313

HYDRAULIC EXCAVATOR



Engine Power (ISO 14396)	82.0 kW (110 hp)
Operating Weight	13 800 kg (30,400 lbs)

Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.

CAT®

THE NEW CAT® 313

NEXT LEVEL PERFORMANCE

The 313 excavator offers superior performance and operator efficiency. Standard, easy-to-use Cat® technologies, a new cab focused on operator comfort and productivity, and low fuel and maintenance costs allow you to move material all day with speed and precision while keeping more money in your pocket.



NEXT GENERATION EXCAVATORS

The new line of Cat Excavators offers more choices than ever for your business.

+ MORE MODEL OPTIONS
+ MORE STANDARD TECHNOLOGIES
+ MORE WAYS TO BOOST PERFORMANCE

Ready to help you make your business stronger, Cat Next Generation Excavators give you new ways to get the most work done at a cost that fits your business.





LOWER MAINTENANCE COSTS **BY UP TO 25%**[1]

Extended maintenance intervals increase uptime and reduce costs.

INCREASE OPERATOR EFFICIENCY **BY UP TO 45%**[1]

The Cat 313 offers the industry's highest level of standard, factory-equipped technology, including Cat GRADE with 2D and Payload.

WORK SMART. **SAVE MONEY.**

Improve fuel efficiency by up to 10 percent. Three power modes – Power mode, Smart mode, and ECO mode – help manage fuel consumption.

[1] Compared to the 313F



BOOST YOUR PRODUCTIVITY BY UP TO 45%

WITH SIMPLE-TO-USE INTEGRATED CAT TECHNOLOGY

STANDARD TECHNOLOGIES INCLUDE:

CAT GRADE WITH 2D

Cat GRADE with 2D helps operators reach grade faster. Onboard processors and sensors provide real-time guidance on distance to grade without guesswork. Work safer with fewer ground personnel needed to check the work area for obstacles or grade.

CAT PAYLOAD

Onboard weighing system increases loading efficiency with on-the-go weighing. Combine with VisionLink® to manage your production targets remotely (available for download to USB).

CAT TECHNOLOGY

GETS JOBS DONE FASTER WITH LESS REWORK

OPTIONAL UPGRADES:

Cat GRADE with Advanced 2D* lets you create and edit grade designs with ease on a second high-resolution 254 mm (10 in.) touchscreen monitor.

Cat GRADE with 3D* adds real-time, pinpoint positioning using GPS and GLONASS.

*Both 2D and 3D Cat GRADE upgrades can be installed at the factory or after purchase.





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. 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 helps ensure 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 percent. 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 will get critical alerts for required maintenance, and you can even request service from your local Cat dealer.



DO MORE. PAY LESS.

With extended and more synchronized maintenance intervals, you get more done at a low cost. Consolidated filter locations make service faster.

INFORMATION AT YOUR FINGERTIPS

View operating information such as fuel and oil levels as well as critical service alerts on the in-cab touchscreen monitor. Your machine's filter life and maintenance intervals are also trackable on the in-cab monitor.

NEW LONGER LASTING FILTERS

The new hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and a 3,000-hour replacement interval – 50 percent longer than previous filter designs.





EXPAND YOUR JOBSITE CAPABILITIES

WITH MORE SWING TORQUE AND FUEL EFFICIENCY

A 10 percent increase in swing torque versus the previous model makes traveling, swinging, and working on slopes easy. Backfill trenches and move around your jobsite faster than before – allowing you to be more productive and finish jobs quickly.

INCREASE FUEL EFFICIENCY BY UP TO 10%

An advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.

SEAT AND JOYSTICK CONSOLE HELP REDUCE FATIGUE

Comfort and movement efficiency help keep operators productive and alert all shift long. A tip-up left console lets you get in and out of the cab easily, and the standard seat is wide and adjustable for operators of virtually any size. Controls are easy to reach, allowing you to operate comfortably with minimal twists and turns.



CAB TAKES THE HARD OUT OF WORK

The new 313 cab protects the operator as much as possible from the fatigue, stresses, sounds, and temperatures of the job.



NEW SMART MODE

The new 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.

KEYLESS PUSH TO START

The 313 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 using a smartphone app.

CUSTOMIZABLE JOYSTICKS

Joystick function can be customized through the monitor. Joystick pattern as well as response can be set to match operator preferences. All preferences are saved with the Operator ID and restored at log in. For additional modifications to the function speed (Gain) setting and balance refinement, contact your local Cat dealer.

