

# Cat<sup>®</sup> 316 GC Hydraulic Excavator

If you need reliability, durability, high productivity, and low cost, the Cat® 316 GC is made for you. This excavator is designed, built, and uniquely supported to put you on the fast track to prosperity.

#### **Reliable, Durable Performance**

- The redesigned 316 GC allows you to be up to 15% more productive than with the previous 313D2 GC model.
- The C3.6 engine delivers more power, is more fuel efficient, and meets U.S. EPA Tier 3 and EU Stage IIIA emission standards, equivalent to China Nonroad Stage III.
- Breakout force is increased and a redesigned swing drive gives you improved swing torque and smoothness, increasing your productivity.
- New main hydraulic pump is electronically controlled for greater efficiency and provides more fluid flow than the previous model, improving control and productivity.
- Undercarriage and track design better meet high production needs and deliver excellent stability.
- A reinforced upper frame gives the 316 GC even greater durability.
- A wide range of bucket and tool options lets you take on more tasks.
- Reinforced bucket linkage pin allows for greater digging force.
- Reinforced stick with tailor-made rebar makes the 316 GC reliable enough to handle any tough application.

# Low Owning and Operating Costs

- Match the power to the job with three working modes: Smart for power automatically adjusted to demand, Eco for lowest fuel burn, and Power for highest productivity.
- The 316 GC is designed for easier and less expensive maintenance, lowering costs up to 20%.
- Hydraulic and air filters have increased service life, while the pilot and case drain filters have been eliminated.
- Most daily maintenance can be performed from ground level, decreasing the amount of time you spend on daily tasks.
- Swing drive operates on the hydraulic system, eliminating the need to check or refill a different oil system.
- Both the hydraulic and engine oil refill amounts have been reduced with no change in performance or service life.
- When hydraulic demand is low, the Automatic Engine Control (AEC) system reduces RPM, lowering your fuel costs.
- Cat Product Link<sup>™</sup> comes standard so you can remotely monitor fuel consumption, machine health, location, and hours on demand through VisionLink<sup>®</sup>.

#### **Simple to Operate**

- Start the engine with a pushbutton.
- One-button sticks (with adjustable joystick response and gain) make control easy for any operator.
- Navigate quickly through simplified control menus on the high-resolution 203 mm (8 in) touchscreen monitor.

# Work in Comfort

- Wide seat (larger than previous models) adjusts for operators of all sizes.
- Standard automatic climate control keeps you at the right temperature all shift long.
- Convenience features include a radio, headphone port, and a USB port for connecting and charging devices.
- Cup holder and storage space forward of the controls can hold large cups and wide cell phones; storage behind the seat can hold a hard hat, large lunchbox, and other items.



#### **Easy to Maintain**

- Nearly all major mechanical components are accessed from the ground or the service platform.
- Radiator screens can be removed easily, are simple to clean, and keep the radiators free of small debris that can be difficult to remove, such as grass clippings.
- Engine compartment is easily accessed from the service platform; fluid caps and gauges are easily reached, and an automatic tensioner ensures you will never need to make belt adjustments.
- Cat technology helps you monitor your machine, and the Caterpillar service network helps you maximize uptime.

#### **Enhanced Safety**

- Emergency engine and electrical shutoffs are also at ground level.
- Handrails meet ISO 2867:2011 requirements; steps and platforms use anti-skid plates with countersunk bolts to prevent slipping and tripping.
- Operator can exit in an emergency through either the rear window or the steel top hatch.
- New cab has larger windows and smaller cab posts, providing excellent visibility into the trench and in every direction.
- Bright exterior LED lights and an optional rearview camera ensure you have total visibility on the jobsite.

# **Standard and Optional Equipment**

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

	Standard	Optional
BOOM AND STICKS		
4.65 m (15'3") Reach HD boom	$\checkmark$	
2.5 m (8'2") Reach HD stick		$\checkmark$
3.0 m (9'10") Reach stick		$\checkmark$
CAB		
Sound suppressed with viscous mounts	$\checkmark$	
High-resolution 203 mm (8") LCD touchscreen monitor	$\checkmark$	
Mechanically adjustable seat with headrest	$\checkmark$	
Automatic bi-level air conditioner	$\checkmark$	
Keyless push-to-start engine control	$\checkmark$	
Floor-mounted adjustable consoles	$\checkmark$	
1-button joystick	$\checkmark$	
1-slider joystick		$\checkmark$
AM/FM radio with USB and aux port	$\checkmark$	
24V DC outlet	$\checkmark$	
Cup holder and storage compartments	$\checkmark$	
70/30 tempered glass windshield	$\checkmark$	
Upper radial wiper with washer	$\checkmark$	
Openable steel hatch	$\checkmark$	
Dome light	$\checkmark$	
Washable floor mat	$\checkmark$	
CAT TECHNOLOGY		
Cat Product Link™	$\checkmark$	
ELECTRICAL SYSTEM		
750 CCA maintenance-free batteries (x2)	$\checkmark$	
Electrical disconnect switch	$\checkmark$	
LED left-side boom and chassis lights	$\checkmark$	
LED right-side boom light		√1
LED cab light	$\checkmark$	
ENGINE		
Three selectable modes: Power, Smart, Eco	$\checkmark$	
52°C (125°F) high-ambient cooling capability	$\checkmark$	
-18°C (-0.4°F) cold start capability	√2	
-25°C (-13°F) cold start capability		√3
Biodiesel capability up to B20	$\checkmark$	
Electric fuel priming pump	$\checkmark$	
Two-stage fuel filtration system	$\checkmark$	
Sealed double-element air filter with precleaner	$\checkmark$	

