

# Cat<sup>®</sup> 335 Hydraulic Excavator

The Cat<sup>®</sup> 335 Excavator brings premium performance with simple-to-use standard technologies to boost operator efficiencies up to 45%. Combine these features with a compact radius design, a new cab, longer maintenance intervals, and a power system that is more efficient, and you have a low cost-per-unit of production excavator that's perfect for medium- to heavy-duty applications. For easier transport, the machine weight is evolving to stay under 80,000 lbs with bucket in most cases. To take advantage of the 12-ft transport restrictions, the machine is also slightly wider, allowing for better over-the-side lifting capabilities.

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

#### **High-Performance Digging and Lifting**

- Larger stick and bucket cylinders and higher hydraulic power can help to increase productivity up to 20%.
- 20% increased hydraulic power for greater production.
- 15% increase in bucket and stick force thanks to larger diameter cylinders.
- Compact radius helps you work in tight spaces.
- 5% improved swing torque makes working on slopes easier.
- Increase operating efficiency up to 45% with standard Cat technologies that lower operator fatigue and operating costs, including fuel consumption and daily maintenance.
- The C7.1 engine meets the latest emission standards. Aftertreatment system requires no maintenance or downtime.
- 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 with power modes; let Smart mode automatically match engine and hydraulic power to digging conditions. Smart mode can save you an average of 10% in fuel consumption with no impact on productivity.
- Advansys<sup>™</sup> 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.
- Optional SmartBoom<sup>™</sup> lets the boom freely travel up and down without using any pump flow so operators can focus on stick and bucket work, reducing operator stress and fuel consumption.
- Two blade widths are now available: 3.6 m (11'8") wide to cover up to 850 mm (33") shoes or 3.45 m (11'3") wide to cover 600 mm (24") shoes.
- Don't let the temperature stop you from working. The excavator has a standard high-ambient temperature capability of 52°C (125.6°F) without de-rate and cold start capability of 18°C (0°F). An optional -32°C (-25°F) cold start package is available.

#### Boost Efficiency and Productivity up to 45% with Integrated Cat Technology

- Improve productivity with standard ease-of-use features, including Cat GRADE with 2D, Cat Payload, and Cat 2D E-Fence.
- Standard Grade Assist helps you 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.
- 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 lets you 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<sup>®</sup> and remotely manage your production targets.
- Upgrade to optional Cat GRADE with Advanced 2D to 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 to use 3D designs and GNSS technology to assist the operator in reaching the desired grade faster and accurately. The optional GNSS antenna coming with the Cat GRADE with 3D option will be flush mounted on the counterweight, allowing for a more protected design while providing excellent visibility to the sky and satellites.



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

- Choose from Deluxe or Premium cabs both with automatic climate control.
- The Deluxe seat is heated and air adjustable. The Premium seat is heated and cooled and adjusts automatically.
- Tip-up console on the Deluxe and Premium cab improves ingress/ egress by approximately 45%.
- 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 and in the consoles. A cup holder, document holder, bottle holder, and coat hook are also provided.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

#### **Less Maintenance**

- Expect up to 20% less maintenance costs than the 335F. (Savings calculated over 12,000 machine hours.)
- Check engine oil level quickly and safely with the new ground-level engine oil 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.
- No required maintenance on the Cat Clean Emissions Module.
- Change all fuel filters at a synchronized 1,000 hours a 100% increase over the 335F fuel filters.
- Expect the new air intake filter with precleaner to last up to 1,000 hours a 100% increase over the previous 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% longer than previous filter designs.
- High-efficiency cooling fans run only when needed; you can program intervals, so they automatically reverse to keep cores clean without interrupting your work.
- S•O•S<sup>SM</sup> ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

### Simple to Operate

- Start the engine with a push button using a Bluetooth key fob (optional), smartphone app (optional), or the unique Operator ID function.
- Program your power mode and joystick preferences using Operator ID; the excavator will remember what you set each time you go to work.
- Navigate quickly on the standard high-resolution 203 mm (8 in.) touchscreen monitor, with the optional 254 mm (10 in.) touchscreen monitor, or with the aid of the jog dial control.
- 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.
- Find the tool you need even if it's hidden beneath overgrowth or debris. The excavator's onboard Bluetooth reader can locate any work tool equipped with Cat asset tracking devices up to a range of 60 m (200 ft) (optional).

