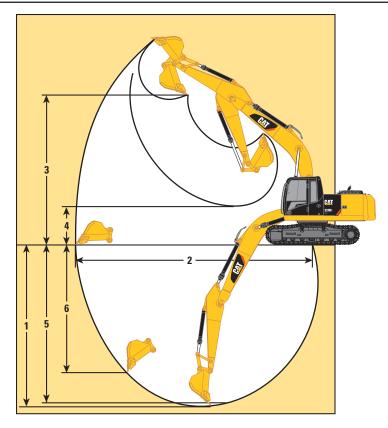
\*With UD 0.90 m³ (1.17 yd³) bucket.

\*\*Including shoe lug height.

\*\*\*Without shoe lug height.

# Working Ranges

All dimensions are approximate.



Regions	China/Asia	AME/CIS/ADSD-S	
Boom Options	Reach Boom 5.7 m (18'8'')	Reach Boom 5.7 m (18'8'')	Reach Boom 5.7 m (18'8")
Stick Options	R2.9B1 (9'6")	R2.9B1 (9'6")	R2.5B1 (8'2")
Bucket Type/Capacity	UD 0.9 m³ (1.17 yd³)	GD 1.0 m³ (1.3 yd³)	GD 1.0 m³ (1.3 yd³)
Bucket Tip Radius	1490 mm (4'11")	1560 mm (5'1")	1560 mm (5'1")
1 Maximum Digging Depth	6640 mm (21'9")	6730 mm (22'1")	6310 mm (20'8")
2 Maximum Reach at Ground Line	9780 mm (32'1")	9870 mm (32'5")	9470 mm (31'1")
<b>3</b> Maximum Loading Height	6570 mm (21'7")	6490 mm (21'4")	6290 mm (20'8")
4 Minimum Loading Height	2250 mm (7'5")	2170 mm (7'1")	2590 mm (8'6")
<b>5</b> Maximum Depth Cut for 2240 mm (8 ft) Level Bottom	6470 mm (21'3")	6560 mm (21'6")	5960 mm (19'7")
6 Maximum Vertical Wall Digging Depth	6010 mm (19'9")	5750 mm (18'10")	5350 mm (17'7")
Bucket Digging Force (SAE)	132 kN (29,700 lbf)	124 kN (27,900 lbf)	124 kN (27,900 lbf)
Bucket Digging Force (ISO)	147 kN (33,000 lbf)	140 kN (31,500 lbf)	140 kN (31,500 lbf)
Stick Digging Force (SAE)	105 kN (23,600 lbf)	104 kN (23,400 lbf)	114 kN (25,600 lbf)
Stick Digging Force (ISO)	108 kN (24,300 lbf)	107 kN (24,100 lbf)	118 kN (26,500 lbf)

# **Operating Weight and Ground Pressure**

	790 mr Triple Grou	600 mm (24") Triple Grouser Shoes		
	Weight	Ground Pressure	Weight	Ground Pressure
each Boom – 5.7 m (18'8")				
R2.9 (9'6") Stick, UD 0.9 m <sup>3</sup> (1.17 yd <sup>3</sup> ) Bucket	20 700 kg	36.2 kPa	20 100 kg	46.3 kPa
	(45,600 lb)	(5.2 psi)	(44,300 lb)	(6.7 psi)
R2.9 (9'6") Stick, GD 1.0 m <sup>3</sup> (1.3 yd <sup>3</sup> ) Bucket	20 800 kg	36.4 kPa	20 200 kg	46.5 kPa
	(45,900 lb)	(5.3 psi)	(44,500 lb)	(6.7 psi)
R2.5 (8'2") Stick, GD 1.0 m <sup>3</sup> (1.3 yd <sup>3</sup> ) Bucket	20 700 kg	36.2 kPa	20 100 kg	46.3 kPa
	(45,600 lb)	(5.2 psi)	(44,300 lb)	(6.7 psi)

