

323 GX Hydraulic Excavator

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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Cat® C4.4	
123.7 kW	166 hp
168 hp (met	ric)
129.4 kW	174 hp
176 hp (met	ric)
105 mm	4 in
127 mm	5 in
4.4 L	269 in ³
Up to B20 ⁽¹⁾	
	123.7 kW 168 hp (met 129.4 kW 176 hp (met 105 mm 127 mm 4.4 L

• Cat C4.4 engine emits equivalent to U.S. EPA Tier 3 and EU Stage IIIA.

- Recommended for use up to 4500 m (14,764 ft) altitude with engine power derate above 3000 m (9,842 ft).
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 2,000 rpm.
- ⁽¹⁾Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Swing Mechanism

Swing Speed	11.13 rpm	
Maximum Swing Torque	82 kN·m	60,333 lbf-ft

Weights

Operating Weight (Non-Rollover 21 600 kg 47,600 lb Protective Structure [Non-ROPS])

• Reach boom, R2.9B1 (9'6") stick, General Duty (GD) 1.19 m³ (1.56 yd³) bucket, 600 mm (24") triple grouser shoes and 4250 kg (9,370 lb) counterweight.

Operating Weight (ROPS)

21 700 kg 47,800 lb

• Reach boom, R2.9B1 (9'6") stick, GD 1.19 m³ (1.56 yd³) bucket, 600 mm (24")triple grouser shoes and 4250 kg (9,370 lb) counterweight.

Track

Optional Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	790 mm	31 in
Number of Shoes (each side)	47	
Number of Track Rollers (each side)	7	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35° +/-70%	
Maximum Travel Speed	5.7 km/h	3.6 mph
Maximum Drawbar Pull	200 kN	44,917 lbf

Hydraulic System

Main System – Maximum Flow – Implement	429 L/min (214.5 × 2 pumps)	113 gal/min (56.7 × 2 pumps)
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	27 500 kPa	3,988 psi
Boom Cylinder – Bore	120 mm	5 in
Boom Cylinder – Stroke	1260 mm	50 in
Stick Cylinder – Bore	140 mm	6 in
Stick Cylinder – Stroke	1504 mm	59 in
Bucket Cylinder – Bore	120 mm	5 in
Bucket Cylinder – Stroke	1104 mm	43 in

Service Refill Capacities

390 L	103 gal
24.5 L	6.5 gal
15 L	4 gal
5.5 L	1.5 gal
4.5 L	1.2 gal
218 L	57.6 gal
115 L	30.4 gal
	24.5 L 15 L 5.5 L 4.5 L 218 L

Standards

Brakes	ISO 10265:2008
ROPS (optional)	ISO 12117-2 2008
Cab/Operator Protective	ISO 10262:1998 Level II
Guards (OPG) (optional)	

Sound Performance

Non-ROPS

GB 16710:2010 (external): 105 dB(A)

GB 16710:2010 (inside cab): 80 dB(A)

ROPS

ISO	6395:2008	(external):	103	dB(A)

ISO 6396:2008 (inside cab): 70 dB(A)

• 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.

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg of refrigerant, which has a CO_2 equivalent of 1.216 metric tonnes.

Operating Weights and Ground Pressures

	600 mm (24 in) Triple Grouser Shoes		790 mm (31 in) Triple Grouser Shoes	
Base Machine Configurations	Weight	Ground Pressure	Weight	Ground Pressure
Base Frame with Track Rollers and Carrier Rollers	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
4250 kg (9,370 lb) Counterweight + 4.25 m (13'11") Undercarriage Base Machine (n	on-ROPS)			
Reach Boom + R2.9B1 (9'6") Stick + 1.19 m ³ (1.56 yd ³) GD Bucket + HP tool control lines	21 600 (47,600)	47.4 (6.9)	22 100 (48,700)	36.8 (5.3)
4250 kg (9,370 lb) Counterweight + 4.25 m (13'11") Undercarriage Base Machine (R	OPS)			
Reach Boom + R2.9B1 (9'6") Stick + 1.19 m ³ (1.56 yd ³) GD Bucket + HP tool control lines	21 700 (47,800)	47.6 (6.9)	22 200 (48,900)	37.0 (5.4)