## **Enhanced 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.
- Access all service 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 pillars, 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 shut-off switch stops all fuel to the engine when activated and shuts down the machine.
- A rearview camera and a right-side-view camera are standard. Upgrade to 360° visibility and you'll easily visualize objects and personnel around the excavator in a single view.
- New service platform design in the front of the machine provides easy, safe, and quick access to upper service platform; the service platform steps use anti-skid punch plate to prevent slipping.
- Brightly colored seatbelts allow easy recognition of properly utilized safety restraints.
- Optional boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose power.

# **Standard and Optional Equipment**

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

	Standard	Optional
CAT TECHNOLOGY		
Cat Product Link™	$\checkmark$	
Work tool recognition	$\checkmark$	
Work tool tracking	$\checkmark$	
Cat Grade with 2D	$\checkmark$	
Cat Grade with Advanced 2D		$\checkmark$
Cat Grade with 3D		$\checkmark$
Cat Assist Technology	$\checkmark$	
Cat Payload	$\checkmark$	
2D E-Fence	$\checkmark$	
Auto hammer stop	$\checkmark$	
Remote Services capability	$\checkmark$	
ENGINE		
Three selectable modes: Power, Smart, Eco	√	
4600 m (15,090 ft) altitude capability with	√	
engine power derate above 3000 m (9,840 ft)		
52°C (126°F) high-ambient cooling	$\checkmark$	
capacity without derate		
-18°C (0°F) cold start capability	$\checkmark$	
-32°C (-25°F) cold start capability		$\checkmark$
Sealed double element air filter with integrated precleaner	$\checkmark$	
1 x 145 Amp. dual alternator	$\checkmark$	
Electric fuel priming pump	$\checkmark$	
Hydraulic and reversible demand fan	$\checkmark$	
Two-stage fuel filtration system with water separator and indicator	$\checkmark$	
Biodiesel capable (up to B20)	✓	
SERVICE AND MAINTENANCE		
S•O•S <sup>sm</sup> sampling ports	✓	
Grouped location for engine oil and fuel filters	$\checkmark$	
Remote flash	$\checkmark$	
SAFETY AND SECURITY		
Rear- and right-side-view cameras	√	
360° visibility		$\checkmark$
ISO 2867 right-hand handrail and hand hold	√	
Service platform with anti-skid plate and countersunk bolts	$\checkmark$	
Hydraulic lockout lever neutralizes all controls	√	
Ground level-accessible secondary engine shutoff switch in cab	$\checkmark$	
Signaling/warning horn	√	

	Standard	Optional
HYDRAULIC SYSTEM		opnonim
SmartBoom <sup>™ 1</sup>	√	
Electric main control valve	√	
Boom and stick regeneration circuits	√	
Automatic hydraulic oil warm up	$\checkmark$	
Automatic two-speed travel	$\checkmark$	
Boom and stick drift reduction valve	✓	
High flow 2-way tool control	✓	
Medium pressure pump and lines		✓
High pressure tool control lines		$\checkmark$
Element type main hydraulic filter	$\checkmark$	
UNDERCARRIAGE AND STRUCTURES		
Base frame with standard track rollers and HD carrier rollers	$\checkmark$	
Grease lubricated track	✓	
ISO 15818 tie down points on base frame	 ✓	
Track guiding guard, segmented two		
pieces	-	
Track guiding guard, full length		$\checkmark$
Heavy-duty travel motor guards	$\checkmark$	
Swivel guard	$\checkmark$	
5.0 mt (11,020 lb) counterweight*		$\checkmark$
7.7 mt (16,980 lb) counterweight**		$\checkmark$
600 mm (24") triple grouser track shoes		$\checkmark$
850 mm (33") triple grouser track shoes		$\checkmark$
3440 mm (11'3") blade		$\checkmark$
3600 mm (11'10") blade		$\checkmark$
*For use with blade only **For use without blade only		
BOOMS, STICKS, AND LINKAGES		
Boom cylinders	√	
6.15 m (20'2") Reach boom	✓	
3.2 m (10'6") Reach stick		✓
3.75 m (12'4") Reach stick		✓
Bucket linkage, CB2 family with lifting eye	✓	
ELECTRICAL SYSTEM		
Maintenance-free batteries	$\checkmark$	
LED chassis light, left-hand/right-hand boom lights, cab lights -1800 lumens	$\checkmark$	
Centralized electrical disconnect switch	✓	
Programmable time delay working lights after engine shutdown	$\checkmark$	
<sup>1</sup> Available in Europe only		

