

# 355

## HYDRAULIC EXCAVATOR



Net Power – ISO 9249  
Operating Weight  
Maximum Digging Depth

330 kW (443 hp)  
51 400 kg (113,300 lb)  
6590 mm (21.7 ft)

**CAT**<sup>®</sup>

# 355

## HYDRAULIC EXCAVATOR

The Cat® 355 is built for severe-duty work. High-durability front structures, heavy counterweight, and enhanced windshield protection make it perfect for using large hammers up to 210 mm (8") in size. Not all features available in all regions. Consult your Cat dealer for specific configurations available in your region.



### BIG PRODUCTION

The 355 can produce massive payloads with hammers up to 210 mm (8") and buckets up to SD 3.8 m<sup>3</sup> (4.9 yd<sup>3</sup>).

### LOW OWNING & OPERATING COSTS

Efficiency – work per unit of fuel – is high for the 355, and it comes from our smart electrohydraulic system. Plus, long-life fuel, oil, and air filters contribute to low maintenance costs and increased uptime.

### HIGH DURABILITY

With severe-duty front structures, a built-in hammer return filter, and enhanced windshield protection, the 355 can withstand the rigors of harsh quarry conditions – every day.

# LATEST FEATURES



## Cab Monitor Improvements

- Continuously improved user interface allows intuitive navigation, minimizing performance interruption with the easy-to-use touchscreen menu.
  1. Identify apps quickly with a grid list view, abbreviated app names, and categorized menu options.
  2. A notification center keeps important information visible to the operator and displays messages without shrinking the camera view.
  3. Color-coded notifications set critical messages apart from the rest.
  4. Use the in-monitor QR code to learn about the machine and technology features through a full suite of “how-to” videos.
- Standard integrated vehicle health management system alerts operators with service guidance and parts needed to enhance uptime.

***Not all features are available in all regions. Please check with your local Cat® Dealer for specific offering availability in your area. Build Number 08C***

# HIGH PERFORMANCE



- Severe-duty boom and stick make the machine more durable in demanding applications.
- This machine is best suited for mine and quarry operations.
- Work up to 3000 m (9,840 ft) above sea level without de-rating.
- Match the excavator to the job with three operating modes: Power, Smart, and ECO.
- The engine meets China Nonroad Stage IV emission standards with an aftertreatment system that requires no operator input or downtime.
- Three levels of fuel filtration protect the engine from dirty diesel fuel.
- Grease sealed between track pins and bushings reduces travel noise and prevents debris from entering to increase undercarriage life.
- The center track guiding guard helps align the excavator track when traveling and working on slopes.
- The sloped track frame prevents mud and debris accumulation, helping reduce the risk of track damage.
- A swing torque increase of 10% makes cycle times faster than the previous series.
- A stick force increase of 10% makes cutting through tough material easier than ever.
- Multifunctioning is smoother and more efficient with the hydrostatic swing circuit.
- Booms, sticks, and frames are up to two times more durable than the previous series, giving you years of reliable performance in the harshest environments.
- Auto warm-up speeds up hydraulic oil warming in cold temperatures and helps prolong the life of components.
- Don't let the temperature stop you from working. This excavator has a high-ambient capability of 52° C (125° F) and a standard cold start capability of -18° C (-0.4° F).

# LESS MAINTENANCE

- Extended, synchronized maintenance intervals and a reduced hydraulic oil capacity save up to 20% in maintenance costs on the 355.
- Boost productivity with proactive service reminders. The Integrated Vehicle Health Management system alerts the operator with step-by-step service guidance and parts needed so you don't experience unnecessary downtime.
- Check engine oil level quickly and safely with the engine oil dipstick on ground level.
- Track your excavator's filter life and maintenance intervals via the in-cab monitor.
- The latest hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3000-hour replacement interval – 50% longer than previous filter designs.
- The excavator is auto-lube ready with built-in mounting points; an available auto-lube retrofit kit provides additional hardware to mount a grease pump and line guards.
- Using Cat® genuine oil and filters and doing typical Scheduled Oil Sampling (S-O-S<sup>SM</sup>) monitoring will double the current service interval to 1,000 hours, giving you greater uptime to do more work.
- S-O-S ports with extended sampling intervals are on ground level, simplifying maintenance and allowing for quick easy extraction of samples for fluid analysis.
- The high-efficiency hydraulic fan has an automatic reverse function to keep cores free from debris, eliminating the need for any operator interaction.
- The advanced air intake filter with pre-cleaner has double the dust holding capacity of the previous air intake filter.
- The latest engine air cleaners with an integrated pre-cleaner have twice the life of radial seal air cleaners.



