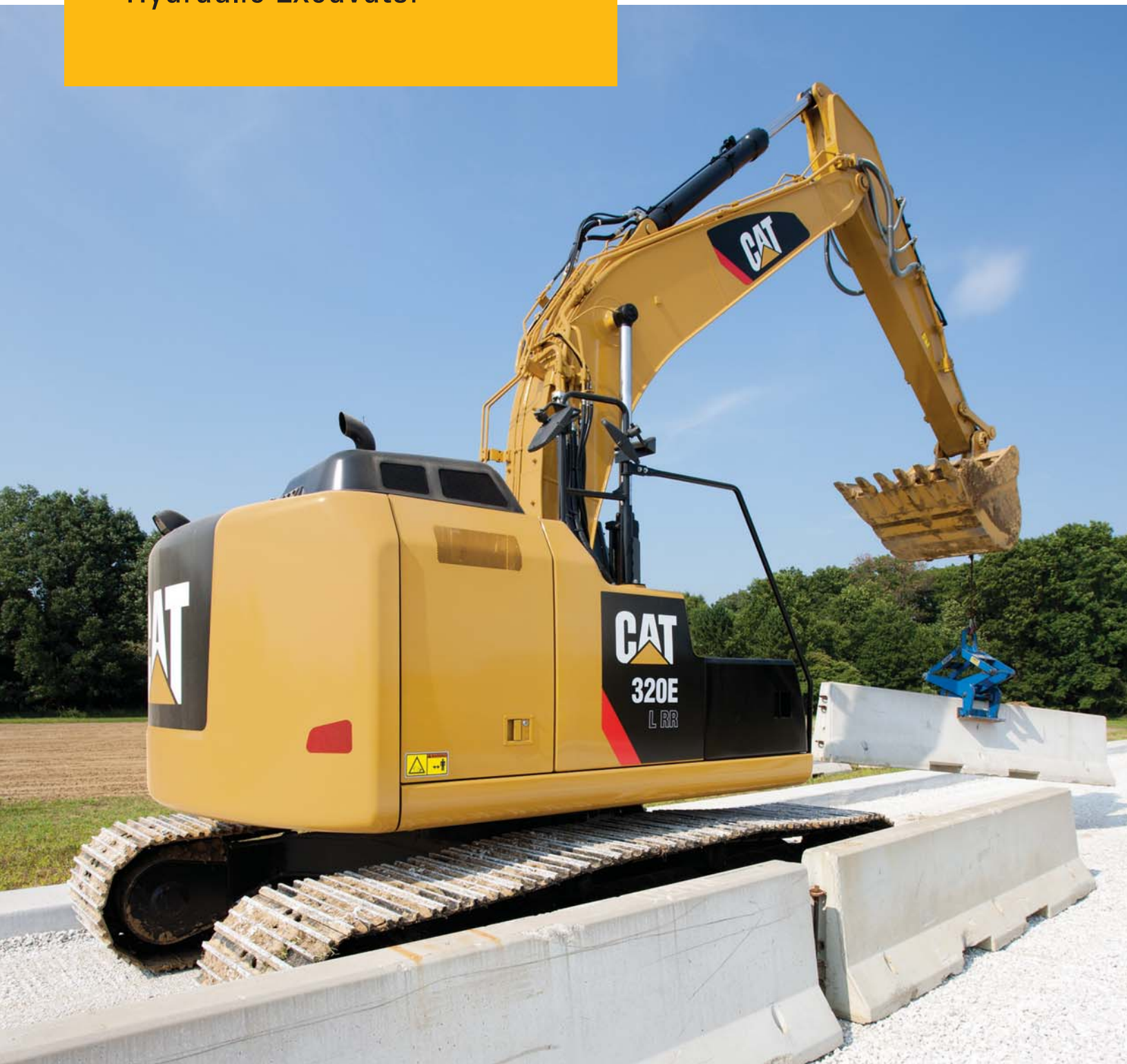


320E LRR

Hydraulic Excavator



Engine

| | |
|--------------------------------|------------------|
| Engine Model | Cat® C6.6 ACERT™ |
| Engine Rated Power – ISO 14396 | 112 kW (152 hp) |

Drive

| | |
|----------------------|----------|
| Maximum Travel Speed | 5.6 km/h |
| Maximum Drawbar Pull | 205 kN |

Weight

| | |
|----------------|-----------|
| Minimum Weight | 23 600 kg |
| Maximum Weight | 24 000 kg |

Introduction

Since its introduction in the 1990s, the 300 Series family of excavators has become the industry standard in general, quarry, and heavy construction applications. The all-new E Series and the 320E LRR will continue that trend-setting standard.

The 320E LRR meets today's European Union Stage IIIB emission standards. It is also built with several new fuel-saving and comfort-enabling features and benefits that will delight owners and operators.

If you are looking for more productivity and comfort less fuel consumption and emissions, and easier and more sensible serviceability, you will find it in the all-new 320E LRR and the E Series family of excavators.

The 320E LRR is technically identical to the 320E L and 320E LN.



