320

HYDRAULIC EXCAVATOR

Engine Power	121 kW (162 hp)
Operating Weight	22 800 kg (50,265 lb)

Cat® C4.4 Engine meets U.S. EPA Tier 4 Final and EU Stage IV emission standards with an aftertreatment system that requires no operator input or downtime.

NEXT GENERATION EXCAVATORS

Cat® Next Generation Excavators offer you more choices than ever for your business.

+ MORE MODEL OPTIONS
+ MORE STANDARD TECHNOLOGIES
+ MORE PRICE POINTS

Ready to help you make your business stronger, Cat Next Generation Excavators give you new ways to get the most work done at the lowest cost – so you put more money in your pocket.

THE CAT® 320

MOVING THE STANDARD HIGHER

The **CAT 320** raises the bar for efficiency and fuel economy in this size class. With the industry's highest level of standard factory technology, a cab made for operator comfort, plus lower fuel and maintenance costs, the 320 will help make your operation more productive and profitable.

INCREASE EFFICIENCY
UP TO 45%[1]

The Cat 320 offers the industry's highest level of standard factory-equipped technology, including Cat GRADE with 2D, GRADE with Assist, and Payload.

REDUCE FUEL CONSUMPTION
UP TO 25%[2]

A precise combination of lower engine speed and a large hydraulic pump delivers top performance while burning less fuel.

LOWER MAINTENANCE COSTS
UP TO 20%[3]

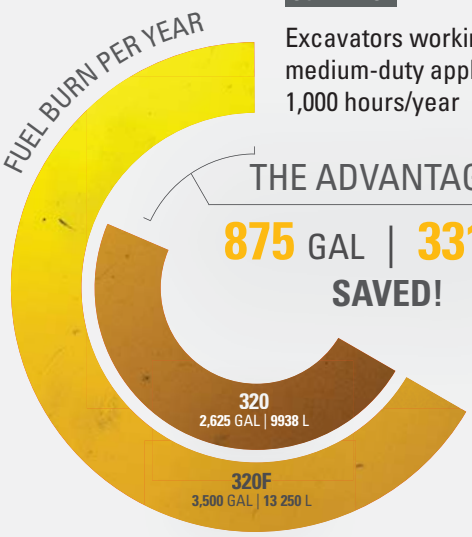
Extended and more synchronized maintenance intervals increase uptime and reduce costs compared to the 320F.

[1] Operator efficiency gains compared to traditional grading methods.
[2] Compared to the 320F.
[3] Cost reduction based on 12,000 hours of operation.

FUEL EFFICIENCY SAVINGS ADD UP

SCENARIO:

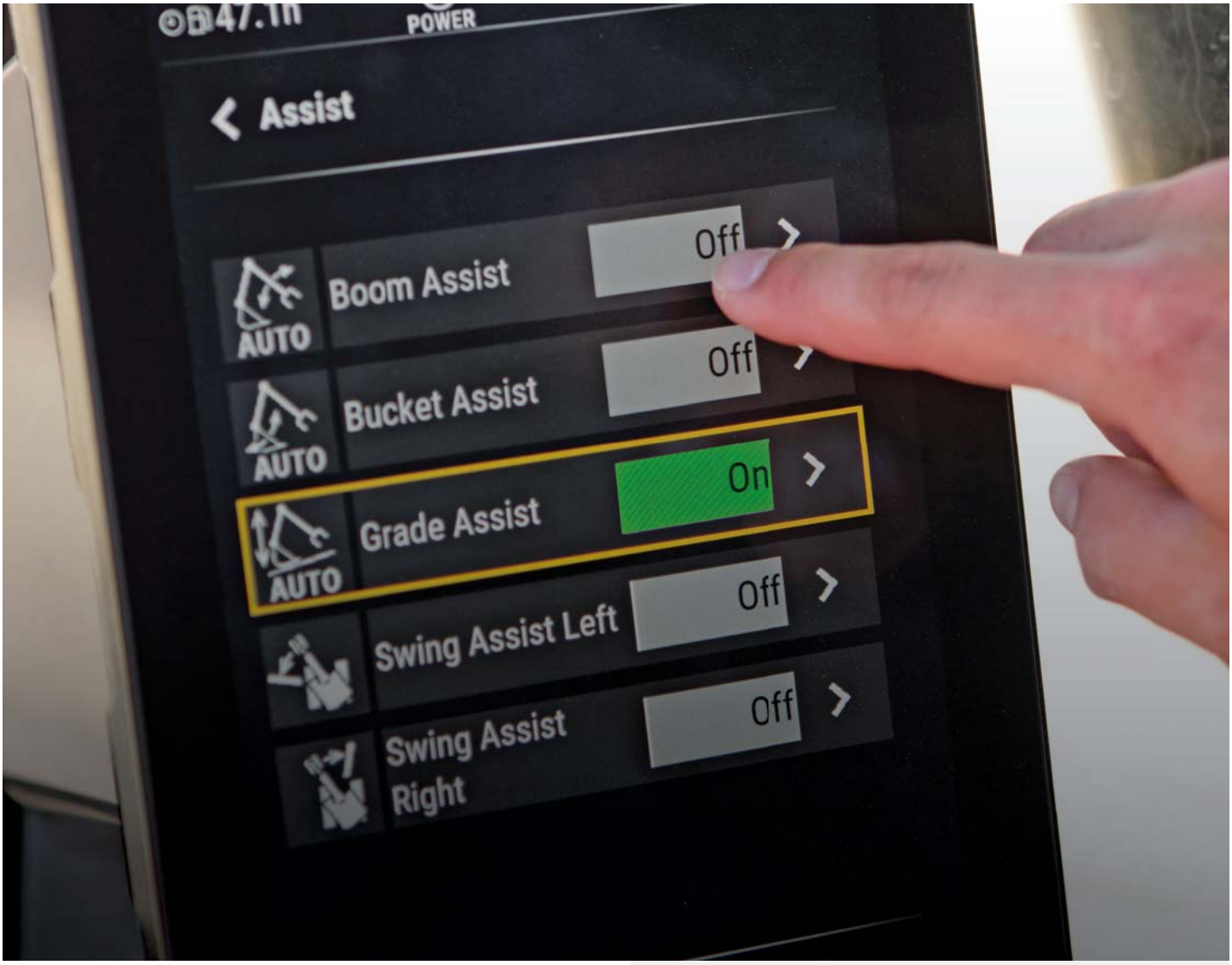
Excavators working in a medium-duty application, 1,000 hours/year



CALCULATION:

320F:
3.5 GAL/HR × 1,000 HR/YR = 3,500 GAL/YR
13.25 L/HR × 1000 HR/YR = 13 250 L/YR

320:
(3.5 GAL/HR × 75%) × 1,000 HR/YR = 2,625 GAL/YR
(13.25 L/HR × 75%) × 1000 HR/YR = 9938 L/YR



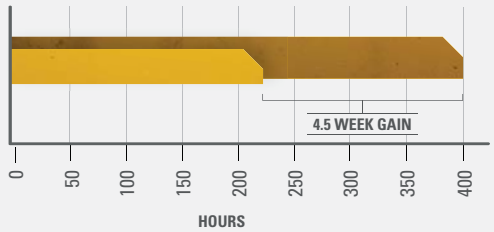
STANDARD CAT TECHNOLOGY

GETS JOBS DONE FASTER WITH LESS REWORK

Onboard Cat Technology gives you the edge. Operators of all experience levels will dig, load and grade with more confidence, speed, and accuracy. The result? Better productivity and lower costs.

WHAT WOULD YOU DO WITH 4.5 MORE WEEKS?

45% **GAIN WITH TECHNOLOGY**
means same amount of work done faster



PREVIOUS YEAR:
USING TRADITIONAL GRADING METHODS

400 hours/year, grading with stakes and checkers

CURRENT YEAR:
USING CAT 320 WITH CAT TECHNOLOGY

220 hours/year, with standard Cat GRADE

INCREASE EFFICIENCY UP TO 45%
WITH CAT TECHNOLOGY

STANDARD, SIMPLE-TO-USE TECHNOLOGIES INCLUDE:

STANDARD CAT GRADE WITH 2D

Cat GRADE with 2D helps operators reach grade faster. Operators cut and fill to exact specifications without overcutting. You can program up to four of your most commonly used target depth and slope off sets so you can get to grade with ease – a real time saver on the jobsite. Best of all, no grade checkers are needed so the work area is safer.

