

Product Specifications For M314



Engine

Engine Power - ISO 14396	100 kW
Engine Power - ISO 14396 (DIN)	136 hp (metric)
Engine Model	Cat® C3.6
Net Power - ISO 9249	95 kW
Net Power - ISO 9249 (DIN)	129 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, EU Stage V, and Korea Stage V emission standards.
Note (1)	Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, Clean Emission Module (CEM) exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed. Rated speed 2,000 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).

Machine Weight

Operating Weight Maximum	18000 kg
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Operating Weight Minimum	14600 kg
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Note (1)

Operating weight includes full fuel tank, operator, 500 kg (1,102 lb) bucket and dual pneumatic tires. Weight varies depending on configuration. Typical configurations include a 2200 mm (7'3") stick and a 210 kg (463 lb) quick coupler.

Drive

Maximum Travel Speed	37 km/h
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Hydraulic System

Main System - Maximum Flow - Implement	270 L/min
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Maximum Pressure - Implement Circuit - Normal	35000 kPa
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Maximum Pressure - Implement Circuit - Heavy Lift	37000 kPa
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Maximum Pressure - Implement Circuit - Travel Circuit	35000 kPa
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Swing Mechanism

Maximum Swing Speed*	9.1 r/min
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Maximum Swing Torque	41.3 kN·m
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Note (1)

*For CE-marked machine default value may be set lower

Service Refill Capacities

Fuel Tank	295 l
Diesel Exhaust Fluid (DEF)	20 l
Cooling System	20 l
Hydraulic Tank	90 l
Hydraulic System - Including Tank	220 l

Dimensions

Boom	Variable Adjustable Boom 5 m (16' 6")
Stick	2.2 m (7' 3")
Bucket	GD 0.76 m ³ (0.99 yd ³)
Shipping Height - Top of Cab	3315 mm
Shipping Length	8210 mm
Support Point	3450 mm
Tail Swing Radius	2150 mm
Counterweight Clearance	1260 mm
Ground Clearance	335 mm
Undercarriage Length	4920 mm
Wheel Base	2500 mm

Working Ranges And Forces

Boom	Variable Adjustable Boom 5 m (16' 6")
Stick	2.2 m (7' 3")
Bucket	GD 0.76 m ³ (0.99 yd ³)
Digging Height	9780 mm
Dump Height	7010 mm
Maximum Digging Depth	5290 mm
Maximum Vertical Wall Digging Depth	4250 mm
Maximum Reach at Ground Line	8650 mm
Stick Forces (ISO)	71 kN
Bucket Forces (ISO)	105 kN
Note (1)	Range values are calculated with a GD bucket (CW-S) and CW-20S-D.4.N quick coupler with a tip radius of 1387 mm (4'7"). Force values are calculated with heavy lift on, a GD bucket (pin-on) and a tip radius of 1224 mm (4'0").

Air Conditioning System

Note	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 CO ₂ 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 CO ₂ equivalent of 0.0004 metric tonnes (0.0004 tons).
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Sustainability

Recyclability	91%
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M314 Standard Equipment

NOTE

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

ELECTRICAL SYSTEM

LED lights on boom and cab
Programmable time-delay LED working lights
Roading and indicator lights, front and rear
Maintenance free batteries
Centralized electrical disconnect switch

ENGINE

Cat C3.6 single turbo diesel engine
Power mode selector
One-touch low idle with auto engine speed control
Automatic engine idle shutdown
Up to 52°C (125°F) high-ambient cooling capacity
Cold start capability down to -18°C (0°F)
Double element air filter with integrated pre-cleaner

HYDRAULIC SYSTEM

Boom, stick, and bucket drift reduction valves
Automatic hydraulic oil warm up
Heavy lift mode

SAFETY AND SECURITY

Rear and right-side-view cameras
Wide angle mirrors
Signal/warning horn
Lockable disconnect switch
Anti-skid plate and countersunk bolts on service platform

SERVICE AND MAINTENANCE

Scheduled Oil Sampling (S·O·SSM) ports
Integrated vehicle health management system

TECHNOLOGY

VisionLink™
Remote Flash and Remote Troubleshoot

UNDERCARRIAGE AND STRUCTURES

All wheel drive
Automatic brake/axle lock
3300 kg (7275 lb) counterweight

CAB

Sound-suppressed ROPS cab
Keyless push-to-start engine control
Height-adjustable console, infinite with no tool
High-Resolution 254 mm (10 in) LCD touchscreen monitor

M314 Optional Equipment

NOTE

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

BOOMS AND STICKS

4650 mm (15'3") One-Piece Boom (Europe, Aus-NZ only)
4400 mm (14'5") One-Piece Boom (South Korea only)
5028 mm (16'6") Variable Adjustable Boom
2200 mm (7'3") stick
2500 mm (8'2") stick
2900 mm (9'6") Drop Nose stick without bucket linkage (Europe only)

ELECTRICAL SYSTEM

LED lights on chassis (left-hand, right-hand) and counterweight
Electrical refueling pump

HYDRAULIC SYSTEM

Boom/stick lowering check valves
Bucket cylinder check valves
One-slider joysticks
Two-slider joysticks
Joystick Steering

SAFETY AND SECURITY

360° visibility
Travel alarm
Inspection lighting
2D E-fence
Cab avoidance

SERVICE AND MAINTENANCE

Automatic lubrication system for implement and swing system

TECHNOLOGY

Cat Grade with 2D
Cat Grade with 2D with Attachment Ready Option (ARO)

Laser catcher
Cat Grade 3D Ready
Cat Grade Connectivity
Cat Grade with Assist
Cat Payload
Cat Tiltrotator (TRS) integration

UNDERCARRIAGE AND STRUCTURES

9.00-20 14 PR, dual tires (South Korea only)
10.00-20 16 PR, dual tires
10.00-20, dual, solid rubber tires
300-80-22.5 dual pneumatic, spacerless tire (Europe only)

CAB

Operator Protective Guard (OPG)
Openable two-piece front window (laminated)
Fixed one-piece front window (P5A classified)