# **330** Hydraulic excavator

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Engine Power ISO 14396 ISO 14396 (DIN) Operating Weight

205 kW (275 hp) 279 hp (metric) 31 400 kg (69,200 lb)

BAT

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Meets U.S. EPA Tier 4 Final, EU Stage V, Japan 2014, and Korea Tier 5 emission standards.

### **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 ways to get the most work done at the lowest cost – so you put more money in your pocket.



# THE CAT® 3300 MOVING THE STANDARD HIGHER

**THE CAT 330** Hydraulic Excavator raises the bar for performance and fuel efficiency in this size class. With the industry's highest level of standard factory technology, a cab focused on operator comfort, plus lower fuel and maintenance costs, the 330 will set the pace for productivity and profit in your operation.



## INCREASE OPERATING EFFICIENCY UP TO 45%'

The Cat 330 offers the industry's highest level of standard factory-equipped technology, including Cat Grade with 2D, Grade with Assist, and Payload.

# INCREASE FUEL EFFICIENCY UP TO 20%<sup>2</sup>

With larger hydraulic pumps, an electro-hydraulic system, and increased bucket capacity, the Cat 330 delivers more work per unit of fuel.

# LOWER MAINTENANCE COSTS UP TO 25%<sup>3</sup>

Fewer maintenance items paired with extended and more synchronized maintenance intervals increase uptime and reduce costs.

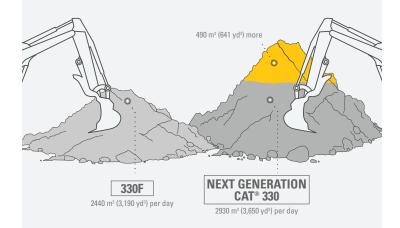
<sup>1</sup> Operator efficiency gains compared to traditional grading methods.

<sup>2</sup> Compared to 330F.

<sup>3</sup> Cost reduction based on 12,000 hours of operation.

# GET MORE OUT OF EVERY MOVE.

MOVE MORE WITH A 20% INCREASE IN FUEL EFFICIENCY.



The next generation Cat 330 moves 20% MORE than the Cat 330F with the same amount of fuel.

### SCENARIO:

330F consuming 18 L/hr (4.8 gal/hr), configured with 1.54 m³ (2.01 yd³) bucket, bucket fill factor of 110%, and 20 second cycle times.

330F MOVES AN AVERAGE OF 2440 M<sup>3</sup> (3,190 YD<sup>3</sup>) EACH 8-HOUR DAY USING 145 L (38 GAL) FUEL. NEXT GENERATION 330 MOVES AN ADDITIONAL 490 M<sup>3</sup> (641 YD<sup>3</sup>) USING THE SAME AMOUNT OF FUEL.



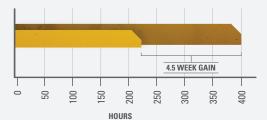
# STANDARD CAT TECHNOLOGY GETS JOBS DONE FASTER WITH LESS REWORK

**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 330 WITH CAT TECHNOLOGY

220 hours/year, with standard Cat Grade



# 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 offsets 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.



Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material – with a bucket and thumb combination or grapple and clamshell attachments - and get a real-time weight estimate without swinging. Automated tracking helps manage production and lower cost. You can even take payload data with you. The monitor's USP port lets you download your results from one shift all the way up to 30 days of work so can manage your progress without needing an internet connection or VisionLink® subscription.

# 🔄 STANDARD CAT GRADE WITH ASSIST

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

### AVAILABLE OPTIONAL UPGRADES

Cat Grade with Advanced 2D and Cat Grade with 3D increase productivity and your profit potential. Cat Grade with Advanced 2D offers in-field design capability through an additional highresolution touchscreen monitor. Cat Grade with 3D offers a choice of a single antenna global navigation satellite system (GNSS) for enhanced guidance or dual antenna GNSS for maximum grading efficiency.

All Cat Grade systems are compatible with radios and base stations from Trimble, Topcon, and Leica. Already invested in grade infrastructure? You can install grade systems from Trimble, Topcon, and Leica onto the machine.



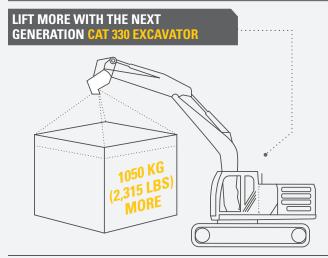
# EXPAND YOUR JOBSITE CAPABILITIES WITH MORE LIFT AND MORE SWING TORQUE

The larger counterweight means you can increase your bucket size and lift up to 9% more than the 330F.