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Engine

Reduced emissions, economical and reliable performance

Cat® C6.6 ACERT™ Engine

The Cat C6.6 ACERT engine delivers more horsepower using significantly less fuel than the previous series engine.

Emissions Solution

Equipped to meet Stage IIIB emission standards, the 320E LRR's C6.6 ACERT engine features wall and thru flow filters that perform through the machine work cycle without operator intervention.

All nonroad European Union Stage IIIB diesel engines are required to use only Ultra Low Sulfur Diesel (ULSD) fuels containing 15 mg/kg sulfur or less. Cat® DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specification are also required. For further fluid specifications and guidelines, visit: <http://www.cat.com/cdal/files/214956/71/SEBU6251-13-secured.pdf>

Biodiesel-Ready Fuel System

The C6.6 ACERT engine is equipped with an electronic-controlled high-pressure fuel system that includes an electric priming pump (lifting pump) and three-layer fuel hoses to allow the use of biodiesels up to B20 (biodiesel fuel 20% mixture meeting ASTM 6751 or EN 14214).

Cooling System

The cooling system features an air-to-air aftercooler and A/C condenser positioned for easy servicing; the fan automatically adjusts to ambient temperatures to help reduce fuel consumption and noise.

Speed and Power Control

The 320E LRR features speed control to maintain a constant speed – regardless of load – to improve fuel economy. Two different power modes are offered: high power and economy. The operator can easily change between modes through the monitor or console switch to meet the needs for the job at hand – all to help manage and conserve fuel.



Operator Station

Comfort and convenience to keep people productive



Seats

The seat range includes air suspension, heated, and air cooled options. All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt angle adjustments to meet operator needs for comfort and productivity.

Controls

The right and left joystick consoles can be adjusted to meet individual preferences, improving operator comfort and productivity during the course of a day. With the touch of a button, one-touch idle reduces engine speed to help save fuel; touch it again or move the joystick and the machine returns to normal operating level.

Monitor

The 320E LRR is equipped with a 7" LCD (Liquid Crystal Display) monitor that's 40% bigger than the previous model's with higher resolution for better visibility. In addition to an improved keypad and added functionality, it's programmable to provide information in a choice of 42 languages to support today's diverse workforce.

An "Engine Shutdown Setting" accessible through the monitor allows owners and operators to specify how long the machine should idle before shutting down the engine, which can save significant amounts of fuel.

The image of the rearview camera is displayed directly on the monitor. Up to two different camera images can be displayed on the screen.

Power Supply

Two 12-volt power supply sockets are located near key storage areas for charging electronic devices.

Storage

Storage spaces are located in the front, rear, and side consoles. A specific space near the auxiliary power supply holds MP3 players and cell phones. The drink holder accommodates large mugs with handles, and a shelf behind the seat stores large lunch or toolboxes.

Automatic Climate Control

The climate control system features five air outlets with positive filtered ventilation, which makes working in the heat and cold much more pleasant.





Reduced Radius

Designed for high maneuverability in confined spaces

Reduced Radius

The 320E LRR's tail swing radius is 2080 mm compared to 2830 mm on the 320E. When aligned with the tracks, working over the front, it does not extend beyond the track length allowing the 320E LRR to work well in road construction applications and other space-restricted areas.

Stability

The 320E LRR offers a stable platform for all applications. When compared to the 320E L, the 320E LRR delivers up to 16% additional lift over the side with the heavier counterweight. One of the main contributors is the use of an additional counterweight, which allows the balance of the machine to be comparable to a standard machine with a longer tail swing.

Comfort

While the length of the upper structure is reduced to accommodate the work at hand, the cab of the 320E LRR is the same size with all the amenities and attachments found inside the 320E L.

Hydraulics

Power to move more dirt, rock, and debris with speed and precision

Hydraulic Horsepower

Hydraulic horsepower is the actual machine power available to do work through implements and work tools. It's much more than just the engine power under the hood – it's a core strength that differentiates Cat machines from other brands.

Hydraulic Pumps

The 320E LRR uses a two-pump, high-pressure hydraulic system to tackle the toughest work in short order. A highly efficient and simple back-to-back main control valve improves fuel consumption and allows for greater tool versatility.

Heavy Lift

The 320E LRR features a heavy lift function to give more lift capacity over the front. With a touch of a button, pressure increases and engine speed reduces to give better control in lifting those extra-tough-to-move materials like concrete pipe and road construction barriers.

Swing Priority Circuit

The swing priority circuit on the 320E LRR uses an electric valve that's operated by the machine's Electronic Control Module (ECM). Compared to using a hydraulic valve, an electric valve allows for more finely tuned control, which is critical during material loading.

Electric Boom Regeneration Valve

This valve minimizes pump flow when the boom lowers down, which helps improve fuel efficiency. It is optimized for any dial speed setting being used by the operator, which results in enhanced boom lowering speed for greater controllability.





