# **Product Specifications For M314 - Tier 4 / Stage V**



# Engine

Engine Power - ISO 14396	134 hp
Engine Power - ISO 14396 (DIN)	136 hp (metric)
Engine Model	Cat® C3.6
Net Power - ISO 9249	127 hp
Net Power - ISO 9249 (DIN)	129 hp (metric)
Bore	3.9 in
Stroke	5 in
Displacement	221 in³
Biodiesel Capability	Up to B20 <sup>1</sup>
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) or 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. \* Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer). \*\* Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

# **Machine Weight**

Operating Weight Maximum

39680 lb

Operating Weight Minimum

32190 lb

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** 

23 mile/h

# **Hydraulic System**

Main System - Maximum Flow - Implement	71.3 gal/min
Maximum Pressure - Implement Circuit - Normal	5076 psi
Maximum Pressure - Implement Circuit - Heavy Lift	5366 psi
Maximum Pressure - Implement Circuit - Travel Circuit	5076 psi

# **Swing Mechanism**

**Maximum Swing Torque** 

Maximum Swing Speed*	9.1 r/min

30461 lbf·ft

# **Service Refill Capacities**

Fuel Tank	77.9 gal (US)
Diesel Exhaust Fluid (DEF)	5.3 gal (US)
Cooling System	5.3 gal (US)
Hydraulic Tank	23.8 gal (US)
Hydraulic System - Including Tank	58.1 gal (US)

# **Dimensions**

Boom	Variable Adjustable Boom 5 m (16' 6")
Stick	2.2 m (7' 3")
Bucket	GD 0.76 m³ (0.99 yd³)
Shipping Height - Top of Cab	10.9 ft
Shipping Length	26.9 ft
Support Point	11.3 ft
Tail Swing Radius	7.1 ft
Counterweight Clearance	4.1 ft
Ground Clearance	1.1 ft
Undercarriage Length	16.1 ft
Wheel Base	8.2 ft

# **Working Ranges And Forces**

Boom	Variable Adjustable Boom 5 m (16' 6")
Stick	2.2 m (7' 3")
Bucket	GD 0.76 m³ (0.99 yd³)
Digging Height	32.1 ft
Dump Height	23 ft
Maximum Digging Depth	17.4 ft
Maximum Vertical Wall Digging Depth	13.9 ft
Maximum Reach at Ground Line	28.4 ft
Stick Forces (ISO)	15961 lbf
Bucket Forces (ISO)	23605 lbf
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 (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).

# **Sustainability**

Recyclability 91%

# M314 - Tier 4 / Stage V 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
52° C (125° F) high-ambient cooling capacity
Cold start capability -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·S℠) 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 - Tier 4 / Stage V 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 tires10.00-20, dual, solid rubber tires300-80-22.5 dual pneumatic, spacerless tire (Europe only)

### **CAB**

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