

Cat[®] 315 Hydraulic Excavator

The Cat[®] 315 excavator offers superior performance in a compact design. Standard, easy-to-use Cat technologies boost operator efficiencies 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.

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

High Performance and Productivity

- Increase productivity by up to eight percent over the 315F.
- Work confidently in space-restricted areas. Dig, swing, and dump within a working space of 3.96 m (12 ft 11 in).
- Easily work on slopes and move around your jobsite with 10 percent more swing torque and 14 percent more drawbar pull.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Smart mode meets your power needs by automatically matching engine and hydraulic power to digging conditions.
- Get higher production in demanding applications, easier penetration into piles, and faster cycle times with Cat Advansys[™] bucket tips. Quickly change tips with a simple lug wrench instead of a hammer or special tool, improving safety and uptime.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- The Cat C3.6 engine meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 (Tier 4 Final) emission standards.
- Don't let the temperature stop you from working. The 315 has a standard high-ambient temperature capability of 52° C (125° F) without de-rate and cold-start capability of –25° C (–13° F).

Boost Efficiency and Productivity with Cat Technologies

- Boost productivity up to 45 percent versus traditional grading with the standard Cat GRADE with 2D system includes indicate-only and laser capability.
- Dig with guidance to depth, slope, and horizontal distance to grade. You can set up to four different depth and slope targets to help save time and money.
- Standard 2D E-fence prevents your machine from moving outside operator-defined parameters.

- Achieve precise load targets and increase loading efficiency with standard Cat PAYLOAD which provides on-the-go weighing and real-time estimates of your payload without swinging.
- Combine Payload with VisionLink[®] and remotely manage your production targets.
- Upgrade to Cat GRADE with Advanced 2D to create and edit grade designs with ease on a second, high-resolution 254 mm (10 in) touchscreen monitor.
- Upgrade to Cat GRADE with 3D to create and edit designs with ease and see the front linkage's full range of motion on a second high-resolution 254 mm (10 in) touchscreen monitor. Use the machine's onboard cell technology to quickly connect to 3D services like TCC or VRS.
- Know the excavator's exact position relative to GPS and GLONASS systems. The machine automatically compensates for excavator pitch and roll caused by sloping ground conditions.
- Use the excavator's onboard cell technology to quickly connect to 3D services like Trimble Connected Community or Virtual Reference Station.
- Already invested in another brand's 3D system? No problem. Standard Cat technology like GRADE with 2D can readily integrate with that system to give you the precise results you need.
- Remote troubleshoot connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and even allows you to request service from your local Cat dealer.
- Standard Product Link[™] automatically and accurately collects data from your connected 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.



Work in Comfort in the All-New Cab

- Increase operator productivity with an all-new, 13 percent larger cab. Comfort, Deluxe, and Premium cab options vary by region.
- The Comfort cab is equipped with a mechanical suspension seat. The Deluxe seat is heated and air adjustable while the Premium seat is heated and cooled and adjusts automatically.
- Get in and out of the cab easier using the tip-up left console available in the Deluxe and Premium cabs.
- Advanced viscous mounts reduce cab vibration.
- Control the excavator comfortably with easy-to-reach controls all located in front of you.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles. A cup holder, document holder, and coat hook are also provided.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

Simple to Operate

- Start the engine with the push of a button, a Bluetooth key fob, a smartphone app, or the unique Operator ID function.
- Program your preferred power mode and joystick settings using your operator ID. The excavator will automatically remember your selections.
- Navigate quickly on the standard high-resolution touchscreen monitor or with the aid of the jog dial control.
- The Cat 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 time and energy with work tool recognition. A simple shake
 of the attached tool confirms its identity ensuring all attachment
 settings are correct, so you can get to work quickly and efficiently.
- Not sure how a function works or how to maintain your machine? Simply access the operator's manual through the touchscreen monitor.

Lower Maintenance Costs

- Expect up to 25 percent less maintenance costs than the 315F.
- Quickly check and service your machine with all daily maintenance points accessible from ground level.
- Check the engine oil level quickly and safely from the ground. Fill and check engine oil on top of the machine with a conveniently located second dipstick.
- Track your machine's filter life and maintenance intervals on the in-cab monitor.
- The new hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000-hour replacement interval 50 percent longer than previous filter designs.
- S·O·SSM ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

