

Cat[®] 374 Hydraulic Excavator

If you want high production and more durability with less maintenance, the 374 is a terrific choice. With 10 percent more swing torque than the 374F it replaces, you'll experience faster cycle times. Plus you get two times more structural durability and up to 20 percent less maintenance for longer service life and greater uptime.

High Performance

- The 374 can load up to 33 trucks per hour with 36 tonne (40 ton) capacity.
- Swing torque increase of 10 percent makes cycle times much faster than the previous series.
- Multifunctioning is smoother and more efficient with the new hydrostatic swing circuit.
- Enhanced heavy lift mode increases system pressure to help you pick and place heavy material with ease.
- Booms, sticks, and frames are two times more durable than the previous series, which will give you years of reliable performance in the harshest environments.
- Match the excavator to the job with three operating modes: Power, Smart, and ECO.
- 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. This excavator has a high-ambient capability of 52° C (125° F) and standard cold start capability of -18° C (-0.4° F).

Boost Efficiency and Productivity with Cat Technology

- 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.
- VisionLink[®] helps you remotely manage production targets. The monitor's USB port lets you download results from one shift all the way up to 30 days of work so you manage progress without needing an internet connection or VisionLink subscription.
- Boost productivity versus traditional grading with standard Cat GRADE with 2D system includes indicate-only and laser capability.
- Upgrade easily to optional Cat GRADE with Advanced 2D or 3D.
- 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[™] provides location, machine hours, fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through VisionLink, helping you improve jobsite efficiency with lower operating costs.



Simple to Operate

- Start the engine with a push button; use a Bluetooth® key fob or the unique Operator ID function.
- 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 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.
- Automatic hydraulic oil warm up gets you to work faster in cold temperatures and helps prolong the life of components.
- Navigate quickly on the standard high-resolution 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 Cat GRADE with Advanced 2D and Cat GRADE with 3D.
- 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.

Work in Comfort in the All-New Cab

- Choose between Deluxe and Premium cabs both with automatic climate control.
- Stay warm with the Deluxe heated seat; stay warm and cool with the Premium heated and ventilated seat.
- 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.

Less Maintenance

- Expect up to 20 percent less maintenance cost than the 374F due to reduced hydraulic oil capacity and extended and synchronized service intervals.
- 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.
- 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; they are accessible from the upper platform.
- The advanced 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 and longer 3,000 hour replacement interval 50 percent longer than previous filter designs.
- The new high-efficiency hydraulic fan has an automatic reverse function to keep cores free from debris, eliminating the need for any operator interaction.
- S·O·SSM ports simplify maintenance and allow for quick, easy extraction of fluid samples for analysis.

Enhanced Safety

- Standard 2D E-Fence is integrated right out of the factory, which prevents the excavator from moving outside of operator-defined set points.
- Lift Assist helps you avoid tipping by letting you know if your load is within the excavator's safe working range limits.
- 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 1,800 lumen lights on the chassis, cab, boom, sides, and rear.
- Serrated steps and anti-skid punch plate on the service platform help prevent slipping.
- A travel direction indicator helps operators know which way to activate the travel levers.
- 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.
- A ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optiona
CAB			BOOMS AND STICKS		
High-resolution 254 mm (10") LCD	\checkmark		7.0 m (23') Mass boom		\checkmark
touchscreen monitor			7.8 m (25'7") Reach boom		\checkmark
Heated seat with air-adjustable	\checkmark		2.57 m (8'5") Mass stick		\checkmark
suspension (Deluxe only)			2.84 m (9'4") Reach stick		\checkmark
Heated and cooled seat with automatic adjustable suspension (Premium only)	\checkmark		3.0 m (9'10") Mass stick		\checkmark
ENGINE			3.6 m (11'10") Reach stick		\checkmark
Cold start block heaters		\checkmark	4.15 m (13'7") Reach stick		\checkmark
Three selectable modes: Power, Smart, Eco	√		4.67 m (15'4") Reach stick		\checkmark
Automatic engine speed control	 ✓		ELECTRICAL SYSTEM		
Up to 4500 m (14,764 ft) altitude capability	 ✓		Maintenance-free 1,400 CCA batteries (×2)	\checkmark	
52° C (126° F) high-ambient cooling capacity	 ✓		Centralized electrical disconnect switch	\checkmark	
-18° C (-0.4° F) cold start capability	 ✓		Chassis light	\checkmark	
Hydraulic reverse fan			LED boom and cab lights		\checkmark
Double element air filter with integrated	 ✓		CAT TECHNOLOGY		
precleaner	•		Cat Product Link	\checkmark	
Remote disable	√		Cat GRADE with 2D	\checkmark	
Biodiesel capability up to B20	√		Cat GRADE with Advanced 2D		\checkmark
HYDRAULIC SYSTEM			Cat GRADE with 3D		\checkmark
SmartBoom™		✓	Cat PAYLOAD	\checkmark	
Boom and stick regeneration circuit	✓		E-Fence	\checkmark	
Electronic main control valve	✓		Lift Assist	\checkmark	
Dedicated closed loop swing circuit	✓		Remote Services capability	\checkmark	
Heavy lift mode	✓		SERVICE AND MAINTENANCE		
Automatic hydraulic oil warm up	✓		Auto lube ready	\checkmark	
Automatic swing parking brake	✓		Grouped location of engine oil and	\checkmark	
High performance hydraulic return filter	✓		fuel filters		
Two speed travel	✓		Scheduled Oil Sampling (S·O·S) ports	\checkmark	
Bio hydraulic oil capability	✓		QuickEvac™ maintenance ready		\checkmark
Advanced tool control		\checkmark	Electric refueling pump with auto shutoff		✓
Medium-pressure auxiliary circuit		\checkmark	SAFETY AND SECURITY		
Quick coupler circuit		\checkmark	Caterpillar One Key security system	\checkmark	
UNDERCARRIAGE AND STRUCTURES			Lockable external tool/storage box	\checkmark	
Long variable gauge undercarriage	~		Lockable door, fuel, and hydraulic tank locks	\checkmark	
Towing eye on base frame	 ✓		Lockable fuel drain compartment	\checkmark	
Standard counterweight	 ✓		Service platforms with anti-skid plate	\checkmark	
Counterweight with removal device		✓	RH handrail and hand hold	\checkmark	
650 mm (26") HD double grouser track shoes			Mirror package	\checkmark	
			Signaling/warning horn	\checkmark	
750 mm (30") HD double arouser track shoes					
750 mm (30") HD double grouser track shoes 900 mm (35") HD double grouser track shoes		 ✓	Ground-level secondary engine shutoff switch	\checkmark	