TOUCHSCREEN MONITOR

Most machine settings can be controlled through the high-resolution 203 mm/8-inch touchscreen monitor. It offers 42 languages and is easy to read from the seat. A second 254 mm/10-inch touchscreen monitor is available.

NEW CAB DESIGN

HELPS KEEP YOU SAFE



ALL-AROUND VISIBILITY

Enlarged windows and improved machine layout increase visibility from the seat of the cab. Standard rearview and right-side-view cameras always keep operators aware of their surroundings. An optional 360° visibility feature is also available. Powerful, long-lasting LED lights consume minimal power, keeping you safe while working in the dark.

ISO-CERTIFIED ROPS CAB KEEPS YOU SAFE

The ISO-certified 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.

EASY ACCESS, CONNECTIVITY, AND STORAGE

Several built-in convenience features make work more comfortable.

+ ERGONOMIC CONTROL LAYOUT
+ 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

SAFETY FEATURES

LOOK OUT FOR YOUR PEOPLE AND EQUIPMENT



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

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

New 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.

SECURE START

Use your PIN code on the monitor, the optional Bluetooth key fob, or your smartphone to enable the push-button starting feature.

STANDARD 2D E-FENCE TECHNOLOGY

Standard 2D 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.



E-WALL SWING



E-WALL FORWARD



E-WALL CAB PROTECTION



E-WALL CEILING



E-WALL FLOOR

INCREASE YOUR PRODUCTIVITY AND PROFIT

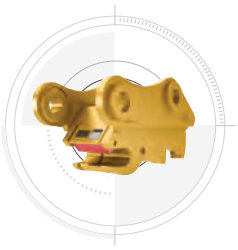
WITH CAT ATTACHMENTS

Easily expand the performance of your machine by using 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.

CW-DEDICATED COUPLERS



PIN GRABBER COUPLERS



HYDRAULIC HAMMERS



PREVENT HAMMER WEAR AND TEAR

Protect your hammer from overworking. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to prevent wear and tear on the attachment and excavator.

GRAPPLES



SHEARS



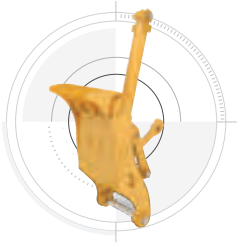
VIBRATORY PLATE COMPACTORS



MULCHERS



THUMBS



GENERAL DUTY BUCKETS



HEAVY DUTY BUCKETS



DITCH CLEANING TILT BUCKETS



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 on-board Bluetooth reader or the 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 C3.6	
Engine Power – ISO 14396	82.0 kW	110 hp
Engine Power – ISO 9249	80.9 kW	108 hp
Bore	98 mm	4 in
Stroke	120 mm	5 in
Displacement	3.6 L	220 in³

HYDRAULIC SYSTEM		
Main System – Maximum Flow	247 L/min	65 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	26 000 kPa	3,770 psi

SWING MECHANISM		
Swing Speed	11.5 rpm	
Maximum Swing Torque	35 kN·m	25,741 lbf-ft

WEIGHTS		
Operating Weight	13 800 kg	30,400 lb

- Reach boom, R3.0 (9'10") Stick, GD 0.53 m³ (0.69 yd³) bucket, 700 mm (28") triple grouser shoes, and 2470 kg (5,445 lb) counterweight.

SERVICE REFILL CAPACITIES		
Fuel Tank	258 L	68.2 gal
Cooling System	15 L	4.0 gal
Engine Oil	8 L	2.1 gal
Final Drive	3 L	0.8 gal
Hydraulic System (including tank)	145 L	38.3 gal
Hydraulic Tank	70 L	18.5 gal
DEF Tank	21 L	5.6 gal

DIMENSIONS		
Boom	Reach 4.65 m (15'3")	
Stick	Reach R3.0 m (9'10")	
Bucket	GD 0.53 m³ (0.69 yd³)	
Shipping Height (top of cab)	2810 mm	9'2"
Handrail Height	2810 mm	9'2"
Shipping Length	7780 mm	25'6"
Shipping Length (with blade)	8050 mm	26'4"
Tail Swing Radius	2190 mm	7'2"
Counterweight Clearance	915 mm	3'0"
Ground Clearance	445 mm	1'5"
Track Length	3750 mm	12'3"
Length to Center of Rollers	3040 mm	9'11"
Track Gauge	1990 mm	6'6"
Transport Width – 500 mm (20") shoe	2490 mm	8'2"