With more swing pressure, a larger swing drive, and a larger swing bearing, the 330 delivers 5% more swing torque over the 330F, making backfilling and working on slopes easier.

Need more lift during your shift? Turn on auto heavy lift and get 8% more power exactly when you need it for as long as you need it.

# LEAVE THE **HEAVY LIFTING** TO US.



### LIFT AS MUCH AS 1050 KG (2,315 LBS) MORE WITH THE NEXT GENERATION CAT 330.

WHEN COMPARED TO THE CAT 330F

Calculated at 4500 mm (14'9") reach over the front, 4500 mm (14'9") below ground level.

SCENARIO:

# LOWER MAINTENANCE COSTS UP TO 25%

With synchronized and extended maintenance intervals, you get more done at a lower cost compared to the 330F. Consolidated filter locations make service faster. Hydraulic, air, and fuel tank filters have increased capacity and longer life. Access to the operation and maintenance manual is easy through the in-cab monitor.

### **KEY MAINTENANCE COST REDUCTIONS INCLUDE:**

- + Consolidated filter locations to reduce service time.
- + Improved hydraulic filter with higher dirt holding capacity.
- + Oil and fuel filters with extended maintenance intervals.
- + Advanced Cat air filter with double the dust holding capacity of the previous filter.
- + High-efficiency electric cooling fans only run when needed and reverse to keep cores free from debris. Choose between manual and auto reverse fan settings.

### SERVICE REMINDERS MADE EASY

Boost productivity with proactive service reminders. Our new integrated vehicle health management system alerts the operator with step-by-step service guidance, along with parts needed, so you don't experience any unnecessary downtime.





# CAB TAKES THE HARD OUT OF WORK

Sites where excavators typically work are rugged and challenging. That's why it's important that the 330 cab protects the operator as much as possible from the fatigue, stresses, sounds, and temperatures of the job.



# SEAT AND 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. The tip-up left console makes egress and ingress easy.

# CAB HELPS KEEP YOU SAFE

The ISO-certified rollover protective structure (ROPS) cab is sound suppressed and sealed. The large windows and lower front, right, and rear profile of the machine give outstanding visibility to the work area without the strain of constantly leaning forward. Standard rearview and right-side-view cameras keep operators aware of their surroundings at all times. An optional 360° visibility feature is also available.

# EASY ACCESS, CONNECTIVITY, AND STORAGE

Several built-in convenience features make work more comfortable for operators:

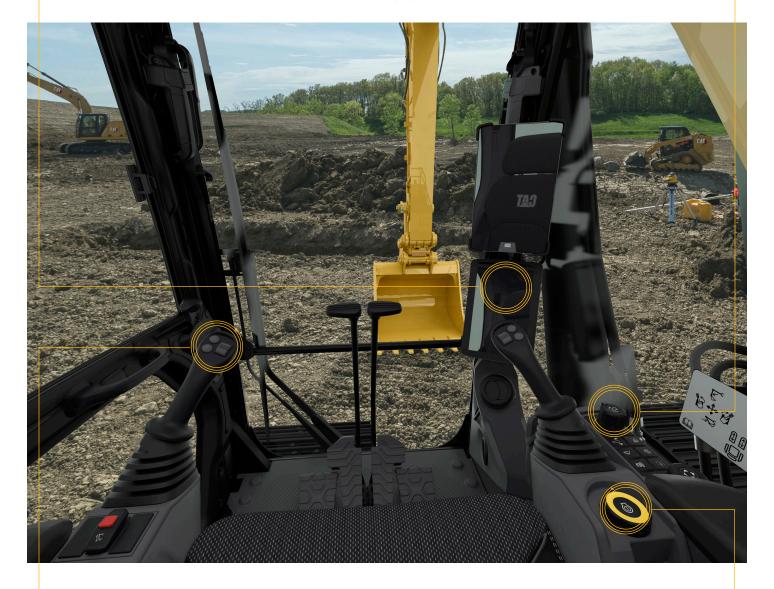
- + Bluetooth® integrated radio
- + USB ports for charging and phone connectivity
- + 12V DC outlets and AUX port
- + Storage in rear, overhead, and console compartments
- + Cup and bottle holders

# **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 read from the seat – no twisting or turning.

# SMART SETTINGS

Smart mode automatically adjusts engine and hydraulic power to meet work demand with maximum fuel efficiency. Auto dig boost increases power by up to 8% for better bucket penetration, shorter cycle times, and greater payloads.