STANDARD CAT PAYLOAD

Cat PAYLOAD technology delivers precise load targets with on-the-go weighing, which helps prevent over/underloading and maximizes efficiency. Automated tracking helps manage production and lower cost. You can even take payload data with you. The monitor's USB port lets you download your results from one shift all the way up to 30 days of work so you can manage your progress without needing an internet connection or VisionLink® subscription.

STANDARD CAT GRADE WITH ASSIST

AUTO

Automated boom, stick and bucket movements deliver more accurate cuts with less effort. The operator simply sets the depth and slope into the monitor and activates single-lever digging.

AVAILABLE OPTIONAL UPGRADES

Cat GRADE with Advanced 2D and Cat GRADE with 3D increase productivity and expand grading capabilities. GRADE with Advanced 2D adds in-field design capabilities through an additional 254 mm (10 inch) high-resolution touchscreen monitor. GRADE with 3D adds GPS and GLONASS positioning for pinpoint accuracy. Plus it's easier than ever to connect to 3D services like Trimble Connected Community or Virtual Reference Station with the excavator's built-in communication technology.

CAT LINK TECHNOLOGY
TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

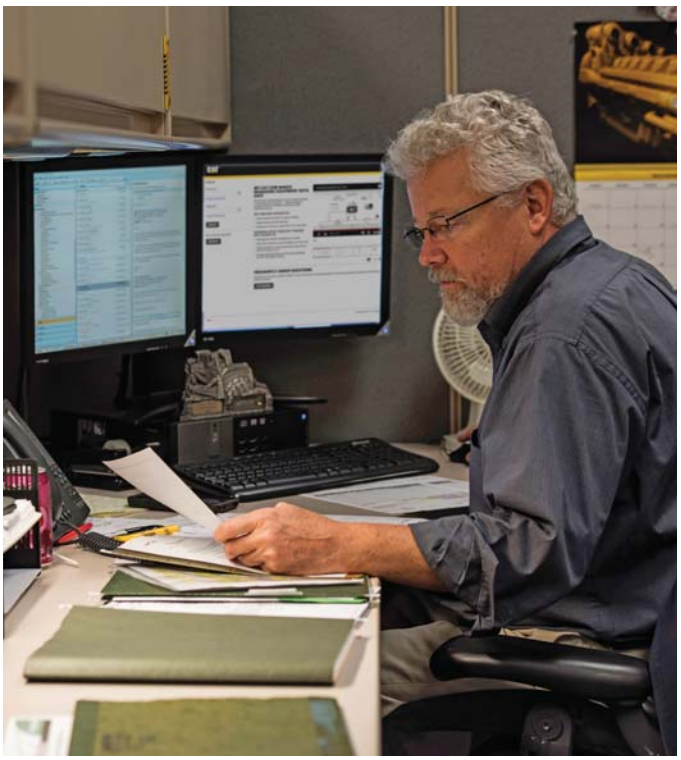
CAT LINK telematics technology helps take the complexity out of managing your jobsites – by gathering data generated by your equipment, materials, and people and serving it up to you in customizable formats.

PRODUCT LINK™

Product Link™ collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

VISIONLINK®

Access information anytime, anywhere with VisionLink – and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting (or both).



Remote Services is a suite of technologies that improve your jobsite efficiency.