Boom lowering check valve Stick lowering check valve

360° visibility

 \checkmark

 \checkmark ~

Technical Specifications

Engine		
Engine Model	C1	5
Engine Power – ISO 9249	361 kW	484 hp
Engine Power – ISO 14396	362 kW	485 hp
Bore	137 mm	5.39 in
Stroke	171 mm	6.73 in
Displacement	15.2 L	928 in ³

Hydraulic System			
Main System – Maximum Flow – Implement	896 L/min (× 2 pumps)	237 gal/min (× 2 pumps)	
Maximum Pressure – Equipment – Implement	37 000 kPa	5,366 psi	
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,511 psi	
Maximum Pressure – Travel	35 000 kPa	5,076 psi	
Maximum Pressure – Swing	35 000 kPa	5,076 psi	

Swing M	echanism	
Swing Speed	6.5	i rpm
Maximum Swing Torque	298 kN∙m	220,000 lbf-ft

Weights		
Operating Weight	71 700 kg	158,200 lb
• Reach boom, R3.6 (11'10") stick, SD 3.3 m³ (4.32 yd³) bucket, 650 mm (26") HD double grouser shoes, standard counterweight.		

Service Refill Capacity			
Fuel Tank Capacity	920 L	243 gal	
Cooling System	71 L	19 gal	
Engine Oil (with filter)	62 L	16 gal	
Swing Drive	20 L	5 gal	
Final Drive (each)	32 L	9 gal	
Hydraulic System (including tank)	620 L	164 gal	
Hydraulic Tank (including suction pipe)	326 L	86 gal	
DEF Tank	80 L	21 gal	

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 of refrigerant, which has a CO₂ equivalent of 1.430 metric tonnes.

Dimensions		
Boom	Reach 7.8 r	n (25'7")
Stick	Reach 3.6 n	n (11'10")
Bucket	SD 3.3 m³ (4.32 yd³)	
Shipping Height (top of cab)	3559 mm	11'8"
Handrail Height	3982 mm	13'0"
Shipping Length (boom, stick, bucket installed)	13 652 mm	44'9"
Tail Swing Radius	4171 mm	13'8"
Counterweight Clearance	1494 mm	4'10"
Ground Clearance	782 mm	2'6"
Track Length	5873 mm	19'3"
Track Length to Center of Rollers	4705 mm	15'5"
Track Gauge – Extended	3410 mm	11'2"
Track Gauge – Retracted	2750 mm	9'0"
Transport Width – Extended – 650 mm (26") Shoes – Without Steps	4060 mm	13'3"
Transport Width – Retracted – 650 mm (26") Shoes – Without Steps	3400 mm	11'1"

Working Ranges			
Boom Reach 7.8 m (25'7")			
Stick	Reach 3.6 m (11'10")		
Bucket	SD 3.3 m ³ (4.32 yd ³)		
Maximum Digging Depth	8570 mm	28'1"	
Maximum Reach at Ground Level	13 160 mm	43'2"	
Maximum Cutting Height	12 550 mm	41'2"	
Maximum Loading Height	8430 mm	27'7"	
Minimum Loading Height	3310 mm	10'10"	
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	8440 mm	27'8"	
Maximum Vertical Wall Digging Depth	6910 mm	22'8"	
Bucket Digging Force (ISO)	358 kN	80,550 lbf	
Stick Digging Force (ISO)	295 kN	66,390 lbf	

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