

# 355

hydraulic excavator



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**Engine power - ISO 14396**

**Operating weight Bucket: Heavy-duty  
(HD)**

**332 kW (445 hp)**

**54000 kg (119000 lb)**

**4.5 m<sup>3</sup> (5.9 yd<sup>3</sup>)**

**CAT**

## Technical Specifications

Please see [cat.com](http://cat.com) for the full technical specifications.

engine		
Net Power - ISO 9249 Net	330 kW	443 hp
Power - ISO 9249 (DIN)	449 hp (metric)	
Engine Model	Cat® C13B	
Engine Power - ISO 14396	332 kW	445 hp
Engine Power - ISO 14396 (DIN)	451 hp (metric)	
Bore	130 mm	5 in
Stroke	157 mm	6 in
Displacement	12.5 L	763 in³
Maximum usable emission standards	B20 <sup>1</sup> grade biodiesel	
It meets China's National IV emission standards for non-road vehicles.		

The nominal net power is the flywheel power measured when the engine is equipped with a fan, intake system, and alternator at 1700 rpm. Nominal power is obtained by testing according to the specified standards in effect at the time of manufacture.

Cat diesel engines must use ULSD (ultra-low sulfur diesel with a sulfur content not exceeding 15 ppm) and be compatible with \*blending ULSD with the following low-carbon intensity fuels\*, with the following maximum percentages:

20% biodiesel FAME (fatty acid methyl esters) \*\*\*

100% renewable diesel, HVO (hydrotreated vegetable oil), and GTL (gas-to-liquid) fuels.

Please refer to the guidelines for successful application. For more information, consult your Cat dealer or << Caterpillar Machine Fluids Recommendations>> (Caterpillar Machine Fluids Recommendations, SEBU6250).

\*While Caterpillar engines are compatible with these alternative fuels, their use may be prohibited in some areas.

\*\*The greenhouse gas emissions from low-carbon intensity fuels are substantially the same as those from conventional fuels.

\*\*\*Engines without aftertreatment systems can be compatible with higher proportions of blended fuels, up to 100% biodiesel (for blends with more than 20% biodiesel, please consult your Cat dealer).

size		
boom	Large capacity	6.55 m (21'6")
stick	Large capacity	2.5 UB (8'2")
Bucket	SD	3.21 m³ (4.20 yd³)
Loading height - cab top	3230 mm	10.58 ft
Handrail height	3370 mm	11.08 ft
Loading length	11660 mm	38.25 ft
tail turning radius	3760 mm	12.33 ft
Counterweight ground clearance	1280 mm	4.17 ft
ground clearance	475 mm	1.58 ft
track length	5370 mm	17.58 ft
Track to track roller center length and	4360 mm	14.3 ft
track gauge	2740 mm	9.6 ft
Transport width	3530 mm	11.58 ft

Scope and intensity of work		
boom	Large capacity	6.55 m (21'6")
pole	Large capacity	2.5 UB (8'2")
Maximum	SD	3.21 m³ (4.20 yd³)
digging depth of the bucket	6770 mm	21.7 ft
Maximum ground extension distance	10770 mm	35.2 ft
Maximum cutting height	10090 mm	33.8 ft
Maximum loading height	6580 mm	22.3 ft
Minimum loading height	3110 mm	10.1 ft
2440 mm (8 ft) Maximum cut at horizontal bottom depth	6600 mm	20.8 ft
Maximum vertical wall excavation depth	4110 mm	12.11 ft
Bucket digging force - ISO	293 kN	66600 lbf
Stick digging force - ISO	240 kN	54100 lbf

air conditioning system		
This machine's air conditioning system contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.0 kg (2.2 lb) of refrigerant with a CO <sub>2</sub> (carbon dioxide) equivalent of 1.430 metric tons (1.6 tons).		
- If equipped with R134a (Global Warming Potential = 1859), the system's refrigerant charge is 1.3 kg (2.9 lb), with a CO <sub>2</sub> equivalent of 1.9 metric tons (2.04 tons).		
- If equipped with R1234yf (Global Warming Potential = 0.501), the system's refrigerant charge is 1.1 kg (2.4 lb), with a CO <sub>2</sub> equivalent of 0.001 metric tons (0.001 tons).		

acoustic performance		
GB/T 25614-2010 (External)	108 dB(A)	
GB/T 25614-2010 (Internal) External	73 dB(A)	

External Sound - Bystander sound power level is the guaranteed value under correct equipment configuration, conforming to GB16710-2010 requirements. Testing is conducted according to the procedures and conditions specified in GB/T25614-2010. Measurements are taken at 70% of the maximum engine cooling fan speed.

Internal Sound - Operator sound pressure level testing is performed on the Caterpillar cab according to the test procedures and conditions specified in GB/T25615-2010. Test conditions include proper cab installation and maintenance, and closed doors and windows. Measurements are taken at 70% of the maximum engine cooling fan speed.