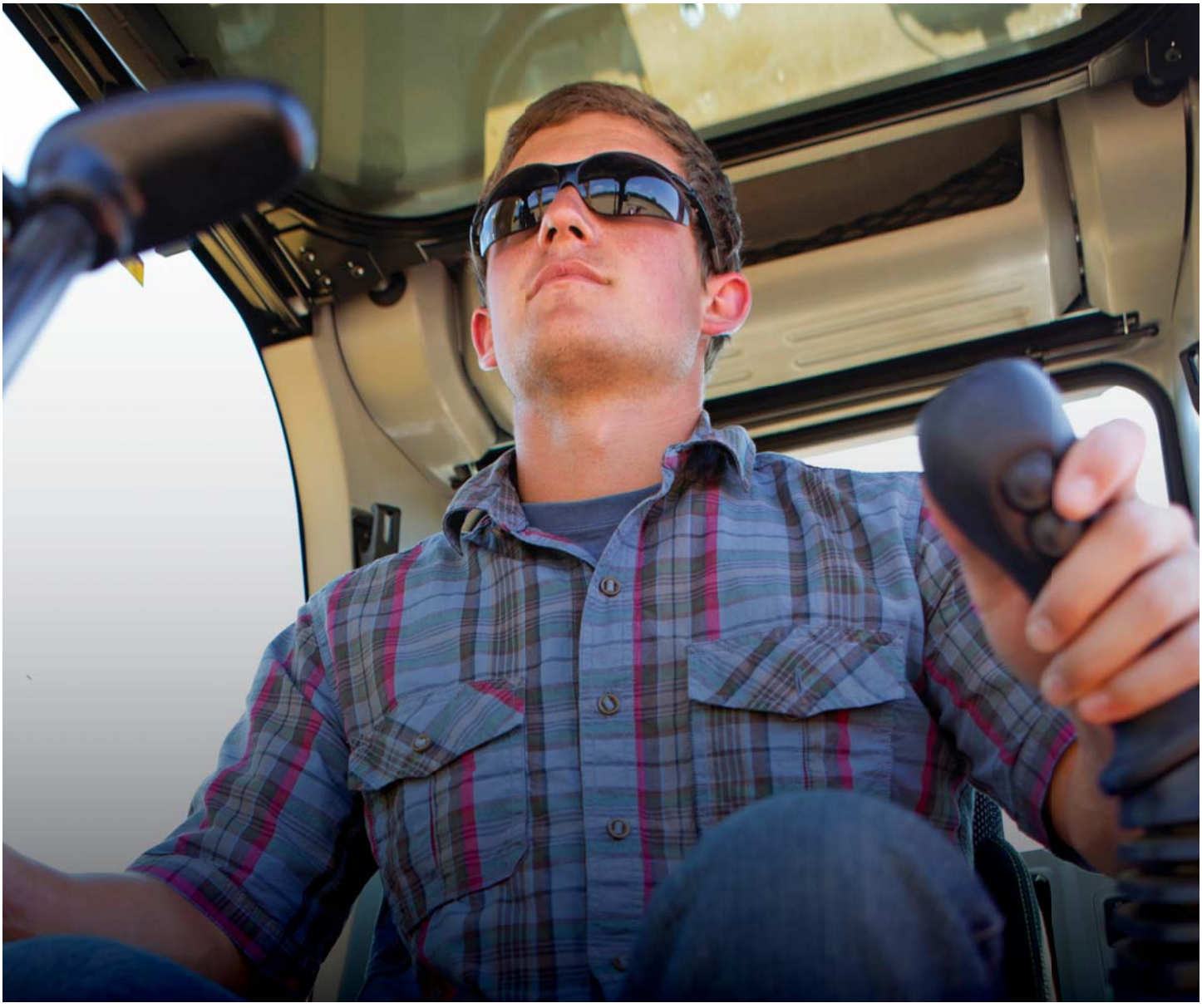
Remote Troubleshoot allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote Troubleshoot ensures the technician arrives with the correct parts and tools the first time, eliminating additional trips to save you time and money.

Remote Flash updates on-board software without a technician being present, potentially reducing update time by as much as 50%. You can initiate the update when convenient, increasing your overall operating efficiency.

The **Cat App** helps you manage your assets – at any time – right from your smartphone. You can see your fleet location, hours, and other information you need to see. You will get critical alerts for required maintenance, and you can even request service from your local Cat dealer.

CAB TAKES THE HARD OUT OF WORK

Sites where excavators typically work are rugged and challenging. That's why it's important that the 320 cab protects the operator as much as possible from the fatigue, stresses, sounds, and temperatures of the job.



SEAT AND JOYSTICK CONSOLE REDUCE FATIGUE

Comfort and efficiency of movement keep operators productive and alert all shift long. The standard seat is wide and adjustable for operators of virtually any size. The Deluxe cab package includes a heated air suspension seat; the Premium seat is both heated and cooled.

TOUCHSCREEN MONITOR

Most machine settings can be controlled through the high-resolution 254 mm/10 inch touchscreen monitor. It offers 42 languages and is easy to reach from the seat – no twisting or turning.

SMART MODE

The Smart Mode (one of three power mode settings) automatically adjusts engine and hydraulic power for the highest fuel efficiency – less power for tasks such as swinging and more power for digging. Operators can set and store their power mode preference using Operator ID; owners can lock in the mode they want their operators to use to help manage fuel consumption.

