

313 LGP Hydraulic Excavator

The Cat® 313 low ground pressure hydraulic excavator brings premium power, performance, and control to your work. This low ground pressure machine has been designed to work in the most demanding agricultural and forestry applications. Unmatched versatility, excellent ground clearance, easy operation, and a comfortable, redesigned cab help make the 313 leading performer.

Reliable and Durable Performance

- The 313 low ground pressure machine has been designed for tough forestry and agricultural applications.
- The C3.6 engine and electro-hydraulic system work in sync, allowing you to move large volumes of material without burning too much fuel.
- The new main hydraulic pump is electronically controlled and provides higher fluid for improved control and productivity.
- Digging force has been increased and the swing drive has been redesigned to provide up to 10% more swing torque and smoothness for improved performance.
- A wide and high undercarriage and track provide design a balance of outstanding ground clearance, performance and stability.
- A full length deck bumper and heavy-duty bottom guard offer increased protection.
- Boom, stick and bucket linkages are reinforced for maximum durability.

Low Owning and Operating Costs

- The 313 is designed to simplify maintenance and reduce maintenance costs, which can reduce costs by up to 20%.
- Three working modes are provided, and the power can be selected according to the specific operation: Smart mode, which can automatically adjust the power according to the demand; Eco mode, which can reduce fuel consumption; Power mode, which can achieve the highest productivity.
- Hydraulic and air filter life has been extended, and pilot and case drain filters have been eliminated.
- A new electric priming pump system automatically prefills the fuel system on start-up, simplifying service and reducing the possibility of air cavitation.

- The swing drive is now integrated with the hydraulic system, eliminating the need to check or refill a separate oil system.
- Refill capacities of both hydraulic oil and engine oil have been reduced with no change in performance or service life.
- The Automatic Engine Control (AEC) system lowers engine rpm to idling if there is no operator input for 5 seconds, reducing your fuel costs.
- The Cat Product Link[™] system comes standard so you can remotely monitor fuel consumption, machine health, location and hours via VisionLink[®] if desired.

Easy to Use

- The keyless engine push start is easy to operate.
- The all-new electro-hydraulic joysticks require less operator effort and reduce operator fatigue significantly, while at the same time allowing customization of the joystick response and gain settings for maximum controllability.
- Quickly navigate through simplified control menus on a high resolution 203 mm (8 in) touchscreen monitor.

Work Comfortably

- The 313 features an adjustable, wider seat and suspension for improved operator comfort.
- Standard automatic temperature control ensures a comfortable temperature throughout the day.
- A large touch screen features simplified menus for adjusting operator preferences.
- Radio comes with Bluetooth[®] connectivity allowing operator to pair the device, enjoy music of choice and pick up calls handsfree.
- Convenient storage locations throughout the cab offer ample space for personal items.



Low Effort Maintenance

- The radiator screen is easily removable for easy cleaning and eliminates small, hard-to-remove debris, such as grass clippings, from the radiator.
- The engine compartment is easily accessible from the service platform; the oil cap and level gauge are easily accessible, and an automatic tensioner ensures you never have to adjust the conveyor belt.
- Cat technology helps you monitor your machine, while the Caterpillar service network helps maximize uptime.

Safety Features

- The 313 features emergency engine and electrical cut-off devices.
- Emergency engine and electrical cut-off devices are accessible at ground level.
- Extra handrails aid in easy servicing; steps and platforms use anti-skid plates with countersunk bolts to prevent slips and trips.
- In an emergency, the operator can climb out of the machine through the rear window or steel sunroof.
- The updated cab is designed with larger windows and smaller cab posts to provide excellent visibility.
- Bright exterior LED lights ensure you're well aware of your surroundings on the job site.

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

	Standard	Optional
BOOMS, STICKS AND LINKAGES		
2.5 m (8'2") HD Reach stick	\checkmark	
4.65 m (15'3") HD Reach boom	\checkmark	
Bucket linkage without lifting eye	\checkmark	
САВ		
Sound suppressed with viscous mounts	\checkmark	
Keyless push-to-start engine control	√	
Automatic bi-level air conditioner	√	
Fixed left side console	√	
51 mm (2 in) orange seat belt	\checkmark	
Mechanically adjustable seat with headrest	\checkmark	
Emergency exit	\checkmark	
High-resolution 203 mm (8") LCD touchscreen monitor	√	
Cup holder and storage compartments		
24V DC outlet	✓	
Speaker	✓	
AM/FM radio with Bluetooth	✓	
Washable floor mat	✓	
Dome light	✓	
Openable steel hatch	✓	
Upper radial wiper with washer	√	
70/30 tempered glass windshield	√	
1-button joystick		✓
Roller front sunscreen		✓
1-slider joystick		✓
CAT TECHNOLOGY		
Cat^{s} Product Link ^T	✓	
ELECTRICAL SYSTEM		
LED left-side boom and chassis lights	~	
Centralized electrical disconnect switch	\checkmark	
1,000 CCA maintenance-free batteries (×2)	\checkmark	
LED right-side boom light		~
LED cab light		✓