WORKING RANGES AND FORCES		
Boom	Reach 4.65 m (15'3")	
Stick	Reach R3.0 m (9'10")	
Bucket	GD 0.53 m³ (0.69 yd³)	
Maximum Digging Depth	6040 mm	19'9"
Maximum Reach at Ground Line	8660 mm	28'4"
Maximum Cutting Height	8830 mm	28'11"
Maximum Loading Height	6420 mm	21'0"
Minimum Loading Height	1600 mm	5'2"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5860 mm	19'2"
Maximum Vertical Wall Digging Depth	5190 mm	17'0"
Minimum Working Equipment Radius	2570 mm	8'5"
Bucket Digging Force (ISO)	98.67 kN	22,180 lbf
Stick Digging Force (ISO)	59.29 kN	13,330 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 0.85 kg of refrigerant which has a CO_2 equivalent of 1.216 metric tonnes.

STANDARD & OPTIONAL EQUIPMENT

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

BOOMS AND STICKS	STANDARD	OPTIONAL
One-piece boom		●
Variable angle boom		●[1]
R2.2 m (7'3") stick		●[1]
R2.5 m (8'2") stick		●[2]
R2.8 m (9'2") stick		●[3]
R3.0 m (9'10") stick		●

CAB	STANDARD	OPTIONAL
ROPS, sound suppression	●	
Deluxe cab: air suspension heated seat, 10" touchscreen monitor		●
Premium cab: air suspension heated and cooled seat, 10" touchscreen monitor		●[1]

CAT TECHNOLOGIES	STANDARD	OPTIONAL
Cat Product Link	●	
Cat GRADE with 2D	●	
Cat GRADE with Advanced 2D		●
Cat GRADE with 3D		●
Cat Payload	●	
2D E-fence	●	
Remote Flash Capability	●	
Remote Troubleshoot Capability	●	
Work tool recognition	●	
Work tool tracking	●	
Auto hammer stop	●	

ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Maintenance free battery	●	
LED chassis light, left-side/right-side boom lights, cab lights	●	
Centralized electrical disconnect switch	●	
Programmable time-delay LED working lights	●	
360° lighting		●

ENGINE	STANDARD	OPTIONAL
C3.6 Tier 4 Final/Stage V	●	
One-touch low idle with automatic engine speed control	●	
Auto engine shutdown	●	
52°C (125°F) high-ambient cooling capacity without derate	●	
-25°C (-13°F) cold start capability	●	
Electric fuel priming pump	●	
Variable fan	●	
Single fuel filtration system	●	
Double element air filter with integrated precleaner	●	
Biodiesel capability up to B20	●	

HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Boom and stick regeneration circuits	●	
Auto hydraulic warmup	●	
Auto two-speed travel	●	
Electric main control valve	●	
Boom and stick drift reduction valve	●	
Swing drive with fine swing control function	●	
Auxiliary line support	●	
Boom and stick lowering check valves		●
Medium-pressure line		●
High-pressure line		●
Quick coupler line		●

SAFETY AND SECURITY	STANDARD	OPTIONAL
Rear- and right-side-view cameras	●	
360° visibility		●
Ground-level engine shutoff switch	●	
Service platform with anti-skid plate and countersunk bolts	●	
Signaling/warning horn	●	
Hydraulic lock-out lever	●	

SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Grouped engine oil and fuel filters	●	
Ground-level engine oil dipstick	●	
S•O•S℠ sampling ports	●	

UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
Grease lubricated track link	●	
ISO 15818 tie down points on base frame	●	
Long undercarriage	●	
500 mm (20") triple grouser shoes		●
500 mm (20") triple grouser shoes with rubber pad		●
600 mm (24") triple grouser shoes		●
700 mm (28") triple grouser shoes		●
770 mm (30") triple grouser shoes		●[1]
2470 kg (5,450 lb) counterweight	●	
2500 mm (8'2") blade		●
2600 mm (8'6") blade		●
2700 mm (8'10") blade		●

[1]Europe only
[2]All regions except North America
[3]North America 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 313 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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www.cat.com www.caterpillar.com

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