Structures & Undercarriage

Built to work in rugged environments



Frame

The 320E LRR features a solid foundation that's built to absorb the stresses of every day work. The main frame utilizes high-tensile-strength steel and a one-piece swing table to improve strength and reliability. The X-shaped carbody is designed to resist bending and twisting forces. The upper frame includes reinforced mountings to support the Roll-Over Protective Structure (ROPS) cab; the lower frame is reinforced to increase component durability.

Undercarriage

The undercarriage is built to support various work applications. Precision-forged carrier rollers, press-fit pin master joints, and enhanced track shoe bolts improve durability and reduce the risk of machine downtime and the need and cost to replace components. Heavy-duty rollers and idlers are sealed and lubricated to extend service life. Track links are assembled and sealed with grease to decrease internal wear and increase life compared to dry seal undercarriage. Also, a segmented two-piece guiding guard is now offered to help maintain track alignment and improve performance in multiple applications.

Counterweights

A 6.2 mt counterweight is standard. Integrated links enable easy removal of the counterweight for maintenance or shipping.



Front Linkage

Made for high stress and long service life

Booms and Sticks

The 320E LRR is offered with a 5.7 m reach boom and the R2.9B1 stick.

Both boom and stick are made of high-tensile-strength steel using a large box section design with interior baffle plates and an additional bottom guard; both undergo ultrasound inspection to ensure weld quality and reliability.

Other reinforced areas on the 320E LRR include thick multi-plate fabrications, castings, and forgings used in high-stress areas such as the boom nose, boom foot, boom cylinder, and stick foot. The boom nose pin retention method is a captured flag design for added durability. The front linkage pins' inner bearing surfaces are welded with a self-lubricated bearing, which helps extend service intervals and increase uptime.

Work Tools

Dig, hammer, rip, and cut with confidence



An extensive range of Cat Work Tools for the 320E LRR includes buckets, compactors, grapples, scrap and demolition shears, multi-processors, pulverizers, and hammers. Each is designed to optimize the versatility and performance of your machine.

Buckets

Cat buckets are designed as an integral part of the 320E LRR system and feature new geometry for better performance. The leading edge has been pushed forward, resulting in more efficient filling and better operator control for greatly improved productivity. Wear coverage in the corners and side cutter and sidebar protector coverage are improved. All benefits are captured in a new bucket line with a new bucket naming convention.

Caterpillar offers standard bucket categories for excavators. Each category is based on intended bucket durability when used in recommended application and material.

General Duty (GD)

GD buckets are for digging in low-impact, low-abrasion material such as dirt, loam, and mixed compositions of dirt and fine gravel.

Heavy Duty (HD)

The most popular bucket style, HD buckets are a good starting point when digging conditions are not well known like a wide range of impact and abrasion conditions including mixed dirt, clay, and rock.

Severe Duty (SD)

SD buckets are for higher abrasion conditions such as well shot granite and caliche. Red area on bucket image illustrates additional protection against wear as compared to a GD bucket.

Specialty Buckets

In addition to the standard four bucket categories, specialty bucket styles are available for the 320E LRR, each with a different purpose:

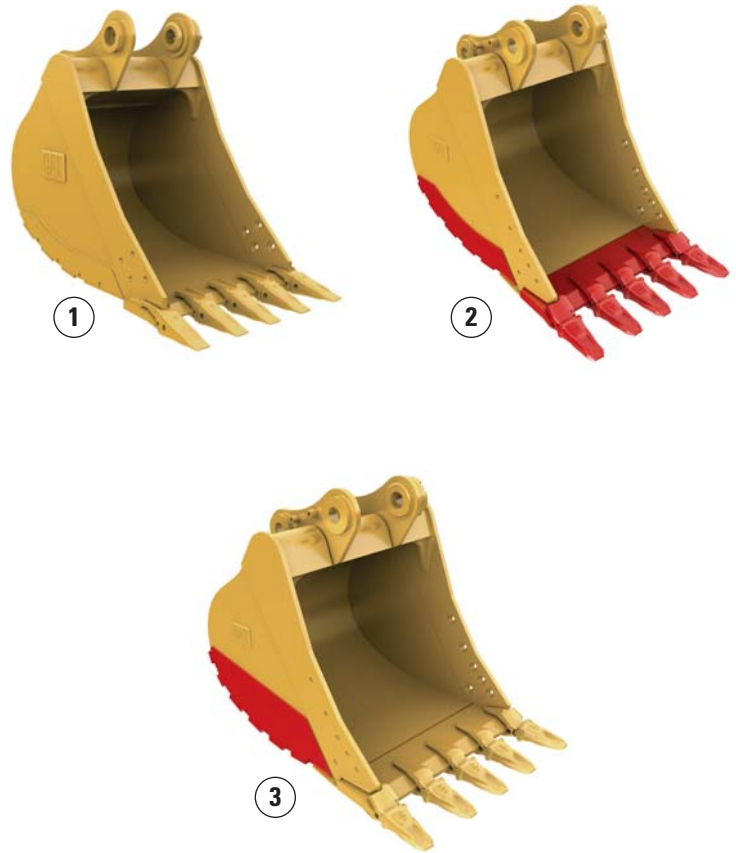
- **Ditch Cleaning** buckets for cleaning ditches, slope grading, and other finish work.
- **Center-Lock Pin Grabber Performance** buckets for maximum digging performance while keeping the versatility and convenience of a coupler.
- **Wide Tip** buckets for low impact material where leaving a smoother floor and minimal spillage are necessary.