# CUSTOMIZABLE JOYSTICKS

Joystick function can be customized through the monitor. Make moving the excavator much easier with Cat Stick Steer. Simply push a button and use one hand to travel and turn instead of both hands or feet on levers or pedals. Adding an auxiliary relay allows you to power on or turn off a CB radio, beacon light, and even a dust suppression watering system without taking your hands off the joysticks.

# D KEYLESS PUSH START

The 330 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 or via an optional Bluetooth key fob.

# SAFETY FEATURES LOOK OUT FOR YOUR PEOPLE AND YOUR EQUIPMENT

Help keep your people and equipment safe with new safety technology features, ground-level daily maintenance, and upper platform access on the Cat 330 excavator.



### **GROUND-LEVEL DAILY MAINTENANCE**

All daily maintenance checks can be performed 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.

### **UPPER PLATFORM ACCESS**

Right service platform design provides easy, safe, and quick access to the upper service platform; the service platform steps use anti-skid punch plate to help prevent slipping.

### CAT DETECT PEOPLE DETECTION

Cat Detect People Detection helps protect the most valuable asset on any jobsite – people. The system uses smart cameras with depth sensors to provide the operator with visual and auditory alerts so he or she can take immediate action when a person is too close to the excavator.

### **E-FENCE TECHNOLOGY**

Whether you are using a bucket and thumb combination or a hammer, grapple, or clamshell, E-Fence automatically stops excavator motion using boundaries you set through 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 overdigging.

### **CAT COMMAND REMOTE CONTROL**

Enhance jobsite safety by adding Cat Command to your fleet. The remote control system comes with everything you need to operate outside of the cab. Command console lets you operate up to 400 meters (437 yards) away. Command station lets you work virtually anywhere.

### **INSPECTION LIGHTING**

Make service work easier and safer with optional inspection lighting. With the flip of a switch, lights will illuminate the engine, pump, battery, and radiator compartments to enhance visibility.



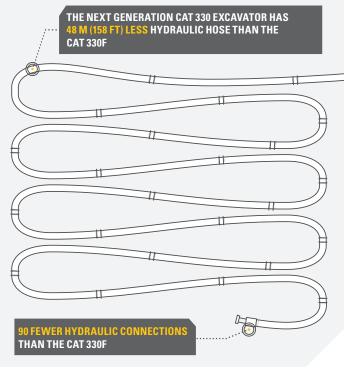
The Cat 330 is a reliable, durable machine. It's designed to take on the hard work you put in front of it every day.

### **UNIQUE DESIGN FEATURES:**

- + Electro-hydraulic system requires less oil, less hoses, and less couplings for added reliability.
- + Larger swing drive and swing bearing support added swing torque for heavier work.
- + Reinforced front structure and base frame support more lift, more counterweight, and more torque.
- + Oval-shaped hydraulic tank increases stress resistance.
- + Technology components are integrated into the machine for added protection.
- + Grease lubricated tracks with a master pin to deliver double the retention force.

# LESS RISK. MORE REWARD.

REDUCED CHANCE OF LEAKS AND DAMAGE WITH FEWER CONNECTIONS AND LESS HOSE.



# **CAT EQUIPMENT MANAGEMENT TECHNOLOGY** TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

Cat equipment management 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™

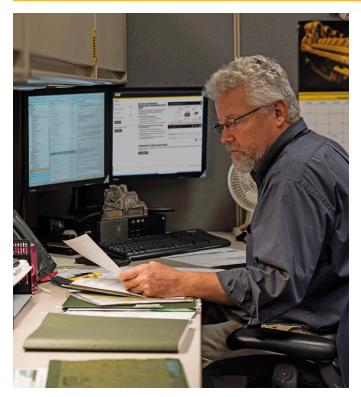
Product Link<sup>™</sup> collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.



### 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).

Caterpillar releases products, services, and technologies in each region at different time intervals. Please verify with your local Cat dealer for technology availability and specifications.



**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 onboard 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.

# 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



SECONDARY PULVERIZERS



MULTI-PROCESSORS



HYDRAULIC HAMMERS

### TILTROTATOR



### QUICK COUPLERS



VIBRATORY PLATE COMPACTORS



### PREVENT HAMMER WEAR AND TEAR

Protect your hammer tool from overheating and rapid wear. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to extend the tool's service life.