# WORK IN COMFORT



- Standard automatic climate control keeps you at the right temperature throughout your shift.
- Get in and out of the cab more easily using the tip-up left console.
- Advanced viscous mounts reduce cab vibration up to 50% over previous excavator models.
- Control the excavator comfortably with easy-to-reach controls 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.

- Keep your excavator secure with Operator ID. Use your PIN code on the monitor to enable the pushbutton starting feature.
- A travel direction indicator helps operators know which way to activate the travel levers.
- Access 100% of daily maintenance points from ground level – no need for you to climb on top of the excavator.
- A ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- The right-hand service platform design provides easy, safe, and quick access to the upper service platform; the service platform steps use serrated steps and an anti-skid punch plate to prevent slipping. The handrails comply with ISO 2867 requirements.
- The standard Rollover Protective Structure (ROPS) 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 pillars, larger windows, and a flat engine hood design.
- Enhance jobsite safety. Add a swing alarm to alert people when rotating from the trench to the stockpile.
- Rear and right-hand-sideview cameras are standard. Upgrade to 360° visibility, and you'll easily visualize objects and personnel around the excavator in a single view.
- See all around the machine with the premium 360° lighting package and its 1800 lm lights on the chassis, cab, boom, sides, and rear.



# SIMPLE TO OPERATE



- Start the engine with a push button; use a Bluetooth key fob or the unique Operator ID function.
- Automatic hydraulic oil warmup gets you to work faster in cold temperatures and helps prolong the life of components.
- Make operating easier with the touch of a joystick button. Additional auxiliary relays allow you to power on or turn off a CB radio, beacon light, and even a dust suppression watering system without taking your hands off the joysticks.
- Program each joystick button, including power mode, response, and pattern, using Operator ID; the machine will remember what you set 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 – saving time and enhancing safety on the jobsite.
- Not sure how a function works or how to maintain the excavator? Always have the operator's manual at your fingertips on the touchscreen monitor.
- Use the in-monitor QR code to learn about machine and technology features through a full suite of "how-to" videos.
- Navigate quickly on the standard high-resolution 254 mm (10 in) touchscreen monitor or with jog dial control.
- A second 254 mm (10 in) monitor is available for Cat® Grade.
- 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 to prevent wear and tear on the attachment and excavator.



- The Cat® C13 engine meets China Nonroad Stage IV emission standards.
  - 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 (hydrogenated 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.
  - Extended maintenance intervals reduce downtime and decrease the amount of fluid and filters that are replaced over the machine’s life.
  - Remote Flash minimizes downtime and maintenance time while keeping your asset running at maximum efficiency. Alerts for machine updates are sent virtually from your Cat dealer, and updates can be deployed without a dealer technician needing to be onsite.
  - Remote Troubleshoot decreases maintenance time and keeps your machine running with maximum efficiency by allowing your Cat dealer to virtually test the machine while working. Once a problem is identified, a technician can fix it the first time, saving time and money.
- \*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.**



# MORE THAN MACHINES

BUILT AROUND YOUR SUCCESS

When you buy Cat equipment, you get so much more than the machine. You also get the support of a best-in-class dealer network, backed by a range of flexible solutions, technology, tools, and more.



## CUSTOMER VALUE AGREEMENTS

A Customer Value Agreement (CVA) from your Cat dealer helps you do more and worry less. A CVA simplifies machine ownership and maintenance, adds the security of expert dealer support, and gives you the peace of mind from effective equipment health management.

## GENUINE CAT PARTS

Genuine Cat parts deliver the highest level of reliability and productivity. Order direct from your Cat dealer or shop online at [parts.cat.com](http://parts.cat.com).

## REPAIR OPTIONS

A broad range of repair options give you choices that work with your needs, budget, and timeline. Every repair is performed by expert Cat technicians. You'll receive smart repair advice, a timely, accurate quote, and service that gets your machine back into action quickly.