#### **Technical Specifications**

Engine		
Engine Model	C	7.1
Net Power – ISO 9249	204 kW	273 hp
Engine Power – ISO 14396	205 kW	275 hp
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in <sup>3</sup>
Displacement	7.01 L	420 1118

Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,200 rpm.

Hydraulic System		
Main System – Maximum Flow – Implement	560 L/min (280 × 2 pumps)	148 gal/min (74 × 2 pumps)
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	28 832 kPa	4,181 psi

Swing Mechanism			
Swing Speed	ed 10.8 rpm		
Maximum Swing Torque	108 kN∙m	79,455 lbf-ft	
Machine Wei	ghts		
Operating Weight	36 200 kg	79,900 lb	
<ul> <li>Long undercarriage, Reach boom, R3.2 (10'6") stick, HD 1.54 m<sup>3</sup> (2.01 yd<sup>3</sup>) bucket, 850 mm (33") triple grouser shoes and 7.7 mt (16,980 lb) counterweight.</li> </ul>			
Operating Weight	34 900 kg	77,000 lb	
<ul> <li>Long undercarriage, Reach boom, R3.2 (10'6") stick, HD 1.54 m<sup>3</sup> (2.01 yd<sup>3</sup>) bucket, 600 mm (24") triple grouser shoes, 5.0 mt (11,202 lb) counterweight and 3440 mm (11'3") blade.</li> </ul>			
Service Refill Capacities			
Fuel Tank Capacity	368 L	97.2 gal	
Cooling System	13 L	3.3 gal	
Engine Oil	25 L	6.6 gal	

Cooling System	13 L	3.3 gal
Engine Oil	25 L	6.6 gal
Swing Drive	11 L	2.9 gal
Final Drive (each)	7 L	1.8 gal
Hydraulic System (including tank)	350 L	92.5 gal
Hydraulic Tank	154 L	40.7 gal
DEFTank	26 L	7.0 gal

Dimensions		
Boom	Reach 6.15 m (20'2")	
Stick	R3.2CB2 (10'6")	
Bucket	HD	
Shipping Height (top of cab)	3272 mm	10'9"
Handrail Height	3428 mm	11'3"
Shipping Length	9826 mm	32'2"
Tail Swing Radius	1903 mm	6'3"
Counterweight Clearance	1167 mm	3'10"
Ground Clearance	482 mm	1'7"
Track Length	5744 mm	18'10"
Length to Center of Rollers	4040 mm	13'3"
Track Gauge – Extended	2740 mm	9'0"
Transport Width – 600 mm (24") Shoes	3340 mm	10'11"
Transport Width – 850 mm (33") Shoes	3590 mm	11'9"
Machine Width with Blade – 600 mm (24") Shoes	3440 mm	11'3"
Machine Width with Blade– 850 mm (33") Shoes	3600 mm	11'10"

Working Ranges and Forces		
Boom	Reach 6.15 m (20'2")	
Stick	R3.2CB2 (10'6")	
Bucket	HD	
Maximum Digging Depth	6990 mm	22'11"
Maximum Reach at Ground Level	10 640 mm	34'11"
Maximum Cutting Height	11 150 mm	36'7"
Maximum Loading Height	7960 mm	26'1"
Minimum Loading Height	2910 mm	9'7"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6840 mm	22'5"
Maximum Vertical Wall Digging Depth	5790 mm	19'0"
Bucket Digging Force (ISO)	207 kN	46,482 lbf
Stick Digging Force (ISO)	144 kN	32,319 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 0.9 kg of refrigerant, which has a CO<sub>2</sub> equivalent of 1.287 metric tonnes.

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

#### © 2020 Caterpillar All rights reserved

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, Advansys, S+O+S, Product Link, SmartBoom, "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.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

AEXQ2985-00 (06-2020) Build Number: 07A (N Am, Aus-NZ, Hong Kong, Taiwan, Eur)