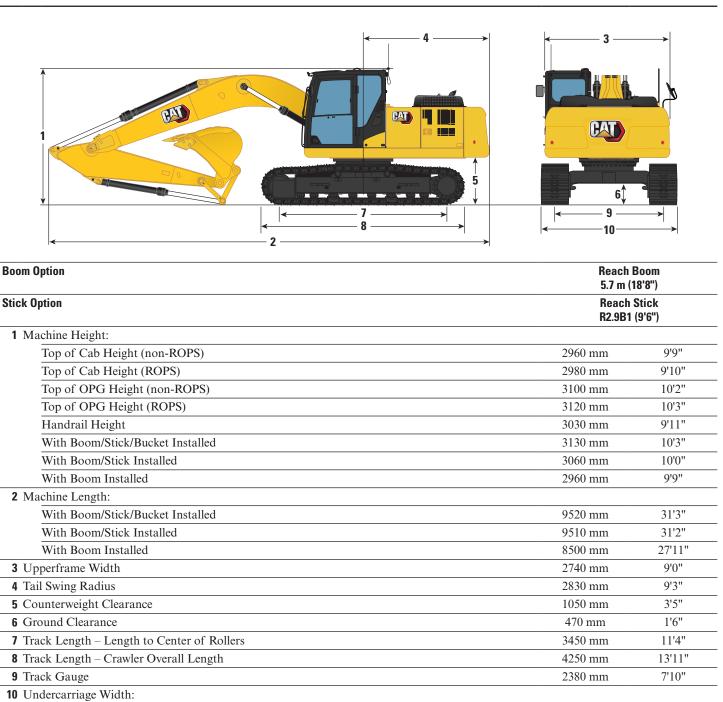
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

Major Component Weights

	kg	lb
Base Machine without ROPS (with 4250 kg [9,370 lb] counterweight, upper frame, 4.25 m [13'11"] undercarriage with rollers and two boom cylinders – does not include boom, stick, bucket, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator).	14 700	32,410
Base Machine with ROPS (with 4250 kg [9,370 lb] counterweight, upper frame, 4.25 m [13'11"] undercarriage with rollers and two boom cylinders – does not include boom, stick, bucket, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator).	14 850	32,700
Track Shoes:		
600 mm (24") Width, 10 mm (0.39") Thick Triple Grouser Track Shoes	2700	5,960
790 mm (31") Width, 10 mm (0.39") Thick Triple Grouser Track Shoes with Step Extension	3210	7,100
Two Boom Cylinders	360	800
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	380	840
Counterweight:		
4250 kg (9,370 lb) Counterweight	4250	9,370
Booms (including lines, pins, stick cylinder):		
Reach Boom 5.7 m (18'8")	1690	3,720
High Pressure (HP) Tool Control Lines for Reach Boom 5.7 m (18'8")	80	180
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R2.9B1 (9'6")	1060	2,340
HP Tool Control Lines for Reach Stick R2.9B1 (9'6")	50	110
Bucket (without linkage, with tips and side cutters):		
1.19 m ³ (1.56 yd ³) GD with Advansys [™] Tips	890	1,970

Dimensions

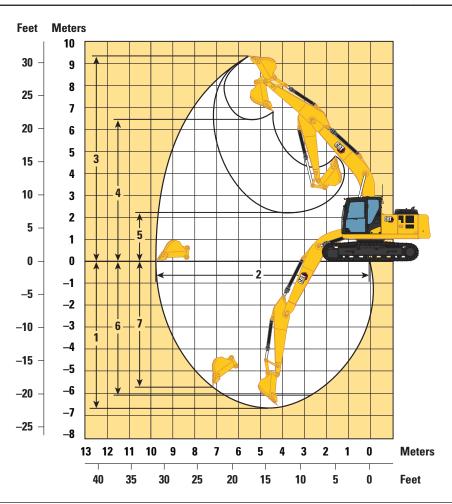
All dimensions are approximate and may vary depending on bucket selection.



600 mm (24") Shoes	2980 mm	9'9"	
790 mm (31") Shoes	3170 mm	10'5"	
Bucket Type	GD	GD	
Bucket Capacity	1.19 m ³	1.56 yd ³	
Bucket Tip Radius	1572 mm	5'2"	

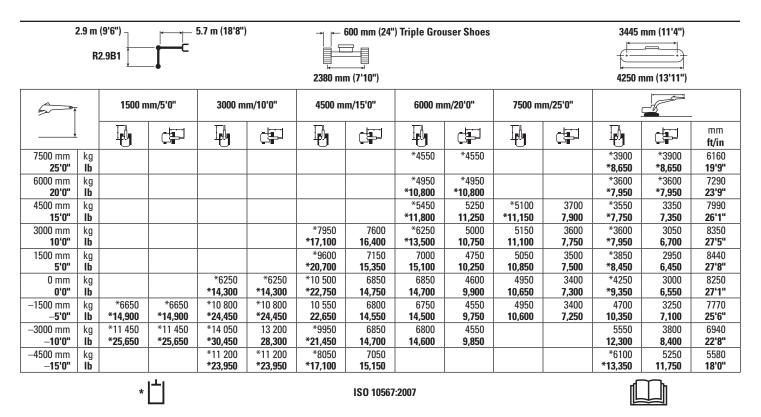
Working Ranges

All dimensions are approximate and may vary depending on bucket selection.