Safety

- Access all daily maintenance points from ground level no need for you to climb on top of the machine.
- The standard ROPS cab meets ISO 12117-2:2008 requirements.
- Smaller cab pillars, larger windows, and a wider skylight hatch provide 60 percent greater vertical visibility.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- A ground-level shut-off switch stops all fuel to the engine and shuts down the machine when activated.
- A rearview and right-side-view camera are standard. Upgrade to 360° visibility to easily see objects and personnel around the excavator in a single view.
- New service platform design provides easy, safe, and quick access to the upper service platform. Prevent slipping with the anti-skid punch plate on the platform steps.
- Optional boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose power.
- Brightly colored seatbelts allow easy recognition of properly utilized safety restraints.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
BOOMS AND STICKS			HYDRAULIC SYSTEM		-
One-piece boom		\checkmark	Boom and stick regeneration circuits	✓	
Variable angle boom		√1	Automatic hydraulic warm up	✓	
R2.2 m (7'3") stick		√1	Automatic two speed travel	√	
R2.5 m (8'2") stick		\checkmark	Electric main control valve	√	
R2.8 m (9'2") stick		√3	Boom and stick drift reduction valve	√	
R3.0 m (9'8") stick		\checkmark	Electric boom snubber	√	
CAB			Auxiliary line support	√	
ROPS, Sound Suppression	√		Boom and stick lowering check valves		✓
Comfort Cab: mechanical suspension seat,		√2	Medium-pressure line		✓
203 mm (8") touchscreen monitor			High-pressure line		√
Deluxe Cab: air suspension heated seat,		\checkmark	Quick coupler line		√
254 mm (10") touchscreen monitor			SAFETY AND SECURITY		
Premium Cab: air suspension heated		√1	Rear and right-side-view cameras	✓	
and cooled seat, 254 mm (10")			360° visibility		√
touchscreen monitor			Ground level engine shutoff switch	√	
CAT TECHNOLOGIES Cat Product Link™	/		Service platform with anti-skid plate	√	
Cat GRADE with 2D	✓		and countersunk bolts		
	V		Signaling/warning horn	√	
Cat GRADE with Advanced 2D		<u>√</u>	SERVICE AND MAINTENANCE		
Cat GRADE with 3D		\checkmark	Grouped engine oil and fuel filters	✓	
Cat PAYLOAD	✓		Ground level engine oil dipstick	√	
2D E-Fence	✓		S·O·S sampling ports	√	
Remote Flash Capability	√		UNDERCARRIAGE AND STRUCTURES		
Remote troubleshoot capability	√		Grease lubricated track link	√	
Auto hammer stop	✓		ISO 15818 tie down points on base frame	√	
ELECTRICAL SYSTEM	,		500 mm (20") triple grouser shoes		✓
Maintenance free battery	✓		600 mm (24") triple grouser shoes		\checkmark
LED chassis light, left-side/right-side	\checkmark		700 mm (28") triple grouser shoes		✓
boom lights, cab lights Programmable time-delay LED	✓		2530 kg (5,580 lb) counterweight	√2	
working lights	v		3830 kg (8,440 lb) counterweight	√4	
360° lighting		\checkmark	2500 mm (8'2") blade		√
ENGINE			2600 mm (8'6") blade		\checkmark
C3.6 Stage V/Tier 4 Final	✓		2700 mm (8'10") blade		√
One-touch low idle with automatic engine	√				
speed control			¹ Europe only		
Automatic engine shutdown	\checkmark		²Japan only ³North America only		
52° C (125° F) high-ambient cooling	\checkmark		⁴ Optional for Japan		
capacity without de-rate					
–25° C (–13° F) cold start capability	\checkmark				
Electric fuel priming pump	\checkmark				
Variable speed fan	\checkmark				
Single fuel filtration system	\checkmark				
Double element air filter with integrated precleaner	\checkmark				
Biodiesel capability up to B20	√				
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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.

Technical Specifications

E	ingine		
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 ³	

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

Weights			
Operating Weight	13 300 kg	29,300 lb	
 Standard Undercarriage, Reach Boom, R2.5 (8'2") Stick, GD 0.52 m³ (0.68 yd³) bucket, 500 mm (20") triple grouser shoes, and 2530 kg (5,580 lb) counterweight. 			
Operating Weight	15 400 kg	34,000 lb	
• Long Undercarriage Beach Boom, B3 0 (9'1") Stick, GD 0 53 m ³ (0 69 vd ³) bucket			

 Long Undercarriage, Reach Boom, R3.0 (917) Stick, GD 0.53 m^o (0.69 yd^o) bucket, 700 mm (28") triple grouser shoes, and 3830 kg (8,440 lb) counterweight.

Service Refill Capacities			
Fuel Tank Capacity	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)	138 L	36 gal	
Hydraulic Tank	72 L	19 gal	
DEF Tank	21 L	6 gal	

Dimensions		
Boom	Reach 4.65	m (15'3")
Stick	Reach R3.0 m (9'8")	
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"
Track Length (standard undercarriage)	3490 mm	11'5"
Length to Center of Rollers	3040 mm	9'11"
Length to Center of Rollers (standard undercarriage)	2780 mm	9'1"
Track Gauge	1990 mm	6'6"
Transport Width – 500 mm (20") shoe	2490 mm	8'2"

Working Ranges			
Boom	Reach 4.65 m (15'3")		
Stick	Reach R3.0 m (9'8")		
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 2400 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 0.8 kg of refrigerant which has a CO_2 equivalent of 1.144 metric tonnes.

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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