Hydraulic Kits

Caterpillar offers field-installed hydraulic kits that are uniquely designed to integrate Cat Work Tool attachments with Cat excavators. Hoses and tubes are pre-made, pre-shaped, and pre-painted to make installation quick and easy.

Comprehensive Product Support

All Cat Work Tools are backed up by a world-wide network of well-stocked parts depots and highly experienced service and support personnel.



1) General Duty 2) Heavy Duty 3) Severe Duty



Integrated Technologies

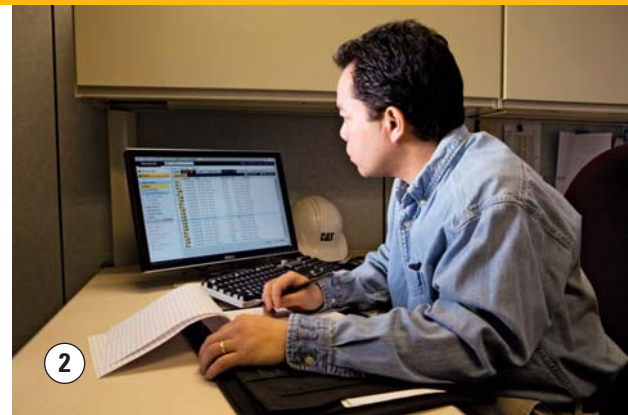
Solutions that make work easier and more efficient

Cat® Grade Control Depth and Slope

This optional system combines traditional machine control and guidance with standard factory-installed and calibrated components, making the system ready to go to work the moment it leaves the factory. The system utilizes internal front linkage sensors – well protected from the harsh working environment – to give operators real-time bucket tip position information through the cab monitor (1), which minimizes the need and cost for traditional grade checking and improves job site safety. It also helps the operator complete jobs in fewer cycles, which means less fuel use.

Cat Product Link

This deeply integrated into the machine monitoring system is designed to help customers improve their overall fleet management effectiveness. Events and diagnostic codes as well as hours, fuel consumption, idle time, machine location, and other detailed information are transmitted to a secure web based application (2 and 3) called VisionLink™, which uses powerful tools to communicate to users and dealers.



Serviceability

Fast, easy and safe access built in

Service Doors

Wide service doors and a one-piece hood provide easy access to the cooling and engine compartments. Both doors and hood feature enhanced hardware and a new screen design to help minimize debris entry.

Compartments

The compartments are designed to provide technicians with quick access to major components and regular service items like filters. The fresh air filter, for example, is located on the side of the cab to make it easy to reach and replace as needed.

Other Service Enhancements

The water separator with water level sensor has a primary fuel filter element located in the pump compartment near ground level.

The fuel tank features a remote drain cock located in the pump compartment to make it easy to remove water and sediment during maintenance.

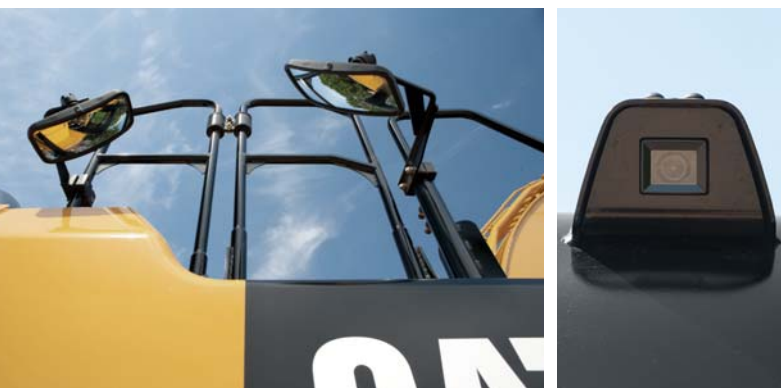
The engine oil check gauge is situated in front of the engine compartment for easy access, and a uniquely designed drain cock helps prevent spills.

Hydraulic lash adjusters automatically adjust valve opening and closing events to help reduce fuel consumption and engine noise. They also eliminate the need for a valve lash, which reduces maintenance for the customer.



Safety

Features to help protect people



ROPS Cab

The ROPS-certified cab allows a Falling Object Guard Structure (FOGS) to be bolted directly to it.

Sound Proofing

Improved sealing and cab roof lining lower noise levels by 5 dB inside the cab – a significant benefit to operators.

Anti-Skid Plates

The surface of the upper structure and the top of the storage box area are covered with anti-skid plates to help prevent service personnel and operators from slipping during maintenance.

Steps, Hand and Guard Rails

Steps on the track frame and storage box along with extended hand and guard rails to the upper deck enable operators to securely work on the machine.

