## 315 HYDRAULIC EXCAVATOR



Engine Power (ISO 14396) Operating Weight

82.0 kW (110 hp) 15 400 kg (34,000 lbs)

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



# THE NEW CAT 315

COMPACT POWER AND EFFICIENCY

The Cat\* 315 excavator offers superior performance in a compact design. Standard, easy-to-use Cat technologies boost operator efficiency and improve jobsite productivity while a large, ergonomic cab provides a comfortable working environment. Combined with simplified maintenance points, the 315 keeps you working, quickly and efficiently.



#### **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.



## SUPERIOR PERFORMANCE

Easily work on slopes and move around your jobsite with 10 percent more swing torque and 14 percent more drawbar pull.

## WORK IN **COMFORT**

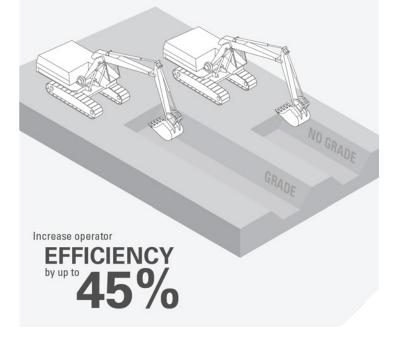
Increase operator productivity with an all-new, 13 percent larger cab. Deluxe and Premium cab options vary by region.

## INCREASE OPERATOR EFFICIENCY BY UP TO 45%<sup>1</sup>

The Cat 315 offers the industry's highest level of standard, factory-equipped technology, including Cat Grade with 2D and Payload.

STANDARD CAT® GRADE

### MORE WORK, LESS TIME, MORE MONEY



<sup>&</sup>lt;sup>1</sup> Compared to the 315F



#### 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.



With bucket or grapple, 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 costs. 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.

#### **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-in.) 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.

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

#### 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 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.

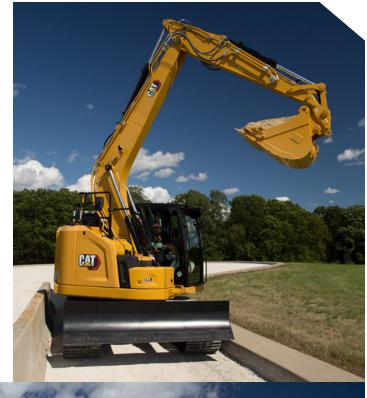
### COMPACT RADIUS

## SIZED RIGHT FOR CONFINED SPACES

The 315's compact radius design makes it the right machine for working in space-restricted areas. Work confidently in road construction jobs with lane closures and next to buildings and other structures.

#### **WORK WITH CONFIDENCE AND POWER**

Unlike a standard radius machine, the 315's boom cylinders are positioned toward the center of the machine, maximizing lifting performance over the front.







## EXPAND YOUR JOBSITE CAPABILITIES

## WITH MORE SWING TORQUE AND GREATER FUEL EFFICIENCY

A 10 percent increase in swing torque and a 14 percent increase in drawbar pull 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**

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 315 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 315 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.



#### 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. 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.



#### **TOUCHSCREEN MONITOR**

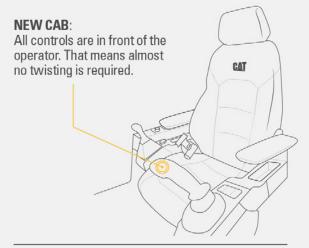
Most machine settings can be controlled through the high-resolution 203 mm/8-in. touchscreen monitor. It offers 42 languages and is easy to read from the seat. A second 254 mm/10-in. touchscreen monitor is available.

#### **NEW CAB DESIGN**

## **HELPS KEEP YOU SAFE**

#### WE'VE GOT YOUR BACK.

### BACK PAIN IS ONE OF THE MOST COMMON REASONS PEOPLE MISS WORK \*



**OLD CAB**: 2,000+ twists a year to reach controls in back of cab that can strain your back.

ASSUME 1 TWIST PER HOUR
1 TWIST x 8-HOUR WORKDAY = 8 TWISTS PER DAY
8 TWISTS x 5 WORKDAYS PER WEEK = 40 TWISTS PER WEEK
40 TWISTS x 52 WEEKS PER YEAR = 2 080 TWISTS PER YEAR

\*SOURCE: HTTPS://WWW.NINDS.NIH.GOV/DISORDERS/PATIENT-CAREGIVER-EDUCATION/FACT-SHEETS/LOW-BACK-PAIN-FACT-SHEET

## 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 FOUIPMENT

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.