CUSTOMIZABLE JOYSTICKS

Joystick function can be customized through the monitor. Joystick pattern as well as response can be set to match operator preference. All preferences are saved with the operator ID and restored at login.

KEYLESS PUSH START

The 320 uses a keyless push-button engine start. This adds security for the machine by using Operator ID codes to limit and track machine access. Codes can be entered manually, via an optional Bluetooth® key fob, or smartphone app.

A QUIET, SAFE WORKSPACE

BUILDS OPERATOR CONFIDENCE

ISO-CERTIFIED ROPS CAB

The ISO-certified ROPS cab is sound-suppressed and sealed. The windows and lower front profile of the machine give outstanding visibility to the work area without the strain of constantly leaning forward.

ALL-AROUND VISIBILITY

Standard rearview and right-hand-sideview cameras keep operators aware of their surroundings at all times. An optional 360° Visibility feature is also available.

EASY ACCESS, CONNECTIVITY AND STORAGE

Convenience features include Bluetooth integrated radio, USB ports for charging and phone connectivity, 12V DC outlets and AUX port, storage in rear, overhead and console compartments, and cup and bottle holders.

SAFETY FEATURES

LOOK OUT FOR YOUR PEOPLE AND YOUR EQUIPMENT

Daily maintenance checks can be performed with 100% of the points accessible from ground level, making maintenance faster, easier, and safer. Checkpoints include the engine oil dipstick, fuel water separator, fuel tank water and sediment drains, and cooling system coolant level check.

LIFT ASSIST

Lift Assist helps you avoid tipping. With visual and auditory alerts, you'll know if your load is within the excavator's safe working range limits.

STAY SAFE EVERY DAY

FACT:

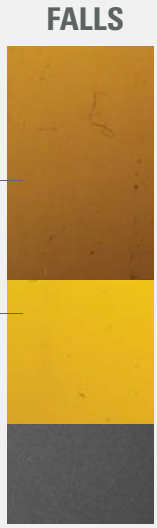
#1 cause of construction accidents: **FALLS***

49% OF FALLS RESULT IN SERIOUS INJURY

30% OF FALLS RESULT IN DEATH

320

100% **GROUND-LEVEL MAINTENANCE** HELPS PREVENT FALLS



*https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4962179/

PROTECTION IN
ALL DIRECTIONS

E-WALL SWING

E-WALL FORWARD

E-WALL CAB PROTECTION

E-WALL CEILING

E-WALL FLOOR

STANDARD 2D E-FENCE TECHNOLOGY

Whether you are using a bucket or hammer, standard 2D E-Fence automatically stops excavator motion using boundaries you set in the monitor for the entire working envelope – above, below, sides, and front. E-Fence protects equipment from damage and reduces fines related to zoning or underground utility damage. Automatic boundaries even help prevent operator fatigue by reducing overswinging and digging.

LOWER MAINTENANCE COSTS

UP TO 20%

With extended and more synchronized maintenance intervals, you get more done at a lower cost compared to the 320F. Consolidated filter locations make service faster. Hydraulic, air, and fuel tank filters have increased capacity and longer life.

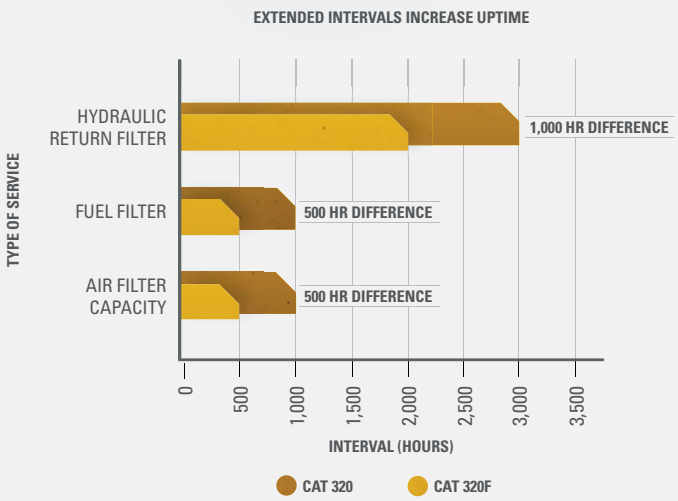
KEY MAINTENANCE COST REDUCTIONS INCLUDE:

+ Consolidated filter locations to reduce service time.
+ Oil and fuel filters with extended maintenance intervals.
+ Advanced air filter with double the dust holding capacity of the previous filter.