### **Major Component Weights**

Base Machine (includes boom cylinders, pins, fluids, operator)	6330 kg (13,960 lb)
Standard Undercarriage	4180 kg (9,220 lb)
Counterweight	3700 kg (8,160 lb)
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 5.7 m (18'8")	1660 kg (3,660 lb)
Stick (includes lines, pins, bucket cylinder and bucket linkage)	
R2.9B1 (9'6")	980 kg (2,160 lb)
R2.5B1 (8'2")	960 kg (2,120 lb)
Track Shoes (Standard/per two track)	
600 mm (24") Triple Grouser Shoes	2460 kg (5,420 lb)
790 mm (31") Triple Grouser Shoes	3060 kg (6,750 lb)
Bucket (with sidecutter and tip)	
UD 0.9 m <sup>3</sup> (1.17 yd <sup>3</sup> )	790 kg (1,740 lb)
GD 1.00 m <sup>3</sup> (1.3 yd <sup>3</sup> )	850 kg (1,870 lb)

ISO 6016 Operating Weight Criteria: Base Machine with fronts, bucket, full fuel tank (and fluids), 75 kg (165 lb) operator. This standard excludes optional attachments.

# **Bucket Specifications and Compatibility**

		Width		Capacity		Weight		Fill	Reach	Reach Boom	
									R2.9	R2.5 (8'2")	
	Linkage	mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb	%	600 mm (24") Triple Grouser Shoes	790 mm (31") Triple Grouser Shoes	600 mm (24") Triple Grouser Shoes
Without Pin Grabber Coupler		I					1		1		
Utility Duty (UD)	В	1150	46	0.90	1.18	725	1,598	100%	۲		
General Duty (GD)	В	1050	42	1.00	1.31	729	1,607	100%	۲	۲	۲
Heavy Duty (HD)	В	1050	42	1.00	1.31	942	2,077	100%	θ	۲	۲
	-		Max	kimum loa	d pin-on (	payload 4	- bucket)	kg	2586	2735	2765
								lb	5,702	6,029	6,096
The above loads are in complian	ce with hydraul	ic excava	tor stand	ard EN474	l, they do	not excee	ed	Maximu	m Material Densit	v:	

87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

2100 kg/m³ (3,500 lb/yd³)
 1800 kg/m³ (3,000 lb/yd³)

⊖ 1500 kg/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>)

Capacity based on ISO 7451.

Bucket weight with Long tips.

# Work Tool Offering Guide (APD, ADSD-S, CIS)\*

Boom Type	Reach
Stick Size	R2.9 (9'6")
Hydraulic Hammer	H115Es
	H120Es
	B20**
These work to	ools are available for the 320D2 GC.

Consult your Cat dealer for proper match.

\*Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

\*\*Match; Pin-on or CW.

#### Work Tool Offering Guide (AME)\*

Boom Type	Reach	Reach
Stick Size	R2.9 (9'6")	R2.5 (8'2")
Hydraulic Hammer	H115Es	H115Es
	H120Es	H120Es
		H130Es**
	B20**	B20**
	These work tools are available for the 320D2 GC.	
	Consult your Cat dealer for proper match.	

\*Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

\*\*Match; Pin-on or CW.