Time Delay Cab and Boom Lights

After the engine start key has been turned to the “OFF” position, lights will be illuminated to enhance visibility. The time delay can vary from 0 to 90 seconds, which can be set through the monitor.

High Intensity Discharge (HID) Lights

Cab lights can be upgraded to HID for greater visibility.

Windows

Two windshield options are available: The 70/30 split configuration features an upper window equipped with handles on the top and both sides so the operator can slide it to store in the ceiling. The lower window is removable and can be stored on the left wall of the cab shell.

The large skylight provides great overhead visibility, excellent natural lighting, and good ventilation. The skylight can be opened completely to become an emergency exit.

Monitor Warning System

The machine’s advanced diagnostic system features a buzzer in the monitor to communicate to operators critical events like full filters or low hydraulic fluid levels so they can take immediate action.

Rearview Camera and Mirrors (ISO 5006)

The standard rearview camera is housed in the counterweight. The image projects through the cab monitor to give the operator a clear view of what is behind the machine.



Complete Customer Care

Service you can count on

Product Support

Cat dealers utilize a worldwide parts network to maximize your machines' uptime. Plus they can help you save money with Cat remanufactured components.

Machine Selection

What are the job requirements and machine attachments? What production is needed? Your Cat dealer can provide recommendations to help you make the right machine choices.

Purchase

Consider financing options and day-to-day operating costs. Look at dealer services that can be included in the machine's cost to yield lower owning and operating costs over time.

Customer Support Agreements

Cat dealers offer a variety of customer support agreements and work with you to develop a plan to meet your specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

Operation

Improving operating techniques can boost your profits. Your Cat dealer has videos, literature, and other ideas to help you increase productivity. Caterpillar also offers simulators and certified operator training to help maximize the return on your investment.

Replacement

Repair, rebuild, or replace? Your Cat dealer can help you evaluate the cost involved so you can make the best choice for your business.



Sustainability

Generations ahead in every way

- The C6.6 ACERT engine, along with the Cat Clean Emissions Module (CEM), meets EU Stage IIIB emission standards.
- The 320E LRR has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel (B20) fuel blended with ULSD that meets ASTM 6751 or EN 14214 standards.
- Even when operating in high horsepower and high production applications, the 320E LRR performs a similar amount of work as the previous D Series model with significantly reduced fuel consumption.
- The 320E LRR is quieter inside and out, which benefits operators and the surrounding environment.
- A ground-level overfill indicator rises when the hydraulic oil tank is full to help the operator avoid spilling.
- The QuickEvac™ option ensures fast, easy, and secure changing of engine and hydraulic oil.
- The 320E LRR is built to be rebuilt with major structures and components capable of being remanufactured to reduce waste and replacement costs.
- An eco-friendly engine oil filter eliminates the need for painted metal cans and aluminum top plates. The cartridge-style spin-on housing enables the internal filter to be separated and replaced; the used internal element can be incinerated to help reduce waste.
- The 320E LRR is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.

320E LRR Hydraulic Excavator Specifications

Engine

| | |
|---|------------------|
| Engine Model | Cat® C6.6 ACERT™ |
| Engine Rated Power – ISO 14396 | 112 kW |
| Engine Rated Power – ISO 14396 (imperial) | 150 hp |
| Engine Rated Power – ISO 14396 (metric) | 152 hp |
| Bore | 105 mm |
| Stroke | 127 mm |
| Displacement | 6.6 L |

Hydraulic System

| | |
|------------------------------------|---------------------------|
| Main System – Maximum Flow (Total) | 428 L/min |
| Swing System – Maximum Flow | 214 L/min |
| Maximum Pressure – Equipment | 35 000 kPa/ 38 000 kPa |
| Maximum Pressure – Travel | 35 000 kPa |
| Maximum Pressure – Swing | 25 000 kPa |
| Pilot System – Maximum Flow | 24.3 L/min |
| Pilot System – Maximum Pressure | 3920 kPa |
| Boom Cylinder – Bore | 120 mm |
| Boom Cylinder – Stroke | 1260 mm |
| Stick Cylinder – Bore | 140 mm |
| Stick Cylinder – Stroke | 1504 mm |
| B1 Bucket Cylinder – Bore | 120 mm |
| B1 Bucket Cylinder – Stroke | 1104 mm |

Drive

| | |
|----------------------|----------|
| Maximum Travel Speed | 5.6 km/h |
| Maximum Drawbar Pull | 205 kN |

Swing Mechanism

| | |
|--------------|-----------|
| Swing Speed | 11.2 rpm |
| Swing Torque | 61.8 kN·m |

Service Refill Capacities

| | |
|-----------------------------------|-------|
| Fuel Tank Capacity | 290 L |
| Cooling System | 30 L |
| Engine Oil (with filter) | 23 L |
| Swing Drive | 8 L |
| Final Drive (each) | 8 L |
| Hydraulic System (including tank) | 205 L |
| Hydraulic Tank | 115 L |