Hearing protection measures should be taken for prolonged operation in open console or cab environments (e.g., poorly maintained or with doors/windows open), or in noisy environments.

Hydraulic system		
Maximum pressure - equipment	35000 kPa	5076 psi
Maximum pressure - Equipment - Lift mode	38000 kPa	5511 psi
Maximum pressure - Driving	35000 kPa	5076 psi
Maximum pressure - rotation	26000 kPa	3771 psi

Rotation mechanism		
Rotation speed	8.3 rpm	
Maximum slewing torque	189 kN·m	139000 ft·lbf
weight		
Working weight	54000 kg	119000 lb

Wide variable gauge (W-VG) chassis, large capacity boom, SD M3.0UB (9'10") stick.

Heavy-duty (HD) 4.5 m<sup>3</sup> (5.89 yd<sup>3</sup>) bucket, 600 mm (24") double gripper track shoes and 9300 mt (20500 lb) counterweight.

Fuel filling capacity		
Fuel tank capacity	715 L	188.9 gal
Diesel exhaust fluid (DEF) tank	80 L	21.1 gal
cooling system	52 L	13.7 gal
Engine oil	40 L	10.6 gal
Rotary drive - each	10.5 L	2.8 gal
final drive - each	9.5 L	2.5 gal
Hydraulic system - including oil tank	550 L	145.3 gal
Hydraulic oil tank	217 L	57.3 gal

## Standard equipment and optional equipment

Standard and optional equipment may vary. Please consult your Cat® dealer for details.

Chassis and Structure		Standard configuration	Optional	The engine		Standard configuration	Optional
Traction ring located on the y		●		offers three selectable modes: Power and Smart. (Smart) and Eco engine speed		●	
underframe, fixed gauge			●	automatic control		●	
chassis, variable gauge			●	up to 4500 m (14760 ft) Altitude operating capability		●	
chassis, 9300 kg (20500 lb) ballast,			●	up to 52°C (126°F) High temperature cooling capability		●	
10050 kg (22156 lb) ballast, 600 mm		●		down to -18°C (0°F) Cold start		●	
(24") ballast, double traction tooth track shoes,			●	capability Dual-element air filter with integrated pre-filter Remote		●	
750 mm (30") triple traction tooth track shoes, 750			●	shut-off		●	
mm (30") double traction tooth track shoes.			●	Cold start engine heater			●
Boom and stick		Standard configuration	Optional	Hydraulic		Standard configuration	Optional
6.55 m (21'6") SD; Large capacity boom		●		up to 4500 m (14760 ft) Altitude operating capability		●	
6.9 m (22'8") SD; Extended boom			●	up to 52°C (126°F) High temperature cooling capability		●	
2.5 m (8'2") SD; Large capacity stick			●	down to -18°C (0°F) Cold start		●	
2.9 m (9'6") SD; Extended stick			●	capability Dual-element air filter with integrated pre-filter Remote		●	
3.0 m (9'10") SD; Large capacity stick			●	shut-off		●	
Cab Rollover		Standard configuration	Optional	Electrical system		Standard configuration	Optional
Protection Structure (ROPS)		●		1000 CCA maintenance-free batteries (x4)		●	
Cab/Operator Protective Gear (OPG)			●	Central electrical disconnect switch		●	
High-resolution 203 mm (8") LCD Touchscreen Display		●		LED light		●	
Automatic Two-Stage Air Conditioning		●		intake heater			●
Keyless Push-Button Start Engine Control		●		Repair and maintenance		Standard configuration	Optional
Air Suspension Basic Seat		●		Integrated vehicle health management system		●	
51 mm (2") Seatbelt		●		Centralized location of engine oil and fuel filter		●	
Bluetooth Radio with USB/Auxiliary Port		●		SOS port			
24V DC power socket				The hydraulic		Standard configuration	Optional
beverage holder		●		system boom and stick regeneration circuit		●	
openable two-piece front windows		●		electronic main control		●	
rear windows emergency exit		●		valve automatically preheats the hydraulic oil.		●	
radial wipers and washer		●		Automatic swing parking brake		●	
openable steel cab hatch.		●		High-performance hydraulic return oil filter,		●	
LED dome light		●		dual-speed travel,		●	
roll-up front sunshade		●		single-phase single-pump auxiliary			●
washable floor mats		●		circuit, combined bidirectional dual-pump auxiliary circuit, quick			●
high-resolution 254 mm (10") LCD touchscreen display			●	connector circuit.			●
roll-up rear sunshade.			●	The safety		Standard configuration	Optional
CAT technology		Standard configuration	Optional	maintenance platform is equipped with anti-slip plates, countersunk		●	
<b>Cat Equipment Management:</b>				screws, a rearview		●	
Remote Flash		●		camera, a lockable power-off		●	
Remote Troubleshoot		●		switch, automatic hydraulic		●	
Operator Coaching			●	hammer stop, rearview		●	
				camera maintenance lighting, and more.			●