

# **Cat® 323**

# Hydraulic Excavator

The Cat® 323 excavator has the speed, efficiency, and power for your heavy-duty applications requiring maximum productivity. You get built-in Cat GRADE with 2D, Grade Assist, Lift Assist, and Payload as standard equipment right from the factory – boosting your operator efficiency by up to 45 percent. Combine these features with a new cab, longer maintenance intervals and reduced fuel consumption that lower maintenance costs by up to 15 percent and fuel consumption by up to 15 percent, and you have an absolutely low-cost-per-unit-of-production excavator built for your heavy-duty applications.

Not all features available in all regions. Consult your Cat dealer for specific configurations available in your region.

#### **High Performance with Lower Fuel Consumption**

- Use up to 15 percent less fuel than the Cat 323D2 excavator.
- Increase operator efficiency by up to 45 percent with standard Cat technologies that lower operator fatigue and your operating costs, including fuel consumption and daily maintenance.
- The C7.1 engine can run on biodiesel up to B20 and meets China Nonroad Stage III and Brazil MAR-1 emission standards equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Match the excavator to the job using power modes; let Smart mode automatically match engine and hydraulic power to your digging conditions.
- Advansys™ bucket tips increase penetration and improve cycle times. Tip changes can be done quickly with a simple lug wrench instead of a hammer or special tool, improving safety and uptime.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- Don't let the temperature stop you from working. The excavator has a standard high-ambient temperature capability of  $52^{\circ}$  C ( $125^{\circ}$  F) and cold start capability of  $-18^{\circ}$  C ( $0^{\circ}$  F). An optional  $-32^{\circ}$  C ( $-25^{\circ}$  F) cold start package is available.

# **Boost Efficiency and Boost Productivity with Integrated Cat Technologies**

- Boost productivity up to 45 percent versus traditional grading with the standard Cat GRADE with 2D and Grade Assist systems – includes indicate-only and laser capability.
- Standard Grade Assist: Stay on grade simply and effortlessly with single-lever digging.
- Set your desired bucket angle and let Bucket Assist automatically maintain the angle in sloping, leveling, fine grading, and trenching applications.
- Keep the tracks on ground in lifting and hard digging with Boom Assist.
- Automatically stop excavator swing at operator-defined set points in truck loading and trenching applications with Swing Assist, which will help you use less effort and consume less fuel.

- Standard Cat PAYLOAD on-board weighing system: Achieve precise load targets and increase loading efficiency with on-the-go weighing and real-time estimates of your payload without swinging.
- Combine Payload with VisionLink® and remotely manage your
  production targets or take payload data with you. The monitor's
  USB port lets you download your results from one shift all the way
  up to 30 days of work so can manage your progress without needing
  an internet connection or VisionLink subscription.
- Upgrade to optional Cat GRADE with Advanced 2D: Create and edit grade designs with ease on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Upgrade to optional Cat GRADE with 3D: Create and edit designs with ease and see the front linkage's full range of motion on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Know the excavator's exact position relative to GPS and GLONASS systems. The machine automatically compensates for excavator pitch and roll caused by sloping ground conditions.
- Use the excavator's onboard cell technology to quickly connect to 3D services like Trimble Connected Community or Virtual Reference Station.
- Already invested in another brand's 3D system? No problem.
   Standard Cat technology like GRADE with 2D can readily integrate with that system to give you the precise results you need.
- Antennas have theft-prevention bolts; a special tool makes them easy for the owner to remove at the end of a shift.
- Remote troubleshoot connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and even allows you to request service from your local Cat dealer.
- Standard Product Link<sup>TM</sup> provides location, machine hours, fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through the VisionLink online interface, helping you improve job site efficiency and lowering operating costs.