STOP LESS. WORK MORE.

WITH THE 320, YOU'LL USE

66 FEWER FILTERS*



*Based on 12,000 operating hours.

INCREASE YOUR PRODUCTIVITY AND PROFIT

WITH CAT ATTACHMENTS

You can easily expand the performance of your machine by utilizing any of the variety of Cat Attachments. Each Cat Attachment is designed to fit the weight and horsepower of Cat Excavators for improved performance, safety, and stability.

BUCKETS

GRAPPLES

HYDRAULIC HAMMERS

PREVENT HAMMER WEAR AND TEAR

Turn on through the monitor and the hammer will automatically stop after 30 seconds of continuous firing, preventing both tool and excavator from overworking.

MULTI-PROCESSORS

QUICK COUPLERS

RAKES

RIPPERS

SECONDARY PULVERIZERS

SHEARS

THUMBS

VIBRATORY PLATE COMPACTORS

ATTACHMENT TRACKING MADE EASY

The Cat PL161 Attachment Locator is a Bluetooth device that makes finding your attachments and other gear quick and easy. The excavator's onboard Bluetooth reader or Cat App on your phone will locate the device automatically.

Save more time and energy with the available work tool recognition feature. A simple shake of the attached tool confirms its identity; it also ensures all the attachment settings are correct so you can get to work quickly and efficiently.

TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

ENGINE		
Engine Model		Cat C4.4
Engine Power – ISO 9249	121 kW	162 hp
Engine Power – ISO 14396	122 kW	164 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in³

HYDRAULIC SYSTEM		
Main System – Maximum Flow – Implement	429 L/min	113 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Heavy Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	27 500 kPa	3,988 psi

SWING MECHANISM		
Swing Speed		11.25 rpm
Maximum Swing Torque	82 kN·m	60,300 lbf-ft

MACHINE WEIGHT		
Operating Weight – 790 mm (31") Shoes	22 800 kg	50,265 lb
Reach boom, R2.9 m (9'6") stick, HD 1.19 m³ (1.56 yd³) bucket, 790 mm (31 in) triple grouser shoes, 4.2 mt (9,300 lb) counterweight.		
Operating Weight – 600 mm (24") Shoes	21 800 kg	48,100 lb
Reach boom, R2.9 m (9'6") stick, HD 1.19 m³ (1.56 yd³) bucket, 600 mm (24 in) triple grouser shoes, 4.2 mt (9,300 lb) counterweight.		

SERVICE REFILL CAPACITIES		
Fuel Tank	345 L	86.6 gal
Cooling System	25 L	6.6 gal
Engine Oil	15 L	4.0 gal
Swing Drive (each)	12 L	3.2 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal
DEF Tank	39 L	10.3 gal

DIMENSIONS		
Boom		**Reach 5.7 m (18'8")**
Stick		**Reach 2.9 m (9'6")**
Bucket		**1.19 m³ (1.56 yd³)**
Shipping Height (top of cab)	2960 mm	9'9"
Handrail Height	2950 mm	9'9"
Shipping Length	9530 mm	31'3"
Tail Swing Radius	2830 mm	9'3"
Track Length	4450 mm	14'7"
Length to Center of Rollers	3650 mm	12'0"
Ground Clearance	470 mm	1'7"
Track Gauge	2380 mm	7'9"
Transport Width – 600 mm (24") Shoes	2980 mm	9'9"
Transport Width – 790 mm (31") Shoes	3170 mm	10'5"
Counterweight Clearance	1050 mm	3'5"

WORKING RANGES AND FORCES		
Boom		**Reach 5.7 m (18'8")**
Stick		**Reach 2.9 m (9'6")**
Bucket		**1.19 m³ (1.56 yd³)**
Maximum Digging Depth	6720 mm	22'1"
Maximum Reach at Ground Level	9860 mm	32'4"
Maximum Cutting Height	9370 mm	30'9"
Maximum Loading Height	6490 mm	21'4"
Minimum Loading Height	2170 mm	7'1"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6550 mm	21'6"
Maximum Vertical Wall Digging Depth	5190 mm	17'0"
Bucket Digging Force (ISO)	150 kN	38,811 lbf
Stick Digging Force (ISO)	106 kN	23,911 lbf

AIR CONDITIONING SYSTEM

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.9 kg of refrigerant, which has a CO_2 equivalent of 1.287 metric tonnes.