### DO HARD-TO-REACH WORK

With 360° rotation and 40° side-to-side tilting action, a Cat tiltrotator will help you get complex work done faster. A new system upgrade from the factory allows the tool to work with Cat 2D Grade, Assist, Payload, and E-Fence. It includes factory-fit joysticks, but uses the standard cab monitor to display the tool and engage its SecureLock<sup>™</sup> so you don't need to spend money on an extra monitor. It also works seamlessly with other brands with no additional hardware required. All you have to do is simply select "Third Party Tiltrotator System Installation" in the monitor, do the calibration, and get to work.

# FIND YOUR ATTACHMENTS FAST

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 <sup>®</sup> C7.1
Engine Power	
ISO 14396	205 kW 275 hp
ISO 14396 (DIN)	279 hp (metric)
Net Power	
ISO 9249	203.7 kW 273 hp
ISO 9249 (DIN)	277 hp (metric)
Bore	105 mm 4 in
Stroke	135 mm 5 in
Displacement	7.01 L 428 in <sup>3</sup>
	1 11 11 11 11

• 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 2,200 rpm.

HYDRAULIC SYSTEM			
Main System – Maximum Flow (Implement)	560 L/min	148 gal/min	
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi	
Maximum Pressure – Equipment – Heavy Lift Mode /Auto Dig Boost	38 000 kPa	5,510 psi	
Maximum Pressure – Travel	35 000 kPa	5,075 psi	
Maximum Pressure – Swing	29 800 kPa	4,320 psi	
WEIGHTS			

31 400 kg	69,200 lb

Long Undercarriage, Reach boom, R3.2 (10'6") stick, HD 1.76 m<sup>3</sup> (2.30 yd<sup>3</sup>) bucket, 800 mm (31") triple grouser shoes, and 6700 kg (14,770 lb) counterweight.

**Operating Weight** 

30 400 kg 67,000 lb

Long Undercarriage, Reach boom, R3.2 (10'6") stick, HD 1.76  $\rm m^3$  (2.30 yd^3) bucket, 600 mm (24") triple grouser shoes, and 6700 kg (14,770 lb) counterweight.

SERVICE REFILL CAPACITIES		
Fuel Tank	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	5.5 L	1.5 gal
Hydraulic System (including tank)	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal
Diesel Exhaust Fluid (DEF) Tank	41 L	10.8 gal

### **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.

DIMENSIONS			
Boom	Reach Boom 6.15 m (20'2")		
Stick	Reach Stick 3.2 m	(10'6")	
Bucket	HD 1.76 m <sup>3</sup> (2.	<b>30 yd</b> ³)	
Shipping Height (top of cab)	3060 mm	10'1"	
Handrail Height	3060 mm	10'1"	
Shipping Length	10 420 mm	34'2"	
Tail Swing Radius	3130 mm	10'3"	
Counterweight Clearance	1120 mm	3'8"	
Ground Clearance	490 mm	1'7"	
Track Length	4860 mm	15'11"	
Length to Center of Rollers	3990 mm	13'1"	
Long Undercarriage			
Track Gauge	2590 mm	8'6"	
Transport Width – 600 mm (24") shoes	3190 mm	10'6"	
Transport Width – 700 mm (28") shoes	3290 mm	10'10"	
Transport Width – 800 mm (31") shoes	3390 mm	11'1"	
Transport Width – 900 mm (35") shoes	3490 mm	11'5"	
Long Narrow Undercarriage			
Track Gauge	2390 mm	7'10"	
Transport Width – 600 mm (24") shoes	2990 mm	9'9"	
Transport Width – 700 mm (28") shoes	3090 mm	10'1"	
Transport Width – 800 mm (31") shoes	3190 mm	10'6"	

### WORKING RANGES AND FORCES

Boom Reach Boom 6.15 m (20'2")			
Stick	Reach Stick 3.2 m (10'6")		
Bucket	HD 1.76 m <sup>3</sup> (2.30 yd <sup>3</sup> )		
Maximum Digging Depth	7240 mm 23'9"		
Maximum Reach at Ground Level	10 680 mm 35'1"		
Maximum Cutting Height	10 030 mm 32'11"		
Maximum Loading Height	6950 mm 22'10"		
Minimum Loading Height	2300 mm 7'7"		
Maximum Depth Cut for 2440 mm (8') Level Bottom	7090 mm 23'3"		
Maximum Vertical Wall Digging Depth	6010 mm 19'9"		
Bucket Digging Force (ISO)	179 kN 40,200 lbf		
Stick Digging Force (ISO)	126 kN 28,300 lbf		
Bucket Digging Force (ISO) – Auto Dig Boost	189 kN 42,480 lbf		
Stick Digging Force (ISO) – Auto Dig Boost	133 kN 29,900 lbf		