2.9 m (9	)'6") -	R2.9B1		<b>C</b>	(18'8")		→ 600 mm (24") Triple Grouser ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓					3270 mm (10'9")		
5	1500 mm/60 in 3000 m			3000 mi	n/120 in	4500 mr	n/180 in	6000 mm/240 in		7500 mm/300 in				
	•													mm in
7500 mm <b>300 in</b>	kg Ib							*4500	4500			*3900 * <b>8,700</b>	*3900 <b>*8,700</b>	6150 <b>240</b>
6000 mm	kg							*4950	4500			*3650	3250	7290
240 in	lb							*10,850	9,650	4500	2050	*8,000	7,200	290
4500 mm <b>180 in</b>	kg Ib							*5450 <b>*11,850</b>	4350 <b>9,350</b>	4500 <b>9,650</b>	3050 <b>6,550</b>	*3550 * <b>7.800</b>	2750 <b>6,050</b>	7990 <b>320</b>
3000 mm	kg					*7950	6250	6200	4150	4400	2950	*3650	2500	8360
120 in	lb					*17,150	13,500	13,350	8,900	9,450	6,350	*8,000	5,500	330
1500 mm	kg					9200	5800	5950	3900	4300	2850	3600	2400	8450
60 in	lb			¥ 2222	¥ 0.0.0.0	19,800	12,500	12,800	8,400	9,200	6,100	7,900	5,250	340
0 mm <b>0 in</b>	kg Ib			*6200 <b>*14,300</b>	*6200 <b>*14,300</b>	8900 <b>19,150</b>	5550 <b>11,950</b>	5800 <b>12,400</b>	3750 <b>8,050</b>	4200 <b>9,050</b>	2750 <b>5,950</b>	3700 <b>8,100</b>	2450 <b>5,350</b>	8260 330
-1500 mm	kg	*6650	*6650	*10 750	10 300	8850	5450	5700	3700	4150	2750	4000	2600	7780
-60 in	lb	*14,850	*14,850	*24,400	22,100	18,950	11,750	12,250	7,900	9,000	5,900	8,750	5,750	310
-3000 mm	kg	*11 400	*11 400	*14 150	10 450	8900	5500	5750	3700			4700	3100	6950
-120 in	lb	*25,600	*25,600	*30,650	22,450	19,050	11,850	12,300	8,000			10,400	6,800	280
-4500 mm	kg			*11 300	10 800	*8100	5700					*6150	4250	5600
–180 in	lb			*24,150	23,200	*17,250	12,300					*13,450	9,550	220
		*	4				ISO 1056	57				ſ	$\prod_{h}$	

\*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.

Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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

2.9 m (9	)'6") -	R2.9B1		5.7 m	(18'8")		→ 790 mm (31")						3270 mm (10'9") + 4080 mm (13'5")		
5	1500 mm/60 in 3000					4500 mm/180 in		6000 mm/240 in		7500 mm/300 in					
	•			Ī										mm in	
7500 mm <b>300 in</b>	kg Ib							*4500	*4500			*3900 * <b>8,700</b>	*3900 * <b>8,700</b>	6150 <b>240</b>	
6000 mm	kg							*4950	4600			*3650	3350	7290	
240 in	lb							*10,850	9,900			*8,000	7,450	290	
4500 mm	kg							*5450	4500	4650	3150	*3550	2850	7990	
180 in	lb					*7050	0450	*11,850	9,600	9,950	6,750	*7,800	6,250	320	
3000 mm <b>120 in</b>	kg Ib					*7950 <b>*17,150</b>	6450 <b>13,900</b>	*6250 <b>*13,550</b>	4250 <b>9.150</b>	4550 <b>9.750</b>	3050 <b>6,550</b>	*3650 * <b>8.000</b>	2600 <b>5.650</b>	8360 <b>330</b>	
1500 mm	kg					9500	6000	6150	4050	4450	2950	3700	2500	8450	
60 in	lb					20,400	12,900	13,200	8,650	9,500	6,300	8,150	5,450	340	
0 mm	kg			*6200	*6200	9200	5700	5950	3850	4350	2850	3800	2500	8260	
0 in	lb			*14,300	*14,300	19,700	12,300	12,800	8,350	9,300	6,150	8,350	5,500	330	
-1500 mm	kg	*6650	*6650	*10 750	10 650	9100	5650	5900	3800	4300	2850	4100	2700	7780	
-60 in	lb	*14,850	*14,850	*24,400	22,800	19,500	12,150	12,650	8,150	9,250	6,100	9,050	5,950	310	
-3000 mm	kg	*11 400	*11 400	*14 150	10 800	9150	5700	5900	3850			4850	3200	6950	
— <b>120 in</b> —4500 mm	lb ka	*25,600	*25,600	*30,650 *11 300	23,150 11 100	<b>19,650</b> *8100	<b>12,250</b> 5900	12,700	8,250			<b>10,700</b> *6150	7,050 4400	<b>280</b> 5600	
-4500 mm - <b>180 in</b>	kg Ib			* <b>24,150</b>	<b>23,900</b>	*17,250	12,700					*13,450	9,850	220	
100 111	10	1	-	24,100	20,000	17,200	12,700					10,100	0,000		
* <b>1</b> <sup></sup> <b>1</b> ISO 10567															

\*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.

Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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

2.5 m (8'2	2")	R2.5B1	← <b>──</b> C	5.7 m (18'8")				nm (24") e Grouser	3270 mm (10'9") + + 4080 mm (13'5")			
		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in				
	•											mm in
7500 mm <b>300 in</b>	kg Ib									*4750 <b>*10,500</b>	*4750 <b>*10,500</b>	5600 <b>220</b>
6000 mm	kg					*5350	4450			*4350	3550	6830
240 in	lb					*11,800	9,500			*9,550	7,950	270
4500 mm	kg			*6750	6650	*5800	4300	4450	3000	*4250	2950	7570
180 in	lb			*14,550	14,350	*12,600	9,250			*9,350	6,550	300
3000 mm	kg			*8500	6150	6150	4100	4400	2950	4000	2650	7960
120 in	lb			*18,300	13,250	13,200	8,800	9,400	6,300	8,800	5,900	320
1500 mm <b>60 in</b>	kg Ib			9100 <b>19,600</b>	5700 <b>12,350</b>	5900 <b>12,700</b>	3850 8,350	4300 <b>9,200</b>	2850 6,100	3850 <b>8,500</b>	2550 <b>5,650</b>	8050 <b>320</b>
0 mm				8900	5500	5750	3750	4200	2800	3950	2600	7860
0 inii	kg Ib			<b>19,050</b>	11,850	5750 <b>12,400</b>	8,050	4200 9,050	5,950	3950 <b>8,700</b>	5,750	310
-1500 mm	kg	*11 300	10 400	8850	5500	5700	3700			4300	2850	7350
-60 in	lb	*25,750	22,300	18,950	11,800	12,300	7,950			9,500	6,250	290
-3000 mm	kg	*13 250	10 600	8950	5550	5800	3750			5250	3450	6470
–120 in	lb	*28,750	22,700	19,200	12,000	12,450	8,100			11,600	7,600	260
-4500 mm	kg			*7200	5800					*6200	5100	4980
–180 in	lb			*15,050	12,550					*13,600	11,500	200
* L ISO 10567												

\*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.

Lift capacity stays with ±5% for all available track shoes.

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

2.5 m (8'2		R2.5B1	← →  ! C	5.7 m (18'8")			2200 mm (7			3270 mm (10'9") 4080 mm (13'5")			
		3000 m	m/120 in	4500 mm/180 in		6000 mm/240 in		7500 mm/300 in					
	<u> </u>	<u>I</u>		I.								mm in	
7500 mm <b>300 in</b>	kg Ib									*4750 <b>*10,500</b>	*4750 * <b>10,500</b>	5600 <b>220</b>	
6000 mm	kg					*5350	4550			*4350	3650	6830	
240 in	lb					*11,800	9,750			*9,550	8,150	270	
4500 mm	kg			*6750	*6750	*5800	4400	4600	3100	*4250	3050	7570	
180 in	lb			*14,550	*14,550	*12,600	9,450			*9,350	6,750	300	
3000 mm	kg			*8500	6300	6300	4200	4500	3000	4100	2750	7960	
120 in	lb			*18,300	13,600	13,550	9,000	9,650	6,450	9,050	6,050	320	
1500 mm <b>60 in</b>	kg Ib			9350	5900	6100	4000 <b>8,600</b>	4400 <b>9,450</b>	2900	3950	2650	8050 <b>320</b>	
				<b>20,150</b> 9150	<b>12,650</b> 5700	<b>13,050</b> 5950	3850	4350	6,300 2850	8,700 4050	5,800 2700	7860	
0 mm <b>0 in</b>	kg Ib			9150 <b>19,600</b>	12,200	12,750	8,300	4350 9.300	6,150	4050 8,950	5,900	310	
-1500 mm	kg	*11 300	10 700	9100	5650	5900	3800	0,000	0,100	4450	2950	7350	
-60 in	lb	*25,750	22,900	19,500	12,150	12,650	8,200			9,800	6,450	290	
-3000 mm	kg	*13 250	10 900	9200	5750	5950	3850			5400	3550	6470	
–120 in	lĎ	*28,750	23,350	19,750	12,350	12,800	8,350			11,950	7,800	260	
–4500 mm	kg			*7200	6000					*6200	5200	4980	
–180 in	lb			*15,050	12,900					*13,600	11,800	200	
* L ISO 10567													