## FINANCIAL SERVICES

Count on Cat Financial to provide the best finance and extended protection solutions for your business. For more than 30 years, we have helped our customers succeed through financial service excellence.



DOZERS



SKID STEERS



MATERIAL HANDLERS



EXCAVATORS



WHEEL LOADERS



TRACK LOADERS

# INCREASE PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

Expand the performance of your excavator with a variety of Cat attachments. Each can maximize the machine's capability of moving material quickly and efficiently.

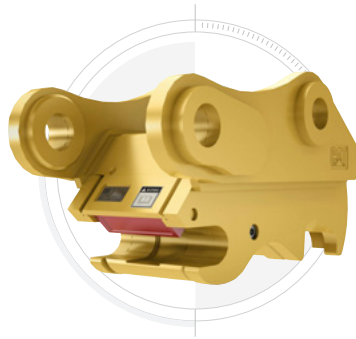
Attachments may vary. Consult your Cat dealer for details.

## BUCKETS



Cat buckets and teeth can cut through the toughest material.

## COUPLERS



Cat quick couplers let you change between tools in minutes, making the machine much more versatile.

## HAMMERS AND MORE



Whether it's breaking rock, cutting steel, or grabbing and loading material, Cat hydromechanical attachments can help you do more work to make more money.

## PREVENT WEAR & TEAR

Auto hammer stop prevents the tool from firing after 30 seconds of continuous firing. This prevents the tool and excavator from overworking, enhancing the service life of both.

# TECHNICAL SPECIFICATIONS

## Engine

Net Power – ISO 9249	330 kW	443 hp
Net Power – ISO 9249 (DIN)	449 hp (metric)	
Engine Model	C13B	
Engine Power – ISO 14396	332 kW	445 hp
Engine Power – ISO 14396 (DIN)	451 hp (metric)	
Bore	130 mm	5 in
Stroke	157 mm	6 in
Displacement	12.5 L	763 in <sup>3</sup>
Biodiesel Capability	Up to B20 <sup>1</sup>	
Emissions	Meets China Nonroad Stage IV emission standards.	

Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, and alternator with engine speed at 1700 rpm. Advertised power is tested per the specified standard in effect at the time of manufacture.

<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

Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,511 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	26 000 kPa	3,771 psi

## Swing Mechanism

Swing Speed	8.3 r/min	
Maximum Swing Torque	189 kN·m	139,000 ft·lbf

## Weights

Operating Weight	51 400 kg	113,300 lb
Fixed Gauge Long undercarriage, Mass boom, SD M3.0UB (9'10") stick, SD 3.21 m <sup>3</sup> (4.20 yd <sup>3</sup> ) bucket, 600 mm (24") double grouser shoes, and 9800 kg (21,605 lb) counterweight.		

## Service Refill Capacities

Fuel Tank Capacity	715 L	188.9 gal
Diesel Exhaust Fluid (DEF) Tank	80 L	21.1 gal
Cooling System	52 L	13.7 gal
Engine Oil	40 L	10.6 gal
Swing Drive – Each	10.5 L	2.8 gal
Final Drive – Each	9.5 L	2.5 gal
Hydraulic System – Including Tank	550 L	145.3 gal
Hydraulic Tank	217 L	57.3 gal

## Dimensions

Boom	Mass 6.55 m (21'6")	
Stick	M2.5 m (8'2")	
Bucket	SD 3.80 m <sup>3</sup> (4.97 yd <sup>3</sup> )	
Shipping Height – Top of Cab	3380 mm	11.1 ft
Handrail Height	3530 mm	11.7 ft
Shipping Length	11 630 mm	38.2 ft
Tail Swing Radius	3760 mm	12.4 ft
Counterweight Clearance	1435 mm	4.8 ft
Ground Clearance	710 mm	2.4 ft
Track Length	5350 mm	17.7 ft
Track Length to Center of Rollers	4340 mm	14.3 ft
Track Gauge	2890 mm	9.6 ft
Transport Width	3180 mm	10.5 ft