Track

| | |
|---------------------------------------|-----------|
| Number of Shoes (each side) | |
| Long Undercarriage | 49 pieces |
| Number of Track Rollers (each side) | |
| Long Undercarriage | 8 pieces |
| Number of Carrier Rollers (each side) | |
| Long Undercarriage | 2 pieces |

Sound Performance

| | |
|----------------------|--------|
| Operator – ISO 6396 | 71 dB |
| Spectator – ISO 6395 | 103 dB |

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

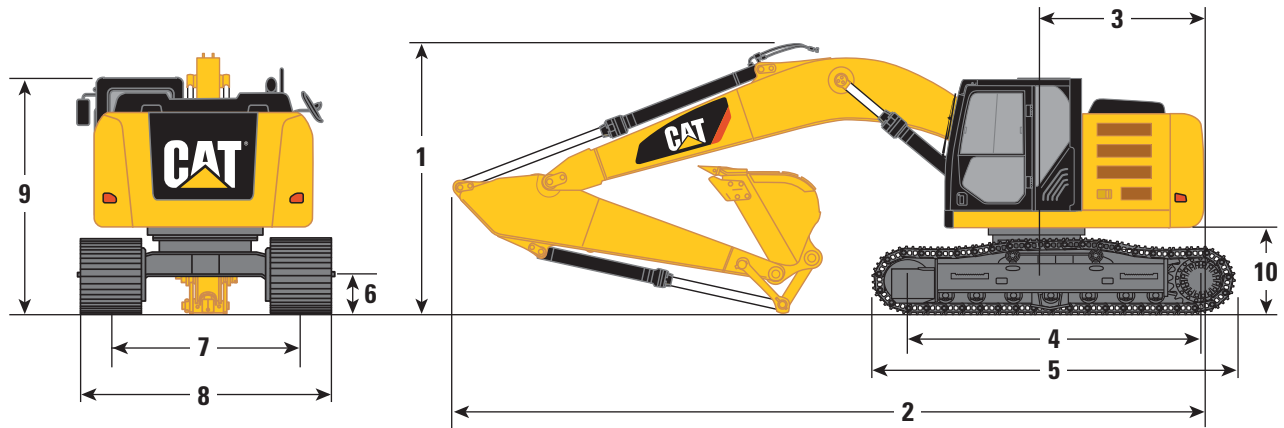
Standards

| | |
|----------|------------------|
| Brakes | ISO 10265 2008 |
| Cab/FOGS | ISO 10262 1998 |
| Cab ROPS | ISO 12117-2 2008 |

320E LRR Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate.



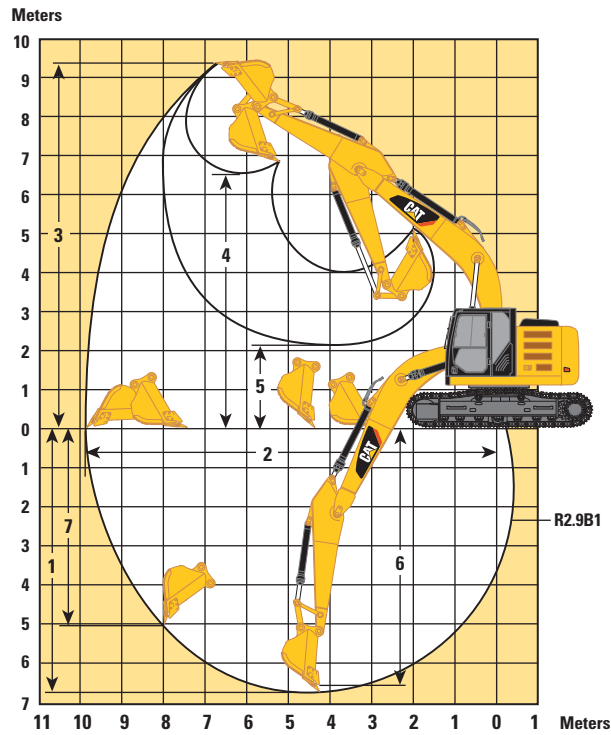
| | Reach Boom 5.7 m R2.9B1 |
|---|-------------------------------|
| Stick | R2.9B1 |
| | mm |
| 1 Shipping Height without Guard Rail* | 3130 |
| Shipping Height with Guard Rail | 3150 |
| Shipping Height with Top Guard without Guard Rail | 3150 |
| 2 Shipping Length | 8970 |
| 3 Tail Swing Radius | 2080 |
| 4 Length to Center of Rollers | 3650 |
| 5 Track Length | 4460 |
| 6 Ground Clearance | 450 |
| 7 Track Gauge | 2380 |
| 8 Transport Width | |
| 600 mm Shoes | 2980 |
| 700 mm Shoes | 3080 |
| 9 Cab Height | 2960 |
| Cab Height with Top Guard | 3150 |
| 10 Counterweight Clearance** | 1000 |

*Including shoe lug height without guard rail.