### Cat® 323 Hydraulic Excavator

#### Work In Comfort in the All-New Cab

- Choose between Comfort and Deluxe cabs both with automatic climate control.
- The Deluxe seat is heated and air adjustable.
- Get in and out of the cab easier using the tip-up left console.
- Advanced viscous mounts reduce cab vibration up to 50 percent over previous excavator models.
- Control the excavator comfortably with easy-to-reach controls all located in front of you.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

#### **Simple To Operate**

- Start the engine with a push button; use a Bluetooth key fob, smartphone app, or Operator ID passcode.
- Program each joystick button, including response and pattern, using Operator ID; the machine will remember it each time you go to work.
- Program up to four depth and slope offsets so you can easily get to grade without a grade checker – a real time saver and safety enhancer on the jobsite.
- Protect your hammer from overworking. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to prevent wear and tear on the attachment and excavator.
- Navigate quickly on the standard high-resolution 203 mm (8 in) touchscreen monitor, or with the optional 254 mm (10 in) touchscreen monitor, or with the aid of the jog dial control.
- A second 254 mm (10 in) monitor is available for the advanced grade control.
- The Cat PL161 Attachment Locator is a Bluetooth device that makes finding your attachments and other gear quick and easy.
   The excavator's onboard Bluetooth reader or Cat App on your phone will locate the device automatically.
- Save more time and energy with available work tool recognition.
   A simple shake of the attached tool confirms its identity; it also ensures all the attachment settings are correct so you can get to work quickly and efficiently.
- Not sure how a function works or how to maintain the excavator?
   Always have the operator's manual at your fingertips in the touchscreen monitor.

#### Maintenance

- Expect up to 15 percent less maintenance costs than the 323D2. (Savings calculated over 12,000 machine hours.)
- Do all daily maintenance at ground level.
- Check engine oil level quickly and safely with the new groundlevel dipstick; fill and check engine oil on top of the machine with a conveniently located second dipstick.
- Track your excavator's filter life and maintenance intervals via the in-cab monitor.
- Fuel filters are synchronized to be changed at 1,000 hours double the interval from the previous filters.
- The new air intake filter with precleaner has double the dust holding capacity of the previous air intake filter.
- The new hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000 hour replacement interval – 50 percent longer than previous filter designs.
- The new high-efficiency electric cooling fans only run when needed and reverse to keep cores free from debris.
- S·O·S<sup>SM</sup> ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

#### Safety

- Lift Assist helps you avoid tipping. With visual and auditory alerts, you'll know if your load is within the excavator's safe working range limits.
- Standard 2D E-fence is integrated right out of the factory to prevent the excavator from moving outside operator-defined set points.
- Access 100 percent of daily maintenance points from ground level no need for you to climb on top of the excavator.
- The standard ROPS cab meets ISO 12117-2:2008 requirements.
- Enjoy great visibility into the trench, in each swing direction, and behind you with the help of smaller cab posts, larger windows, and a flat engine hood design.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- Ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- A rearview camera is standard. Upgrade to 360° visibility and you'll easily see objects and personnel around the excavator in a single view.
- The new right-hand service platform design provides easy, safe, and quick access to the upper service platform; the service platform steps use anti-skid punch plate to prevent slipping.
- The handrails comply with ISO 2867:2011 requirements.
- The lower frame meets ISO 15818:2017 lifting and tie-down requirements.

## **Standard and Optional Equipment**

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

	Standard	Optional
CAB		
ROPS, standard sound suppression	✓	
Mechanically adjustable seat	✓	
Air-adjustable seat with heat (Deluxe only)		✓
High-resolution 203 mm (8 in) LCD	✓	
touchscreen monitor		
High-resolution 254 mm (10 in) LCD touchscreen monitor		<b>V</b>
CAT TECHNOLOGY		
Cat Product Link	✓	
Cat GRADE with 2D	✓	
Cat GRADE with Advanced 2D (not available on SLR)		✓
Cat GRADE with 3D (not available on SLR)		✓
Cat GRADE with Assist	✓	
Cat PAYLOAD	✓	
E-fence	✓	
Lift Assist	✓	
Remote Flash capability	✓	
Remote Troubleshoot capability	✓	
ENGINE		
Cat C7.1 engine	✓	
Automatic engine speed control	✓	
52° C (125° F) high-ambient cooling capacity	✓	
–18° C (0° F) cold start capability	✓	
–32° C (–25° F) cold start capability		✓
Double element air filter with integrated precleaner	✓	
Reversing electric cooling fans	✓	
Biodiesel capability up to B20	✓	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Auto hydraulic warm up	✓	
Auto two-speed travel	✓	
Boom and stick drift reduction valve	✓	
Hammer return filter circuit		✓
Combined flow/high-pressure auxiliary circuit		✓
Quick coupler circuit for Cat Pin Grabber		<b>√</b>