Boom Option		Reach Boom 5.7 m (18'8'')			
Stick Option	Reach R2.9B1				
1 Maximum Digging Depth	6710 mm	22'0"			
2 Maximum Reach at Ground Line	9860 mm	32'4"			
3 Maximum Cutting Height	9470 mm	31'1"			
4 Maximum Loading Height	6500 mm	21'4"			
5 Minimum Loading Height	2180 mm	7'2"			
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6020 mm	19'9"			
7 Maximum Vertical Wall Digging Depth	5740 mm	18'10"			
Minimum Working Equipment Radius	3650 mm	12'0"			
Bucket Digging Force (ISO)	140 kN	31,428 lbf			
Stick Digging Force (ISO)	107 kN	23,942 lbf			
Bucket Type	G	D			
Bucket Capacity	1.19 m ³	1.56 yd ³			
Bucket Tip Radius	1572 mm	5'2"			

Reach Boom Lift Capacities – Counterweight: 4250 kg (9,370 lb) – without Bucket



*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.

Reach Boom Lift Capacities – Counterweight: 4250 kg (9,370 lb) – without Bucket

2.9 m (9'6") R2.9B1				-→						3445 mm (11'4") 4250 mm (13'11")				
5			1500 mm/5'0" 3000						7500 m	m/25'0"				
│↓	<u>.</u>	I.		ĪĄ	Carl	I.		I.	C -	I		I.		mm ft/in
7500 mm 25'0''	kg Ib							*4550	*4550			*3900 *8,650	*3900 * 8,650	6160 19'9''
6000 mm 20'0''	kg Ib							*4950 *10,800	*4950 *10,800			*3600 * 7,950	*3600 * 7,950	7290 23'9 "
4500 mm 15'0"	kg Ib							*5400 * 11,800	5350 11,500	*5100 * 11,500	3800 8,100	*3550 * 7,750	3400 7,500	7990 26'1"
3000 mm 10'0"	kg Ib					*7950 *17,100	7750 16,750	*6250 *13,500	5100 11,000	5300 11,350	3700 7,900	*3600 * 7,950	3100 6,850	8350 27'5"
1500 mm 5'0"	kg Ib					*9600 * 20,700	7300 15,700	*7050 * 15,300	4900 10,500	5150 11,100	3550 7,650	*3850 * 8,450	3000 6,600	8440 27'8''
0 mm 0'0"	kg Ib			*6250 *14,300	*6250 *14.300	*10 500 * 22.750	7000 15,100	7000 15,050	4700 10,150	5100 10,900	3500 7,500	*4250 * 9.350	3050 6.700	8250 27'1"
-1500 mm - 5'0"	kg Ib	*6650 * 14,900	*6650 * 14,900	*10 800 *24,450	*10 800 * 24,450	*10 600 * 23,000	6950 14,900	6900 14,850	4650 10,000	5050 10,850	3450 7,450	4800 10,600	3300 7,300	7770 25'6"
-3000 mm - 10'0"	kg Ib	*11 450 * 25,650	*11 450 * 25,650	*14 050 * 30,450	13 500 28,900	*9950 * 21,450	7000 15,050	6950 14,950	4650 10,050			5700 12,600	3900 8,600	6940 22'8''
-4500 mm - 15'0"	kg Ib			*11 200 *23,950	*11 200 *23,950	*8050 * 17,100	7200 15,500					*6100 * 13,350	5350 12,050	5580 18'0''
		*			·		ISO 10567	:2007				Ĺ		

*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.

Bucket Specifications and Compatibility

							Count	erweight	4250 kg (9,370 lb)
		Width		Width Capacity		Weight		Fill	Reach Boom
	Linkage	mm	in	m ³	yd ³	kg	lb	%	R2.9 m (9'6")
Pin-On (No Quick Coupler)									
General Duty	В	1200	48	1.19	1.56	890	1,962	100	۲
Maximum load with pin-on (payload + bucket)						kg	3085		
								lb	6,801

The above loads are in compliance with hydraulic excavator standard EN474-5:2006+A3:2013, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Maximum Material Density:

1800 kg/m³ (3,000 lb/yd³)

Capacity based on ISO 7451:2007.

Bucket weight with General Duty tips.