**Without shoe lug height.

Working Ranges

All dimensions are approximate.



| | Reach Boom 5.7 m |
|---|-----------------------------|
| Stick | R2.9B1 |
| | mm |
| 1 Maximum Digging Depth | 6720 |
| 2 Maximum Reach at Ground Level | 9860 |
| 3 Maximum Cutting Height | 9370 |
| 4 Maximum Loading Height | 6490 |
| 5 Minimum Loading Height | 2170 |
| 6 Maximum Depth Cut for 2440 mm Level Bottom | 6550 |
| 7 Maximum Vertical Wall Digging Depth | 5060 |

320E LRR Hydraulic Excavator Specifications

Operating Weight and Ground Pressure

| | 700 mm Triple Grouser Shoes | | 600 mm Triple Grouser Shoes | |
|--------------------|--------------------------------|------|--------------------------------|------|
| | kg | kPa | kg | kPa |
| Reach Boom (5.7 m) | | | | |
| R2.9B1 HD | 24 000 | 43.0 | 23 600 | 49.5 |

Major Component Weights

| | kg |
|---|------|
| Base Machine (with boom cylinder, without counterweight, front linkage and track) | 6500 |
| Long Undercarriage | 7850 |
| Counterweight | |
| 6.2 mt | 6200 |
| Boom (includes lines, pins and stick cylinder) | |
| Reach Boom (5.7 m HD) | 1720 |
| Stick (includes lines, pins and bucket cylinder) | |
| R2.9B1 HD | 680 |
| Track Shoe (Long/per two tracks) | |
| 600 mm Triple Grouser | 2700 |
| 700 mm Triple Grouser | 3070 |
| Buckets | |
| B1 1200 mm GD 347-6731 SAE 1.19 m ³ | 930 |

All weights are rounded up to nearest 10 kg except for buckets.

Base machine includes 75 kg operator weight, 90% fuel weight, and undercarriage with center guard.

Bucket and Stick Forces

| | Reach Boom 5.7 m |
|----------------------------|---------------------|
| Stick | R2.9B1 |
| | B1 – Family Bucket |
| | kN |
| General Duty | |
| Bucket Digging Force (ISO) | 140.5 |
| Stick Digging Force (ISO) | 106.7 |
| Heavy Duty | |
| Bucket Digging Force (ISO) | 150.4 |
| Stick Digging Force (ISO) | 106.4 |
| Severe Duty | |
| Bucket Digging Force (ISO) | 150.4 |
| Stick Digging Force (ISO) | 106.4 |

320E LRR Hydraulic Excavator Specifications

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side















Boom – 5.7 m HD

Counterweight – 6.2 mt

Bucket – None

Stick – R2.9B1 HD

Shoes – 600 mm triple grouser

|  | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | |  | | m | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|------|------|
| |  |  |  |  |  |  |  |  |  |  |  |  | | |
| 7.5 m | kg | | | | | | *4950 | *4950 | | | *4300 | *4300 | 6.15 | |
| 6.0 m | kg | | | | | | *5450 | *5450 | | | *3950 | *3950 | 7.28 | |
| 4.5 m | kg | | | | | | *6000 | 5500 | *5650 | 3900 | *3900 | 3550 | 7.98 | |
| 3.0 m | kg | | | | | *8800 | 8050 | *6900 | 5300 | 5950 | 3850 | *4000 | 3250 | 8.35 |
| 1.5 m | kg | | | | | *10 650 | 7550 | *7850 | 5050 | 5850 | 3700 | *4200 | 3150 | 8.44 |
| Ground Line | kg | | | *6600 | *6600 | *11 650 | 7300 | 7950 | 4900 | 5750 | 3650 | *4650 | 3200 | 8.26 |
| -1.5 m | kg | *7050 | *7050 | *11 400 | *11 400 | *11 800 | 7200 | 7900 | 4850 | 5750 | 3600 | 5450 | 3450 | 7.78 |
| -3.0 m | kg | *12 100 | *12 100 | *15 600 | 13 950 | *11 050 | 7250 | 7900 | 4850 | | | 6450 | 4050 | 6.94 |
| -4.5 m | kg | | | *12 500 | *12 500 | *9000 | 7450 | | | | | *6800 | 5500 | 5.60 |















