

Product Specifications For 319



Engine

Net Power - ISO 9249	99 kW
Net Power - ISO 9249 (DIN)	134 hp (metric)
Engine Model	Cat C3.6
Engine Power - ISO 14396	100 kW
Engine Power - ISO 14396 (DIN)	136 hp (metric)
Bore	98 mm
Stroke	120 mm
Displacement	3.6 l
Biodiesel Capability	Up to B20 ¹
Emissions	Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
Note (1)	Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator with engine speed at 2,200 rpm. Advertised power is tested per the specified standard in effect at the time of manufacture.

Note (2)

¹Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible* with ULSD blended with the following lower-carbon intensity fuels** up to: 20% biodiesel FAME (fatty acid methyl ester)*** or 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details. *While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use. **Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels. ***Engines with no aftertreatment devices are compatible with higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

Weights

Operating Weight

20000 kg

Note (1)

*Long undercarriage, 5.1 m (16'9") Reach Boom, 3.1 m (10'2") Reach Stick, General Duty (GD) 1 m³ (1.31 yd³) bucket, and 700 mm (28") triple grouser track shoes.

Working Ranges And Forces

Maximum Digging Depth

6550 mm

Boom

Reach 5.1 m (16'9")

Stick

Reach 3.1 m (10'2")

Bucket

GD 1 m³ (1.31 yd³)

Maximum Reach at Ground Level

9190 mm

Maximum Cutting Height

9050 mm

Maximum Loading Height

6430 mm

Minimum Loading Height

1850 mm

Maximum Depth Cut for 2440 mm (8 ft) Level Bottom

6330 mm

Maximum Vertical Wall Digging Depth

5210 mm

Minimum Working Equipment Radius	2930 mm
Bucket Digging Force - ISO	123 kN
Stick Digging Force - ISO	71 kN

Hydraulic System

Main System - Maximum Flow	296 L/min (78 gal/min)
Maximum Pressure - Equipment	35000 kPa
Maximum Pressure - Travel	35000 kPa
Maximum Pressure - Swing	26100 kPa

Swing Mechanism

Swing Speed	9.2 r/min
Maximum Swing Torque	61 kN·m
Note (1)	*For CE-marked machine default value may be set lower

Service Refill Capacities

Fuel Tank Capacity	229 l
Cooling System	19 l
Engine Oil	11 l
Final Drive - Each	6 l
Hydraulic System - Including Tank	83 l
Hydraulic Tank	76 l
DEF Tank	21 l

Dimensions

Boom	Reach 5.1 m (16'9")
Stick	Reach 3.1 m (10'2")
Bucket	GD 1 m³ (1.31 yd³)
Shipping Height - Top of Cab	2940 mm
Handrail Height	2990 mm
Shipping Length	8120 mm
Shipping Length - with Blade	8660 mm
Tail Swing Radius	1750 mm
Counterweight Clearance	1016 mm
Ground Clearance	463 mm
Track Length	4070 mm
Length to Center of Rollers	3265 mm
Track Gauge	2200 mm
Transport Width	2900 mm

Air Conditioning System

Air Conditioning	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas. If equipped with R134a (Global Warming Potential = 1430), the system contains 0.8 kg (1.8 lb) of refrigerant which has a CO2 equivalent of 1.144 metric tonnes (1.261 tons). If equipped with R1234yf (Global Warming Potential = 0.5), the system contains 0.7 kg (1.5 lb) of refrigerant which has a CO2 equivalent of 0.001 metric tonnes (0.001 tons).
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319 Standard Equipment

NOTE

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

CAB

Rollover Protective Structure (ROPS)

Air suspension heated seat, 254 mm (10") touchscreen monitor

CAT TECHNOLOGIES

VisionLink™

Remote Flash

Remote Troubleshoot

Cat Grade with 2D

Cat Assist

Cat Payload

ELECTRICAL SYSTEM

Maintenance free battery

LED chassis light, left-side/right-side boom lights, cab lights

Programmable time-delay LED working lights

ENGINE

Cat C3.6 single turbo diesel engine

Three selectable modes: Power, Smart, Eco

One-touch low idle with automatic engine speed control

Automatic engine idle shutdown

Down to -25°C (-13°F) cold start capability

Electric fuel priming pump

Electric cooling fans

Single fuel filtration system with water separator and indicator

Sealed double element air filter with integrated pre-cleaner

HYDRAULIC SYSTEM

Electronic main control valve

Single-type electronic main pump

Boom and stick regeneration circuits

Boom and stick drift reduction valve

Automatic hydraulic oil warm up

Automatic two-speed travel

SAFETY AND SECURITY

Rear and right-side-view cameras

Ground level accessible secondary engine shutoff switch in cab

Service platform with anti-skid plate and countersunk bolts

Signaling/warning horn
Hydraulic lock out lever
2D E-fence

SERVICE AND MAINTENANCE

Grouped engine oil and fuel filters
Ground-level engine oil dipstick
S·O·SSM ports
Integrated vehicle health management system

UNDERCARRIAGE AND STRUCTURES

Grease lubricated track link
Tie-down points
4.65 mt (10,200 lb) counterweight

319 Optional Equipment

NOTE

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

BOOM AND STICKS

5.1 m (16'9") Reach Boom
2.64 m (8'8") stub + 2.6 (8'6") fore Variable Angle Boom
2.25 m (7'5") Reach stick (VA Boom only)
2.6 m (8'6") Reach stick
2.9 m (9'6") Reach stick
3.1 m (10'2") Reach stick
2.9 m (9'6") Thumb Ready stick (N Am only)

CAB

Operator Protective Guards (OPG)
Auxiliary relay

CAT TECHNOLOGIES

Operator Coaching
Cat Advanced Payload
Cat Grade with 2D with Attachment Ready Option (ARO)
Cat Grade with 3D (single or dual GNSS)
Cat Grade 3D Ready

ELECTRICAL SYSTEM

360° lighting

HYDRAULIC SYSTEM

Boom and stick lowering check valves

SAFETY AND SECURITY

Cat Detect - People Detection

360° visibility

Swing alarm

Inspection lighting

UNDERCARRIAGE AND STRUCTURES

500 mm (20") triple grouser track shoes (Europe only)

600 mm (24") triple grouser track shoes

600 mm (24") triple grouser track shoes with rubber pad

700 mm (28") triple grouser track shoes with additional steps

900 mm (35") triple grouser track shoes (Europe only)

2800 mm (9'2") blade

2900 mm (9'6") blade