	Standard	Optional
BOOM AND STICKS		
5.7 m (18'8") HD reach boom, 2.9 m (9'6")		✓
HD reach stick		
5.7 m (18'8") HD reach boom, 2.5 m (8'2")		✓
HD reach stick		
UNDERCARRIAGE AND STRUCTURES		
600 mm (24") triple grouser shoes	✓	
Tie-down points on base frame	✓	
5400 kg (11,900 lb) counterweight	✓	
ELECTRICAL SYSTEM		
Two 1,000 CCA maintenance-free batteries	✓	
Four 1,000 CCA maintenance-free batteries		✓
Programmable time-delay LED	✓	
working lights		
LED chassis light, left-hand/right-hand	$\checkmark$	
boom lights, cab lights		
SERVICE AND MAINTENANCE		
Sampling ports for Scheduled Oil	$\checkmark$	
Sampling (S·O·S)		
Ground-level and platform-level engine	✓	
oil dipsticks		
SAFETY AND SECURITY		
Rearview camera	✓	
360° visibility		✓
Ground-level engine shutoff switch	✓	
Right-hand handrail and hand hold	✓	
Signaling/warning horn	✓	

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### **Technical Specifications**

Engine		
Engine Model	Cat C7.1	
Engine Power – ISO 14396	118 kW	158 hp
Engine Power – ISO 9249	117 kW	157 hp
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7 L	428 in <sup>3</sup>

Hydraulic System		
Main System – Maximum Flow (Implement)	429 L/min	113 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Heavy Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	27 500 kPa	3,998 psi

Swing Mecha	anism	
Swing Speed	11.2	5 rpm
Maximum Swing Torque	82 kN⋅m	60,300 lb-ft

Machine Weight			
Operating Weight	24 500 kg	54,000 lb	
$\bullet$ 5.7 m (18'8") HD reach boom, 2.9 m (9'6") HD reach stick, HD 1.18 m³ (1.54 yd³) HD bucket, 600 mm (24") shoes.			

Service Refill Capacities			
Fuel Tank	345 L	86.6 gal	
Cooling System	25 L	6.6 gal	
Engine Oil	25 L	6.6 gal	
Swing Drive (each)	12 L	3.2 gal	
Final Drive (each)	5 L	1.3 gal	
Hydraulic System (including tank)	234 L	61.8 gal	
Hydraulic Tank	115 L	30.4 gal	

Dimensions			
Boom	Reach 5.7 m (18'8")		
Stick	Reach 2.9 m (9'6")		
Bucket	1.30 m³ (1.70 yd³)		
Shipping Height (top of cab)	2960 mm	9'9"	
Handrail Height	2950 mm	9'9"	
Shipping Length	9530 mm	31'3"	
Tail Swing Radius	2830 mm	9'3"	
Length to Center of Rollers	3650 mm	12'0"	
Ground Clearance	470 mm	1'6"	
Track Gauge	2380 mm	7'9"	
Transport Width – 600 mm (24") Shoes	2980 mm	9'9"	
Counterweight Clearance	1050 mm	3'5"	

Working Ranges and Forces		
Boom	Reach 5.7 m (18'8")	
Stick	Reach 2.9 m (9'6")	
Bucket	1.30 m³ (1.70 yd³)	
Maximum Digging Depth	6730 mm	22'1"
Maximum Reach at Ground Level	9870 mm	32'4"
Maximum Cutting Height	9450 mm	31'0"
Maximum Loading Height	6480 mm	21'4"
Minimum Loading Height	2160 mm	7'1"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6560 mm	21'6"
Maximum Vertical Wall Digging Depth	5740 mm	18'10"
Bucket Digging Force (ISO)	140 kN	31,505 lbf
Stick Digging Force (ISO)	107 kN	23,962 lbf



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