Boom – 5.7 m HD

Counterweight – 6.2 mt

Bucket – None

Stick – R2.9B1 HD

Shoes – 700 mm triple grouser

|  | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | |  | | m | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|------|------|
| |  |  |  |  |  |  |  |  |  |  |  |  | | |
| 7.5 m | kg | | | | | | *4950 | *4950 | | | *4300 | *4300 | 6.15 | |
| 6.0 m | kg | | | | | | *5450 | *5450 | | | *3950 | *3950 | 7.28 | |
| 4.5 m | kg | | | | | | *6000 | 5600 | *5650 | 4000 | *3900 | 3600 | 7.98 | |
| 3.0 m | kg | | | | | *8800 | 8150 | *6900 | 5350 | *6050 | 3900 | *4000 | 3300 | 8.35 |
| 1.5 m | kg | | | | | *10 650 | 7650 | *7850 | 5150 | 5950 | 3800 | *4200 | 3200 | 8.44 |
| Ground Line | kg | | | *6600 | *6600 | *11 650 | 7400 | 8100 | 5000 | 5850 | 3700 | *4650 | 3250 | 8.26 |
| -1.5 m | kg | *7050 | *7050 | *11 400 | *11 400 | *11 800 | 7300 | 8000 | 4900 | 5800 | 3650 | *5500 | 3500 | 7.78 |
| -3.0 m | kg | *12 100 | *12 100 | *15 600 | 14 150 | *11 050 | 7350 | 8050 | 4950 | | | 6550 | 4100 | 6.94 |
| -4.5 m | kg | | | *12 500 | *12 500 | *9000 | 7550 | | | | | *6800 | 5600 | 5.60 |

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Work Tool Offering Guide*

| Boom Type | Reach HD R5.7 |
|-----------------------------------|---|
| Stick Size | HD R2.9 |
| Hydraulic Hammer | H115Es H120Es H130Es |
| Multi-Processor | MP15** |
| Pulverizer | P215 |
| Mobile Scrap and Demolition Shear | S320B** S325B*** S340B*** |
| Compactor (Vibratory Plate) | CVP110 |
| Contractors' Grapple | G120B – G130B |
| Trash Grapple | These work tools are available for the 320E LRR. Consult your Cat dealer for proper match. |
| Rakes | |

*Matches are dependent on excavator configurations. Consult your Cat dealer for proper work tool match.

**Pin-on only.

***Boom-mount.

320E LRR Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

Without Quick Coupler

| | Linkage | Width | Capacity | Weight | Fill | Reach (HD) |
|--|---------|-------|----------------|--------|------|------------|
| | | mm | m ³ | kg | % | R2.9 HD |
| General Duty (GD) | B | 600 | 0.46 | 549 | 100% | ● |
| | B | 750 | 0.64 | 620 | 100% | ● |
| | B | 900 | 0.81 | 666 | 100% | ● |
| | B | 1200 | 1.19 | 800 | 100% | ● |
| | B | 1300 | 1.30 | 832 | 100% | ⊙ |
| | B | 1400 | 1.43 | 867 | 100% | ⊖ |
| Heavy Duty (HD) | B | 1050 | 1.00 | 879 | 100% | ● |
| | B | 1200 | 1.19 | 906 | 100% | ● |
| | B | 1200 | 1.19 | 917 | 100% | ● |
| | B | 1300 | 1.30 | 960 | 100% | ⊙ |
| Severe Duty (SD) | B | 1200 | 1.19 | 1000 | 90% | ● |
| Maximum load pin-on (payload + bucket) | | | | | kg | 3300 |

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

Maximum Material Density:

- 2100 kg/m³
- ⊙ 1800 kg/m³
- ⊖ 1500 kg/m³

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

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

ENGINE

- C6.6 diesel engine
- Biodiesel capable
- European Union Stage IIIB compliant
- 2300 m altitude capability
- Electric priming pump (lifting pump)
- Automatic engine speed control
- Economy and high power modes
- Two-speed travel
- Side-by-side cooling system
- Radial seal air filter
- Primary filter with water separator and water separator indicator switch
- Starting kit, cold weather, -18° C
- Screen filter in fuel line
- Primary fuel filter
- Secondary fuel filter

HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- High-pressure line
- Medium-pressure line
- Common (Electronic Control device, 1/2P, one-way circuit)
- Capability of installing Cat Bio hydraulic oil
- Quick drains, engine and hydraulic oil (QuickEvac™)

CAB

- Pressurized operator station with positive filtration
- Mirror package
- Sliding upper door window (left-hand cab door)
- Glass-breaking safety hammer
- Removable lower windshield with in cab storage bracket
- Coat hook
- Beverage holder
- Literature holder
- Two stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with warning, filter/fluid change, and working hour information
- Adjustable armrest
- Height adjustable joystick consoles
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Capability of installing two additional pedals
- Two power outlets, 10 amp (total)
- Laminated glass front upper window and tempered other windows
- Cab hatch
- Seat, high-back air suspension with heater
- Sunscreen
- Windshield wiper with washer

UNDERCARRIAGE

- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame
- Segmented (2 piece) track guiding guard

ELECTRICAL

- 80 amp alternator
- Circuit breaker
- Capability to electrically connect a beacon

LIGHTS

- Boom light with time delay
- Exterior lights integrated into storage box

SECURITY

- Cat one key security system
- Door locks
- Cap locks on fuel and hydraulic tanks
- Lockable external tool/storage box
- Signaling/warning horn
- Secondary engine shutoff switch
- Openable skylight for emergency exit
- Rearview camera

TECHNOLOGY

- Product Link

GUARD

- Side rubber bumper
- HD Bottom guard
- Swivel guard
- HD Travel motor guard

320E LRR Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

UNDERCARRIAGE

600 mm triple grouser shoes

700 mm triple grouser shoes

320E LRR Hydraulic Excavator

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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