\*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.

Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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

#### **Standard Equipment**

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

#### ENGINE

- Cat C4.4 ACERT diesel engine
- Biodiesel capable up to B20
- Meets U.S. EPA Tier 3/EU Stage IIIA equivalent and China Nonroad Stage III emission standards
- 3000 m (9,843 ft) altitude capability
- Radial seal air filters (primary and secondary filter)
- Glow plugs (for cold weather start)
- Automatic engine speed control with one touch low idle
- High ambient cooling package
- Starting kit, cold weather,  $<-18^{\circ} \text{ C} (-0^{\circ} \text{ F})$
- Water separator with water level indicator
- Waved fin radiator with space for cleaning
- Two speed travel
- Electric priming pump

#### **HYDRAULIC SYSTEM**

- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- Boom drift reducing valve
- Stick drift reducing valve
- High performance hydraulic return filters

#### CAB

- Pressurized cab
- Fully adjustable mechanical suspension seat
- Adjustable armrest
- Flexible seat belt, retractable (51 mm [2 in] width)
- 70/30 split front windshield
- Laminated upper front windshield and tempered other windows
- Sliding upper door window
- Openable front windshield with assist device
- Pillar mounted upper windshield wiper and washer
- Bi-level air conditioner (automatic) with defroster (pressurized function)
- Color LCD display with warning, filter/ fluid change, and working hour information
- Control lever joysticks
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Radio mounting (DIN size)
- Two stereo speakers
- Beverage holder
- Coat hook
- Ashtray and lighter
- Storage compartment for lunch box
- Openable roof hatch
- Washable floor mat
- Roll down sunscreen

#### UNDERCARRIAGE

- Idler and center section track guiding guard
- Towing eye on base frame
- Grease lubricated track

#### ELECTRICAL

• Batteries (2 × 750 CCA)

#### **FRONT LINKAGE**

- R5.7 m (18'8") reach boom with left side light
- R2.9B1 (9'6") reach stick
- R2.5B1 (8'2") reach stick
- Bucket linkage

#### LIGHTS

- Left boom working light
- Right working light, storage box mounted
- Interior lighting

#### SECURITY

- Cat one key security system
- Door and compartment locks
- Signaling/warning horn
- Rearview mirrors
- Fire wall between engine and pump compartment
- Emergency engine shutoff switch
- Rear window, emergency exit
- Battery disconnect switch

#### COUNTERWEIGHT

• 3.7 mt (4.1 t) counterweight

#### TECHNOLOGY

- Product Link
- Cat data link receptacle

# **320D2 GC Optional Equipment**

# **Optional Equipment**

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

#### ENGINE

- Block heater (dealer installed option)
- Air prefilter for Waste and Forestry application (consult your dealer)
- Electric refueling pump with auto shut off

#### **HYDRAULIC SYSTEM**

- Hammer circuit, foot pedal operated
- Boom and stick high pressure lines
- Multi viscous oil

#### UNDERCARRIAGE

- 600 mm (24") triple grouser shoes
- 790 mm (31") triple grouser shoes

#### SECURITY

• Travel alarm

#### LIGHT

· Halogen cab-mounted working lights

# Notes

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

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