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

Attachments Offering Guide

Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

✓ Match † Allowed usage on machine less than	50%
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Counterweight		4250 kg (9,370 lb
Boom Type		Reach Boom
Stick Length		R2.9 m (9'6")
Hydraulic Hammers	H120 GC	\checkmark
	H120 GC Side Mount	\checkmark
	H120 GC S	\checkmark
	H120 S	\checkmark
	H130 S	à
Compactors (Vibratory Plate)	CVP110	\checkmark

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
BOOMS, STICKS AND LINKAGES			ENGINE		
5.7 m (18'8") Reach boom	\checkmark		Cat® C4.4 double turbo diesel engine	\checkmark	
2.9 m (9'6") Reach stick	\checkmark		Two selectable modes: Power, Smart	\checkmark	
Bucket linkage with lifting eye, B1 type	\checkmark		Up to 4500 m (14,764 ft) altitude	\checkmark	
САВ			capability with derate from 3000 m		
Sound suppressed cab with viscous mounts	\checkmark		(9,842 ft)		
High-resolution 203 mm (8") LCD touchscreen monitor	\checkmark		52° C (125° F) high-ambient cooling capacity	✓	
Mechanical-suspension seat with	✓		-25° C (-13° F) cold start capability	✓	
head rest and arm rest			Electric fuel priming pump	✓	
51 mm (2") orange seat belt	\checkmark		Direct drive fan	√	
Auto bi-level air conditioner	\checkmark		Two-stage fuel filtration system with	\checkmark	
Keyless push-to-start engine control	\checkmark		water separator and indicator Sealed double element air filter	✓	
Fixed left-side console	\checkmark		with pre-cleaner	v	
1-button joysticks	\checkmark		HYDRAULIC SYSTEM		
3-button joysticks		\checkmark	Electronic main control valve,	✓	
AM/FM Bluetooth [®] radio with USB/Auxiliary ports	\checkmark		hammer ready Back-to-back electronic pump	✓	
Speakers (mounted on roof)	\checkmark		Boom and stick regeneration circuits	· ·	
24V DC outlet	\checkmark		Automatic hydraulic oil warm up	· ✓	
Storage compartments	\checkmark		Automatic hydraulic on warm up Automatic two-speed travel	· ✓	
Cup holder	\checkmark		Hammer lines	↓	
70/30 tempered glass windshield	\checkmark		Hammer return filter	•	√
Rear window emergency exit	√		High performance hydraulic return filter	✓	v
Radial wiper with washer	✓		SAFETY AND SECURITY	v	
Openable steel hatch	√		Anti-skid plating with countersunk bolts	√	
LED dome light	√		OPG with matching lights	•	✓
Washable floor mat	√		Handrail and handhold	✓	•
CAT TECHNOLOGY			Lockable external tool/storage box	 ✓	
VisionLink®	√*		Ground-level secondary engine	 ✓	
VisionLink Productivity		\checkmark	shutoff switch	v	
Capability to Remote Flash	✓		Lockable disconnect switch	✓	
Cat Product Link [™] (telematics only)			Signaling/warning horn	✓	
ELECTRICAL SYSTEM			Swing alarm		~
Two 950 CCA maintenance-free batteries	\checkmark		Hydraulic lockout lever	✓	
Electrical disconnect switch	\checkmark		ROPS		✓
LED chassis and cab lights	\checkmark		Right-hand-side mirror	√	
LED right-side boom light		\checkmark	Rearview camera		✓
LED left-side boom light	\checkmark		Travel alarm	✓	

*Connect subscription only. Additional subscriptions are available. Contact your Cat dealer for availability.

(continued on next page)

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
SERVICE AND MAINTENANCE			UNDERCARRIAGE AND STRUCTURES		
Grouped engine oil and fuel filters	\checkmark		600 mm (24") triple grouser track shoes		\checkmark
Scheduled Oil Sampling (S·O·S SM) ports	\checkmark		790 mm (31") triple grouser track shoes		\checkmark
Radiator screen		\checkmark	Grease lubricated track link	\checkmark	
			Center track guiding guard	\checkmark	
			Bottom guards	\checkmark	
			Travel motor guards	\checkmark	
			4250 kg (9,370 lb) counterweight	\checkmark	
			Tie-down points	\checkmark	

323 GX Attachments

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

GUARDS

SERVICE PART

• Hammer floor pedal kit

- 6 mm (0.24") standard swivel guard
- Mesh guard full front (not compatible Grease gun holder
- with cab light cover, rain protector)
- Mesh guard lower half front

323 GX Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

Engine

- The Cat C4.4 engine emits equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer. **Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Air Conditioning System

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg (1.9 lb) of refrigerant which has a CO_2 equivalent of 1.216 metric tonnes (1.340 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium < 0.01%
- Chromium < 0.01%
- Lead < 0.01%

Sound Performance

Non-ROPS

GB 16710:2010 (external) – 105 dB(A)	
GB 16710:2010 (inside cab) – 80 dB(A)	
ROPS	

ISO 6395:2008 (external) – 103 dB(A)	
ISO 6396:2008 (inside cab) – 70 dB(A)	

• 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.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO[™] Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Smart mode matches machine power to digging requirements automatically
 - Automatic Engine Control reduces engine speed when the machine is not under load to minimize fuel consumption
 - Cut maintenance costs up to 20% with enhanced filters and extended service intervals
 - The latest hydraulic oil filter provides longer life with a 3,000-hour replacement interval – 50% longer than previous filter designs

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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