

Product Specifications For 320 - Tier 3



Engine

Net Power - ISO 9249	117 kW
Net Power - ISO 9249 (DIN)	159 hp (metric)
Engine Model	Cat® C7.1
Engine Power - ISO 14396	118 kW
Engine Power - ISO 14396 (DIN)	160 hp (metric)
Bore	105 mm
Stroke	135 mm
Displacement	7.01 l
Biodiesel Capability	Up to B20 ¹
Emissions	Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
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 1,800 rpm. Advertised power is tested per the specified standard in effect at the time of manufacture.

Note (2)

¹Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to: 100% 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. *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.

Weights

Operating Weight

21300 kg

Note

Heavy Duty (HD) Reach boom, HD R2.9 (9'6") stick, HD 1.19 m³ (1.56 yd³) bucket, 600 mm (24") triple grouser shoes, and 3700 kg (8,200 lb) counterweight.

Working Ranges And Forces

Maximum Digging Depth

6720 mm

Boom

HD Reach 5.7 m (18'8")

Stick

HD Reach 2.9 m (9'6")

Bucket

 HD 1.19 m³ (1.56 yd³)

Maximum Reach at Ground Level

9860 mm

Maximum Cutting Height

9370 mm

Maximum Loading Height

6490 mm

Minimum Loading Height

2170 mm

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

6550 mm

Maximum Vertical Wall Digging Depth

5190 mm

Bucket Digging Force - ISO

150 kN

Stick Digging Force - ISO

106 kN

Hydraulic System

Main System - Maximum Flow

429 l/min (113 gal/min)

Maximum Pressure - Equipment

35000 kPa

Maximum Pressure - Equipment - Lift Mode

38000 kPa

Maximum Pressure - Travel

34300 kPa

Maximum Pressure - Swing

27500 kPa

Swing Mechanism

Swing Speed

11.3 r/min

Note (1)

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

Maximum Swing Torque

82 kN·m

Service Refill Capacities

Fuel Tank Capacity

345 l

Cooling System

25 l

Engine Oil

25 l

Swing Drive

6 l

Final Drive - Each

5 l

Hydraulic System - Including Tank

234 l

Hydraulic Tank

115 l

Dimensions

Boom	HD Reach 5.7 m (18'8")
Stick	HD Reach 2.9 m (9'6")
Bucket	HD 1.19 m ³ (1.56 yd ³)
Shipping Height - Top of Cab	2960 mm
Handrail Height	2950 mm
Shipping Length	9530 mm
Tail Swing Radius	2830 mm
Counterweight Clearance	1050 mm
Ground Clearance	470 mm
Track Length	4450 mm
Length to Center of Rollers	3650 mm
Track Gauge	2380 mm
Transport Width	2980 mm

Air Conditioning System

Air Conditioning The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg (1.9 lb) of refrigerant which has a CO₂ equivalent of 1.216 metric tonnes (1.340 tons).

320 - Tier 3 Standard Equipment

NOTE

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

CAB

Rollover Protective Structure (ROPS)
Mechanical-suspension seat (Comfort only)
Heated air-suspension seat (Deluxe only)
High-resolution 203 mm (8 in) LCD touchscreen monitor

CAT TECHNOLOGY

VisionLink®
Remote Flash
Remote Troubleshoot
Work tool recognition and tracking (PL161)
Cat Grade with 2D
Cat Assist
Cat Payload

ELECTRICAL SYSTEM

Two 1,000 CCA maintenance-free batteries
Programmable time-delay LED working lights
LED chassis light, left-hand/right-hand boom lights, cab lights

ENGINE

Cat C7.1 single turbo diesel engine
Three selectable power modes
Automatic engine speed control
Auto engine idle shutdown
52°C (125°F) high-ambient cooling capacity
-18°C (0°F) cold start capability
Double element air filter with integrated precleaner
Reversing electric cooling fans

HYDRAULIC SYSTEM

Boom and stick regeneration circuits
Auto warm up
Auto two-speed travel
Boom and stick drift reduction valve
Auto hydraulic warm up
Slider joysticks

SAFETY AND SECURITY

2D E-Fence
Auto hammer stop
Rearview camera
Cat asset tracker
Ground-level engine shutoff switch
Lockable disconnect switch
Right-hand handrail and hand hold
Signaling/warning horn

SERVICE AND MAINTENANCE

Scheduled Oil Sampling (S·O·SSM) ports
Ground-level and platform-level engine oil dipsticks
Integrated vehicle health management system

UNDERCARRIAGE AND STRUCTURES

Tie-down points on base frame

320 - Tier 3 Optional Equipment

NOTE

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

BOOMS AND STICKS

5.7 m (18'8") HD Reach boom
8.85 m (29'0") Super Long Reach boom
2.9 m (9'6") HD Reach stick
2.5 m (8'2") HD Reach stick
2.9 m (9'6") SD Reach stick (Kingdom of Saudi Arabia only)
2.5 m (8'2") SD Reach stick (Kingdom of Saudi Arabia only)
6.28 m (20'7") Super Long Reach stick

CAB

Operator Protective Guards (OPG)
High-resolution 254 mm (10 in) LCD touchscreen monitor
Cat Stick Steer

CAT TECHNOLOGY

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

ELECTRICAL SYSTEM

Four 1,000 CCA maintenance-free batteries

ENGINE

-32°C (-25°F) cold start capability

HYDRAULIC SYSTEM

Hammer return filter circuit
Hydraulic efficiency monitoring
Auto Heavy Lift
Tool control (two pump, one/two way high-pressure flow)
Basic tool control (one pump, one way high-pressure flow)
Quick coupler circuit for Cat Pin Grabber

SAFETY AND SECURITY

Cat Command (remote control)
Right-hand-sideview camera
360° visibility
Travel alarm
Swing alarm
Inspection lighting

UNDERCARRIAGE AND STRUCTURES

600 mm (24") double grouser track shoes
600 mm (24") triple grouser track shoes
700 mm (28") triple grouser track shoes
790 mm (31") tripler grouser track shoes
800 mm (31") triple grouser track shoes
3700 kg (8,160 lb) counterweight
4200 kg (9,300 lb) counterweight
4700 kg (10,400 lb) counterweight for SLR boom and stick