# **STANDARD & OPTIONAL EQUIPMENT**

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

САВ	STANDARD	OPTIONAL	BOOMS AND STICKS	STANDARD	OPTIONAL
Rollover protective structure (ROPS)	•		5.55 m (18'2") Mass boom		•
Mechanical-suspension seat (comfort only)	•		6.15 m (20'2") Reach boom		•
Heated air-suspension seat (deluxe only)	•		6.15 m (20'2") HD Reach boom		•
Heated and ventilated air-suspension seat			6.5 m (21'3") Straight boom		•
(premium, demolition only)	•		10.2 m (33'6") Super Long Reach boom		•
High-resolution 203 mm (8 in) LCD touchscreen monitor (comfort only)	٠		3.0 m (10'") Stub + 3.3 m (10'10") Fore Variable Angle boom		•
High-resolution 254 mm (10 in)			2.5 m (8'2") Mass stick		
LCD touchscreen monitor (premium,	•		2.65 m (8'8") Reach stick		
deluxe, demolition only)			2.65 m (8'8") HD Reach stick		
Cat® Stick Steer		٠	3.2 m (10'6") Reach stick		
Auxiliary relay		•	3.2 m (10'6") HD Reach stick		
CAT TECHNOLOGY	STANDARD	OPTIONAL	3.75 m (12'2") Reach stick		
	STANDARD	UPTIONAL	7.85 m (25'9") Super Long Reach stick		
Cat Product Link™	•		7.05 m (25.5.7 Super Long headin stick		
Remote Flash	•		UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONA
Remote Troubleshoot	٠		600 mm (24") triple grouser shoes		٠
Cat Grade with 2D	•		600 mm (24") HD triple grouser shoes		•
Cat Grade with Advanced 2D		٠	600 mm (24") double grouser shoes		•
Cat Grade with 3D single GNSS		•	600 mm (24") single grouser shoes		•
Cat Grade with 3D dual GNSS		•	700 mm (28") HD triple grouser shoes		•
Cat Grade with Assist	•		800 mm (31") triple grouser shoes		•
Cat Payload	٠		900 mm (34") triple grouser shoes		•
E-Fence	•		Tie-down points on base frame	•	
Lift assist (Except VAB)	٠		6700 kg (14,770 lb) counterweight	•	
ENGINE	STANDARD	OPTIONAL	ELECTRICAL SYSTEM	STANDARD	OPTIONA
Cat C7.1 twin turbo diesel engine	•		Two 1.000 CCA maintenance free batteries	UTAILDAILD	
Three selectable power modes	•		Programmable time-delay LED working lights	•	
Auto engine speed control	•		LED chassis light, left-hand/right-hand boom	•	
Auto engine idle shutdown	•		lights, cab lights	٠	
50° C (122° F) high-ambient cooling capacity with derate	٠		SERVICE AND MAINTENANCE	STANDARD	OPTIONA
-18° C (0° F) cold start capability	•		Scheduled Oil Sampling (S·O·S™) ports	•	
-32° C (-25° F) cold start capability	Ū	•	Ground-level and platform-level engine	-	
Double element air filter with integrated			oil dipsticks	•	
precleaner	•		Electric refueling pump with auto shutoff		•
Reversing electric cooling fans	٠		Integrated vehicle health management system		٠
HYDRAULIC SYSTEM	STANDARD	OPTIONAL			
Boom and stick regeneration circuits	٠		SAFETY AND SECURITY	STANDARD	OPTIONA
Auto warm up	٠		Cat Detect People Detection		•
Auto two-speed travel	٠		Rearview camera	•	
Auto heavy lift (Except SLR)	٠		Right-hand-sideview camera	٠	
Auto dig boost (Except VAB and SLR)	٠		360° visibility		•
Boom and stick drift reduction valve	٠		Ground-level engine shutoff switch	٠	
Boom and stick lowering check valves		٠	Right-hand handrail and handhold	٠	
		•	Signaling/warning horn	٠	
Hammer return filter circuit			Swing alarm		•
Hammer return filter circuit Tool control (two pump, one/two way high-					
		•	Cat Command remote control		•

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 and additional regional offerings, refer to the Technical Specifications brochure 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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