	Standard	Optional
ENGINE		
–18° C (–0.4° F) cold start capability	\checkmark	
Cat C3.6 single turbo diesel engine	\checkmark	
HYDRAULIC SYSTEM		
Element type main hydraulic filter	\checkmark	
Automatic two-speed travel	\checkmark	
Electronic control pump	\checkmark	
Electronic main control valve	~	
Tool control (one way high pressure flow)		\checkmark
Tool control (without high pressure flow)		\checkmark
Tool control (two way high pressure flow)		\checkmark
Main control valve without tool control		\checkmark
SAFETY AND SECURITY		
Hydraulic lock out lever neutralizes all controls	\checkmark	
Ground-level secondary engine shutoff switch	\checkmark	
Signaling/warning horn	\checkmark	
SERVICE AND MAINTENANCE		
Radiator screen	\checkmark	
Scheduled Oil Sampling (S.O.S [™]) ports	\checkmark	
Grouped engine oil and fuel filters	\checkmark	
UNDERCARRIAGE AND STRUCTURES		
HD travel motor guards	\checkmark	
Center track guiding guard	\checkmark	
Grease lubricated track link	\checkmark	
Low Ground Pressure undercarriage	\checkmark	
1300 kg (2,870 lb) counterweight	\checkmark	
Bottom guard	\checkmark	
Swivel guard		\checkmark
790 mm (31") triple grouser track shoes		\checkmark
960 mm (38") single grouser track shoes		\checkmark

Technical Specifications

Engine		
Engine Model	Cat	C3.6
Engine Power – ISO 14396	74.4 kW	100 hp
Engine Power – ISO 14396 – Metric	101 mhp	
Net Power – ISO 9249	70.6 kW	95 hp
Net Power – ISO 9249 – Metric	96 mhp	
Bore	98 mm	4 in
Stroke	120 mm	5 in
Displacement	3.6 L	220 in ³

• No engine power derating required below 3000 m (9,840 ft) altitude

• 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.

Hydraulic System		
Main System – Maximum Flow – Total	247 L/min	65 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Swing	25 900 kPa	3,756 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Swing Mechanism		
Swing Speed 11.5 r/min		
Swilly Speed	11.5	.,
Maximum Swing Torque	43 kN⋅m	31,640 ft·lbf
	43 kN⋅m	
Maximum Swing Torque	43 kN⋅m	

1300 kg (2,870 lb) counterweight.

Service Refill Capacities			
Fuel Tank Capacity	237 L	62.6 gal	
Cooling System	11 L	2.9 gal	
Engine Oil	11 L	2.9 gal	
Final Drive — Each	6 L	1.6 gal	
Hydraulic System – Including Tank	145 L	38.3 gal	
Hydraulic Tank	77 L	20.3 gal	

Dimensions			
Boom	Reach Boom	Reach Boom 4.65 m (15'3")	
Stick	Reach Stick	Reach Stick R2.5 m (8'2")	
Bucket	General Duty		
Shipping Height – Top of Cab	3190 mm	10.42 ft	
Shipping Height	3220 mm	10.58 ft	
Shipping Length	7680 mm	25.17 ft	
Transport Width	2890 mm	9.5 ft	
Tail Swing Radius	2200 mm	7.25 ft	
Counterweight Clearance	1260 mm	4.17 ft	
Ground Clearance	650 mm	2.17 ft	
Track Length	4000 mm	13.08 ft	
Track Gauge	2080 mm	6.83 ft	
Working Ranges			
Boom	Reach Boom	4.65 m (15'3")	
Stick	Reach Stick R2.5 m (8'2")		
Bucket	General Duty		
Maximum Digging Depth	5180 mm	17 ft	
Maximum Reach at Ground Level	8100 mm	26.58 ft	
Maximum Cutting Height	8860 mm	29.08 ft	
Maximum Loading Height	6460 mm	21.17 ft	
Minimum Loading Height	2380 mm	7.83 ft	
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	4970 mm	16.33 ft	
Maximum Vertical Wall Digging Depth	4500 mm	14.75 ft	
Bucket Digging Force (ISO)	98.5 kN	22,140 lbf	
Stick Diaging Force (ICO)	68.8 kN	15 470 164	
Stick Digging Force (ISO)	00.0 KIN	15,470 lbf	

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