

Product Specifications For M320



Engine

Engine Power - ISO 14396	129 kW
Engine Power - ISO 14396 (DIN)	176 hp (metric)
Engine Model	Cat C4.4
Net Power - ISO 9249	127.8 kW
Net Power - ISO 9249 (DIN)	174 hp (metric)
Bore	105 mm
Stroke	135 mm
Displacement	4.4 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 cleaner, Clean Emission Module (CEM) exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed. Rated 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).

Machine Weight

**Operating Weight
Maximum**

21200 kg

**Operating Weight
Minimum**

18800 kg

Note (1)

Operating weight includes full fuel tank, operator, bucket 700 kg (1,543 lb) and dual pneumatic tires. Weight varies depending on configuration. Typical configurations include 2500 mm (8'2") stick, 3600 kg (7,937 lb) counterweight, bucket and 220 kg (485 lb) quick coupler.

Drive

Maximum Travel Speed

35 km/h

Hydraulic System

Main System - Maximum Flow - Implement

306 L/min

Maximum Pressure - Implement Circuit - Normal

35000 kPa

Maximum Pressure - Implement Circuit - Heavy Lift

37000 kPa

Maximum Pressure - Implement Circuit - Travel Circuit

35000 kPa

Swing Mechanism

Maximum Swing Speed*

9.2 r/min

Maximum Swing Torque	52.5 kN·m
----------------------	-----------

Note (1) *For CE-marked machine default value may be set lower

Service Refill Capacities

Fuel Tank	470 l
Diesel Exhaust Fluid (DEF)	30 l
Cooling System	31.7 l
Hydraulic Tank	155 l
Hydraulic System - Including Tank	270 l

Dimensions

Boom	Variable Adjustable Boom 5260 mm (17'3")
Stick	2500 mm (8'2")
Bucket	GD 0.98 m³ (1.28 yd³)
Shipping Height - Top of Cab	3370 mm
Shipping Length	8925 mm
Support Point	3580 mm
Tail Swing Radius	2600 mm
Counterweight Clearance	1306 mm
Ground Clearance	420 mm
Undercarriage Length	5050 mm
Wheel Base	2700 mm

Working Ranges And Forces

Boom	Variable Adjustable Boom 5260 mm (17'3")
Stick	2500 mm (8'2")
Bucket	GD 0.98 m ³ (1.28 yd ³)
Maximum Cutting Height	9950 mm
Maximum Loading Height	6960 mm
Maximum Digging Depth	6030 mm
Maximum Vertical Wall Digging Depth	4230 mm
Maximum Reach at Ground Line	9290 mm
Stick Forces (ISO)	92 kN
Bucket Forces (ISO)	137 kN
Note (1)	Range values are with dual pneumatic tires (10.00-20). Range values are calculated with a GD bucket (CW) and CW-30 quick coupler with a tip radius of 1535 mm (5'0"). Force values are calculated with heavy lift on, a GD bucket (pin-on) and a tip radius of 1462 mm (4'10").

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 1 kg (2.2 lb) of refrigerant which has a CO ₂ equivalent of 1.430 metric tonnes (1.576 tons). If equipped with R1234yf (Global Warming Potential = 0.5), the system contains 0.8 kg (1.8 lb) of refrigerant which has a CO ₂ equivalent of 0.0004 metric tonnes (0.0004 tons).
-------------	---

M320 Standard Equipment

NOTE

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

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

CAT TECHNOLOGY

VisionLink™
Remote Flash and Remote Troubleshoot

ELECTRICAL SYSTEM

LED lights on chassis (left-hand, right-hand) and counterweight
Programmable time-delay LED working lights
Roading and indicator lights, front and rear
Maintenance free batteries
Centralized electrical disconnect switch

ENGINE

Power Mode Selector
One-touch low idle with automatic 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
Lockable disconnect switch
Anti-skid plate and countersunk bolts on service platform
Signal/warning horn

SERVICE AND MAINTENANCE

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

UNDERCARRIAGE AND STRUCTURES

Automatic brake/axle lock
All wheel drive

M320 Optional Equipment

NOTE

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

BOOM AND STICKS

5650 mm (18'6") One-piece boom
5260 mm (17'3") Variable Adjustable boom
2500 mm (8'2") stick
2900 mm (9'6") stick

CAB

Operator Protective Guards (OPG)

CAT 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

ELECTRICAL SYSTEM

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
Inspection lighting

2D E-fence

Cab Avoidance

SERVICE AND MAINTENANCE

Automatic lubrication system for implement and swing system

UNDERCARRIAGE AND STRUCTURES

10.00-20 16 PR, dual tires

11.00-20-16 PR, dual tires

315/70R22.5, no gap dual tires (Europe only)

445/70R 19.5, single tires

300-80-22.5 dual pneumatic, spacerless tire

3600 kg (7,937 lb) counterweight (Europe only)

4200 kg (9,260 lb) counterweight