CAB FEATURES

FEATURE	DESCRIPTION	DELUXE	PREMIUM
ROPS	Standard Sound Suppression	●	x
	Advanced Sound Suppression	x	●
High-Resolution Monitor	254 mm (10 inch) Touchscreen	●	●
Keyless Push-to-Start	Engine Control	●	●
Jog Dial, Shortcut Keys	Monitor Control	●	●
Air Conditioning	Automatic Bi-level	●	●
Suspension Seat with Seat Belt	Air Adjustable	●	●
	Automatic	x	●
	Heated	●	x
	Heated & Cooled	x	●
Console	Infinitely Adjustable	●	●
	Tilt-Up Left Side	●	●
Bluetooth Integrated Radio	With USB Ports	●	●

● - standard x - not available

STANDARD & OPTIONAL EQUIPMENT

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

CAB	STANDARD	OPTIONAL
ROPS, standard sound suppression (Deluxe only)	•	
ROPS, advanced sound suppression (Premium only)	•	
Air-adjustable seat with heat (Deluxe only)	•	
Auto-adjustable seat with heat and air ventilation (Premium only)	•	
High-resolution 254 mm (10 inch) LCD touchscreen monitor	•	

CAT TECHNOLOGY	STANDARD	OPTIONAL
Cat Product Link	•	
Cat GRADE with 2D	•	
Cat GRADE with Advanced 2D (not available on SLR)		•
Cat GRADE with 3D (not available on SLR)		•
Cat GRADE with Assist	•	
Cat PAYLOAD	•	
E-Fence	•	
Lift Assist	•	
Remote Flash capability	•	
Remote Troubleshoot capability	•	

ENGINE	STANDARD	OPTIONAL
Three selectable power modes	•	
Automatic engine speed control	•	
52° C (125° F) high-ambient cooling capacity	•	
–32° C (–25° F) cold start capability	•	
Double element air filter with integrated precleaner	•	
Reversing electric cooling fans	•	
Biodiesel capability up to B20	•	

HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Boom and stick regeneration circuits	•	
Boom and stick lowering check valves		•
Auto hydraulic warm up	•	
Auto two-speed travel	•	
Boom and stick drift reduction valve	•	
Hammer return filter circuit		•
Advanced Tool Control (two pump, one/two way high-pressure flow)	•[1]	•
Medium-pressure circuit		•
Quick coupler circuit for Cat Pin Grabber	•[2]	•

BOOMS AND STICKS	STANDARD	OPTIONAL
5.7 m (18'8") reach boom, 2.9 m (9'6") stick		•
8.85 m (29'0") SLR boom, 6.28 m (20'7") SLR stick		•

UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
600 mm (24") triple grouser shoes		•
700 mm (28") triple grouser shoes		•
790 mm (31") triple grouser shoes		•
900 mm (35") triple grouser shoes		•
Tie-down points on base frame	•	
4200 kg (9,300 lb) counterweight		•
4700 kg (10,400 lb) counterweight for SLR boom and stick		•

ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Two 1,000 CCA maintenance-free batteries	•	
Programmable time-delay LED working lights	•	
LED chassis light, left-hand/right-hand boom lights, cab lights	•	

SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Sampling ports for Scheduled Oil Sampling (S·O·S[SM])	•	
Ground-level and platform-level engine oil dipsticks	•	

SAFETY AND SECURITY	STANDARD	OPTIONAL
Rear and right-hand-sideview cameras	•	
360° Visibility		•
Ground-level engine shutoff switch	•	
Right-hand handrail and hand hold	•	
Signaling/warning horn	•	

[1] *ANZ and Europe only.*
[2] *Europe only.*

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.

For additional information, refer to the Technical Specifications brochures for the 320 GC, 320 and 323 models available at *www.cat.com* or your Cat dealer.

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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AEXQ2329-03
Replaces AEXQ2329-02
Build Number: 07C