## Working Ranges & Forces

Boom	Mass 6.55 m (21'6")	
Stick	M2.5 m (8'2")	
Bucket	SD 3.80 m <sup>3</sup> (4.97 yd <sup>3</sup> )	
Maximum Digging Depth	6590 mm	21.7 ft
Maximum Reach at Ground Level	10 710 mm	35.2 ft
Maximum Cutting Height	10 260 mm	33.8 ft
Maximum Loading Height	6770 mm	22.3 ft
Minimum Loading Height	3290 mm	10.1 ft
Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	6290 mm	20.8 ft
Maximum Vertical Wall Digging Depth	3930 mm	12.11 ft
Bucket Digging Force – ISO	296 kN	66,600 lbf
Stick Digging Force – ISO	241 kN	54,100 lbf

## Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.00 kg (2.2 lb) of refrigerant, which has a CO<sub>2</sub> equivalent of 1.430 metric tonnes (1.576 tons).

# STANDARD & OPTIONAL EQUIPMENT

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

	Standard	Optional		Standard	Optional
<b>UNDERCARRIAGE AND STRUCTURES</b>			<b>ENGINE</b>		
9.8 mt (21,605 lb) counterweight	✓		Three selectable modes: Power, Smart, and Eco	✓	
Towing eye on base frame	✓		Auto engine speed control	✓	
Fixed gauge undercarriage		✓	Up to 4500 m (14,760 ft) altitude capability	✓	
Variable gauge wide undercarriage		✓	52° C (126° F) high-ambient cooling capacity	✓	
9800 kg (21,605 lb) counterweight		✓	-18° C (0° F) cold start capability	✓	
10 050 kg (22,156 lb) counterweight		✓	Double element air filter with integrated pre-cleaner	✓	
600 mm (24") double grouser track shoes		✓	Remote disable	✓	
750 mm (30") triple grouser track shoes		✓	Cold start block heater		✓
750 mm (30") double grouser track shoes		✓	Hydraulic reverse fan		✓
<b>BOOMS AND STICKS</b>			-32° C (-25° F) cold start capability		✓
6.55 m (21'6") Mass boom		✓	<b>ELECTRICAL SYSTEM</b>		
6.9 m (22'8") Reach boom		✓	Maintenance-free 1000 CCA batteries (x4)	✓	
2.5 m (8'2") Mass stick		✓	Centralized electrical disconnect switch	✓	
2.9 m (9'6") Reach stick		✓	LED lights	✓	
3.0 m (9'10") Mass stick		✓	Inlet air heater		✓
<b>CAB</b>			<b>SERVICE AND MAINTENANCE</b>		
ROPS	✓		Integrated vehicle health management system	✓	
Cab/Operator Protective Guards (OPG)	✓		Grouped location of engine oil & fuel filters	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓		S.O.S ports	✓	
Auto bi-level air conditioner	✓		<b>HYDRAULIC SYSTEM</b>		
Keyless push-to-start engine control	✓		Boom and stick regeneration circuit	✓	
Air-suspension Essential seat	✓		Electronic main control valve	✓	
51 mm (2") seat belt	✓		Auto hydraulic oil warmup	✓	
Bluetooth radio with USB/Auxiliary ports	✓		Auto swing parking brake	✓	
24V DC outlet	✓		High performance hydraulic return filter	✓	
Beverage holder	✓		Two-speed travel	✓	
Openable two-piece front window	✓		One-way one-pump auxiliary circuit		✓
Rear window emergency exit	✓		Combined two-way two-pump auxiliary circuit		✓
Radial wiper with washer	✓		Quick coupler circuit		✓
Openable steel hatch	✓		<b>SAFETY AND SECURITY</b>		
LED dome light	✓		Service platform with anti-skid plate and recessed bolts	✓	
Roller front sunscreen	✓		Rearview camera	✓	
Washable floor mat	✓		Lockable disconnect switch	✓	
High-resolution 254 mm (10") LCD touchscreen monitor		✓	Auto hammer stop	✓	
Roller rear sunscreen		✓	Rearview camera	✓	
			Inspection lighting		✓





For more complete information on Cat products, dealer services and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com).

© 2024 Caterpillar. All Rights Reserved.

VisionLink is a trademark of Caterpillar Inc., registered in the United States and in other countries.

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

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, SmartBoom, S·O·S, Product Link, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.  
[www.cat.com](http://www.cat.com) [www.caterpillar.com](http://www.caterpillar.com)

AEXQ3423-03  
Replaces AEXQ3423-02  
Build Number: 08D  
(China)