#### **SECURE START**

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

#### **UPPER PLATFORM ACCESS**

New right service platform design provides easy, safe, and quick access to upper service platform. The service platform steps use anti-skid punch plate to help prevent slipping.

#### 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.

#### **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-WALL SWING



E-WALL FORWARD



**E-WALL CAB PROTECTION** 



**E-WALL CEILING** 



E-WALL FLOOR



## UP TO 25% LESS MAINTENANCE COSTS



LESS MAINTENANCE, MORE PROFITABILITY

NOTE: COMPARISON IS BASED ON THE 315 vs 315F.

## DO MORE. PAY LESS.

With extended and more synchronized maintenance intervals, you get more done at a lower 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.

## 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.

**GRAPPLES** 

**COUPLERS** 

**HYDRAULIC HAMMERS** 

PREVENT HAMMER **WEAR AND TEAR** 

**ATTACHMENT TRACKING MADE EASY** 







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.

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.

**SHEARS** 

**VIBRATORY PLATE** COMPACTORS

**MULCHERS** 

TILTROTATOR











**THUMBS** 



**GENERAL DUTY BUCKETS** 



**HEAVY DUTY BUCKETS** 



**DITCH CLEANING TILT BUCKETS** 





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.

E	NGINE	
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 in <sup>3</sup>

HYDRAULIC	SYSTEM	
Main System – Maximum Flow	276 L/min	72.9 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		12 rpm
Maximum Swing Torque	35 kN⋅m	25,815 lbf-ft

TTEIGHT1	0	
Operating Weight	15 400 kg	34,000 lb
<ul> <li>Reach boom, R3.0 (9'10") Stick, GD 0.53 m triple grouser shoes, and 3830 kg (8,440 l</li> </ul>	. , .	, 700 mm (28")

WEIGHTS

SERVICE REFILL	CAPACITIES	
Fuel Tank	187 L	49 gal
Cooling System	15 L	4 gal
Engine Oil	8 L	2 gal
Final Drive	3 L	1 gal
Hydraulic System (including tank)	85 L	23 gal
Hydraulic Tank	72 L	19 gal
DEF Tank	21 L	6 gal

DIMENSIONS	S	
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	2860 mm	9'4"
Shipping Length	7530 mm	24'8"
Shipping Length (with blade)	8090 mm	26'6"
Tail Swing Radius	1570 mm	5'1"
Counterweight Clearance	880 mm	2'10"
Ground Clearance	440 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 A	AND FORCES	
Boom	Reach 4.6	5 m (15'3")
Stick	Reach R3.	0 m (9'10")
Bucket	GD 0.53 m³ (0.69 yd³)	
Maximum Digging Depth	5990 mm	19'7"
Maximum Reach at Ground Line	8690 mm	28'6"
Maximum Cutting Height	9690 mm	31'9"
Maximum Loading Height	7220 mm	23'8"
Minimum Loading Height	2080 mm	6'9"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5810 mm	19'0"
Maximum Vertical Wall Digging Depth	5180 mm	16'11"
Minimum Working Equipment Radius	2240 mm	7'4"
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<sub>2</sub> 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	011111111111111111111111111111111111111	•
Variable angle boom		<b>o</b> 1
R2.2 m (7'3") stick		<b>•</b> 1
R2.5 m (8'2") stick		<b>3</b>
R2.8 m (9'2") stick		<b>2</b>
R3.0 m (9'10") stick		•
CAB	STANDARD	OPTIONAL
ROPS, sound suppression	•	01 1101012
Deluxe cab: air suspension heated seat, 254 mm (10") touchscreen monitor		•
Premium cab: air suspension heated and cooled seat, 10" touchscreen monitor		•1
Cat Stick Steer		•
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	•	
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	•	

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	•	
Electric boom snubber	•	
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	•	
Cat Detect People Detection		•
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
SERVICE AND MAINTENANCE Grouped engine oil and fuel filters	STANDARD  •	OPTIONAL
		OPTIONAL
Grouped engine oil and fuel filters	•	OPTIONAL
Grouped engine oil and fuel filters Ground-level engine oil dipstick	•	OPTIONAL OPTIONAL
Grouped engine oil and fuel filters  Ground-level engine oil dipstick  S•0•S <sup>SM</sup> sampling ports	•	
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For more complete information on Cat products, dealer services and industry solutions, visit us on the web at www.cat.com.

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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