

# PRODUCT SPECIFICATIONS FOR 320 - TIER 4 / STAGE V



## ENGINE

|                             |          |
|-----------------------------|----------|
| <b>Net Power - ISO 9249</b> | 128.5 kW |
|-----------------------------|----------|

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Net Power - ISO 9249 (DIN)</b> | 175 hp (metric) |
|-----------------------------------|-----------------|

|                     |          |
|---------------------|----------|
| <b>Engine Model</b> | Cat C4.4 |
|---------------------|----------|

|                                 |          |
|---------------------------------|----------|
| <b>Engine Power - ISO 14396</b> | 129.4 kW |
|---------------------------------|----------|

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Engine Power - ISO 14396 (DIN)</b> | 176 hp (metric) |
|---------------------------------------|-----------------|

|             |        |
|-------------|--------|
| <b>Bore</b> | 105 mm |
|-------------|--------|

|               |        |
|---------------|--------|
| <b>Stroke</b> | 127 mm |
|---------------|--------|

|                     |       |
|---------------------|-------|
| <b>Displacement</b> | 4.4 l |
|---------------------|-------|

|                             |                        |
|-----------------------------|------------------------|
| <b>Biodiesel Capability</b> | Up to B20 <sup>1</sup> |
|-----------------------------|------------------------|

|                  |                                                                             |
|------------------|-----------------------------------------------------------------------------|
| <b>Emissions</b> | Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards. |
|------------------|-----------------------------------------------------------------------------|

|                 |                                                                                                                                                                                                                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note (1)</b> | 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)**

<sup>1</sup>Cat 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.

## HYDRAULIC SYSTEM

**Main System - Maximum Flow**

429 l/min (113 gal/min)

**Maximum Pressure - Equipment**

35000 kPa

**Maximum Pressure - Travel**

34300 kPa

**Maximum Pressure - Swing**

27500 kPa

## SWING MECHANISM

**Maximum Swing Torque**

82 kN·m

## WEIGHTS

**Operating Weight**

22600 kg

**Note**

Reach boom, R2.9 (9'6") stick, Heavy Duty (HD) 1.19 m<sup>3</sup> (1.56 yd<sup>3</sup>) bucket 790 mm (31") triple grouser shoes, 4200 kg (10,400 lb) counterweight.

## SERVICE REFILL CAPACITIES

**Fuel Tank Capacity**

345 l

**Cooling System**

25 l

**Engine Oil**

15 l

**Swing Drive - Each**

6 l

|                                   |       |
|-----------------------------------|-------|
| Final Drive - Each                | 4 l   |
| Hydraulic System - Including Tank | 234 l |
| Hydraulic Tank                    | 115 l |
| DEF Tank                          | 39 l  |

## DIMENSIONS

|                              |                                             |
|------------------------------|---------------------------------------------|
| Boom                         | Reach 5.7 m (18'8")                         |
| Stick                        | Reach 2.9 m (9'6")                          |
| Bucket                       | 1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> ) |
| 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                                     |

## WORKING RANGES & FORCES

|                       |         |
|-----------------------|---------|
| Maximum Digging Depth | 6720 mm |
|-----------------------|---------|

|                                                          |                                             |
|----------------------------------------------------------|---------------------------------------------|
| <b>Boom</b>                                              | Reach 5.7 m (18'8")                         |
| <b>Stick</b>                                             | Reach 2.9 m (9'6")                          |
| <b>Bucket</b>                                            | 1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> ) |
| <b>Maximum Reach at Ground Level</b>                     | 9860 mm                                     |
| <b>Maximum Cutting Height</b>                            | 9370 mm                                     |
| <b>Maximum Loading Height</b>                            | 6490 mm                                     |
| <b>Minimum Loading Height</b>                            | 2170 mm                                     |
| <b>Maximum Depth Cut for 2440 mm (8 ft) Level Bottom</b> | 6550 mm                                     |
| <b>Maximum Vertical Wall Digging Depth</b>               | 5190 mm                                     |
| <b>Bucket Digging Force - ISO</b>                        | 150 kN                                      |
| <b>Stick Digging Force - ISO</b>                         | 106 kN                                      |

## AIR CONDITIONING SYSTEM

|                         |                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Conditioning</b> | 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). |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SUSTAINABILITY

|                      |     |
|----------------------|-----|
| <b>Recyclability</b> | 97% |
|----------------------|-----|

## 320 - TIER 4 / STAGE V STANDARD EQUIPMENT

### NOTE

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

### CAB

Rollover protective structure (ROPS)

Air-adjustable seat with heat (Deluxe only)  
Auto-adjustable seat with heat and air ventilation (Premium only)  
High-resolution 254 mm (10 inch) LCD touchscreen monitor

## **CAT TECHNOLOGY**

VisionLink®  
Remote Flash  
Remote Troubleshoot  
Cat Grade 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 C4.4 twin turbo diesel engine  
Three selectable power modes  
Automatic engine speed control  
52°C (126°F) ambient cooling capacity  
-32°C (-25°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  
Auto dig boost  
Boom and stick drift reduction valve

## **SAFETY AND SECURITY**

2D E-Fence  
Auto hammer stop  
Rearview and right-side-view cameras  
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·S<sup>SM</sup>) 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 4 / STAGE V OPTIONAL EQUIPMENT**

### **NOTE**

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

## **BOOMS AND STICKS**

5.7 m (18'8") Reach boom

5.7 m (18'8") HD Reach boom

2.8 m (9'2") Stub + 3.3 m (10'10") Fore, VA boom

8.85 m (29'0") Super Long Reach boom

2.5 m (8'2") Reach stick

2.9 m (9'6") Reach stick

2.5 m (8'2") HD Reach stick

2.9 m (9'6") HD Reach stick

2.9 m (9'6") HD Thumb Ready Reach stick

6.28 m (20'7") Super Long Reach stick

## **CAB**

Cat Stick Steer

Auxiliary relay

## **CAT TECHNOLOGY**

VisionLink Productivity

Cat Grade Connectivity

Cat Grade 2D with Attachment Ready Option (ARO)

Cat Grade 3D single GNSS

Cat Grade 3D dual GNSS

Cat Tilt Rotator (TRS) Integration

Operator Coaching

## **HYDRAULIC SYSTEM**

Boom and stick lowering check valves

SmartBoom™ (Europe only)

Hammer return filter circuit

Hydraulic efficiency monitoring

Advanced tool control (two pump, one/two way high-pressure flow)

Medium-pressure circuit

Quick coupler circuit for Cat pin grabber

## **SAFETY AND SECURITY**

Cat Command (remote control)

360° visibility

Swing alarm

Inspection lighting

## **UNDERCARRIAGE AND STRUCTURES**

600 mm (24") triple grouser shoes

700 mm (28") triple grouser shoes

790 mm (31") triple grouser shoes

900 mm (35") triple grouser shoes

4200 kg (9,300 lb) counterweight

4700 kg (10,400 lb) counterweight