	Standard	Optional
HYDRAULIC SYSTEM		
Electronic main control valve	$\checkmark$	
Electronic control pump	$\checkmark$	
Boom and stick regeneration circuits	$\checkmark$	
Automatic hydraulic oil warm up	$\checkmark$	
Automatic two-speed travel	$\checkmark$	
Hammer lines		$\checkmark$
Hammer floor pedal kit		$\checkmark$
High performance hydraulic return filter	$\checkmark$	
SAFETY AND SECURITY		
Anti-skid plating with countersunk bolts	$\checkmark$	
Handrail and handhold	$\checkmark$	
Lockable external tool/storage box	$\checkmark$	
Mirror package	$\checkmark$	
Rearview camera		$\checkmark$
Signaling/warning horn	$\checkmark$	
Hydraulic lockout lever	$\checkmark$	
Travel alarm with cancel switch		$\checkmark^4$
SERVICE AND MAINTENANCE		
Grouped location of filters	$\checkmark$	
Radiator screen	$\checkmark$	
S•O•S <sup>™</sup> sampling ports	$\checkmark$	
UNDERCARRIAGE AND STRUCTURES		
500 mm (20") triple grouser shoes		$\checkmark$
600 mm (24") triple grouser shoes		√1
700 mm (28") triple grouser shoes with additional steps		√5
770 mm (30") triple grouser shoes with additional steps		√5
Center track guiding guard	$\checkmark$	
Grease lubricated track link	$\checkmark$	
Bottom guards	$\checkmark$	
Travel motor guards	$\checkmark$	
3.2 mt (7,055 lb) counterweight	$\checkmark$	
Tie-down points	√	

<sup>1</sup>All regions except Taiwan

<sup>2</sup>All regions except CIS

<sup>3</sup>CIS and Africa-Middle East only. Standard for CIS

<sup>4</sup>Standard in South America

<sup>5</sup>All regions except Taiwan and Africa-Middle East

### **Technical Specifications**

Engine		
Engine Model	C3.	6
Net Power – ISO 9249:2007	77.3 kW	104 hp
Engine Power – ISO 14396:2002	82 kW	110 hp
Bore	98 mm	4 in
Stroke	120 mm	5 in
Displacement	3.6 L	220 in <sup>3</sup>

• The 316 GC meets U.S. EPA Tier 3 and EU Stage IIIA emission standards, equivalent to China Nonroad Stage III

• No engine power derating required below 3,000 m altitude.

• Rating at 2,200 rpm.

Hydraulic System		
Main System – Maximum Flow – Implement	268 L/min	71 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	26 000 kPa	3,770 psi
Boom Cylinder – Bore	105 mm	4 in
Boom Cylinder – Stroke	1015 mm	40 in
Stick Cylinder – Bore	120 mm	5 in
Stick Cylinder – Stroke	1197 mm	47 in
Bucket Cylinder – Bore	100 mm	4 in
Bucket Cylinder – Stroke	939 mm	37 in

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)	3 L	0.8 gal
Hydraulic System (including tank)	145 L	38.3 gal
Hydraulic Tank	77 L	20.3 gal

	Swing Mechanism		
Swing Speed		11.5	rpm
Maximum Swing Torque		43 kN∙m	31,634 lbf-ft

Machine WeightOperating Weight14 294 kg31,500 lbLong undercarriage, HD 4.65 m (15'3") boom, HD R2.5 m (8'2") stick,<br/>GD 0.65 m³ (0.85 yd³) bucket, and 500 mm (20") TG shoes.Stick

Dimensions		
Boom	HD 4.65 m (15'3")	
Stick	HD 2.5 m (8'2")	
Bucket	GD 0.65 m³ (0.85 yd³)	
Shipping Height (top of cab)	2780 mm	9'1"
Handrail Height	2830 mm	9'3"
Shipping Length	7770 mm	25'6"
Tail Swing Radius	2290 mm	7'6"
Counterweight Clearance	900 mm	2'11"
Ground Clearance	425 mm	1'5"
Track Length	3750 mm	12'4"
Length to Center of Rollers	3040 mm	10'0"
Track Gauge	1990 mm	6'6"
Transport Width – 500 mm (20") Shoes	2490 mm	8'2"

Working Ranges and Forces		
Boom	HD 4.65 m (15'3")	
Stick	HD 2.5 (	n (8'2")
Bucket	GD 0.65 m³ (0.85 yd³)	
Maximum Digging Depth	5530 mm	18'2"
Maximum Reach at Ground Level	8180 mm	26'10"
Maximum Cutting Height	8500 mm	27'11"
Maximum Loading Height	6110 mm	20'1"
Minimum Loading Height	2020 mm	6'8"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5330 mm	17'6"
Maximum Vertical Wall Digging Depth	4860 mm	15'11"
Bucket Digging Force (ISO)	109 kN	24,500 lbf
Stick Digging Force (ISO)	75 kN	16,860 lbf

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