



Cat[®] 307

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 307 Mini Excavator with standard tail and fixed side boom design delivers high performance with low fuel consumption. The durable and reliable structure helps you work in applications with high productivity but low operating cost.

ALL DAY COMFORT

A sealed cab is equipped with an improved air conditioning system, radio and a suspension seat to help keep you working comfortably all day long.

EASY TO OPERATE

Controls are easy to use with an ergonomic joystick, 100% pilot controls and a load sensing hydraulic system deliver smooth, powerful performance.

BIG PERFORMANCE IN A MINI DESIGN

- Increased lifting, swinging, travel and multi-functioning performance help you get the job done more efficiently.
- Heavy duty structural design ensures machine durability and reliability. Optional hydraulic line allows the machine to work in a broad range of applications.
- Counterweight extends to both sides of the machine provides improved stability.

SAFETY ON THE JOB SITE

Your safety is our top priority. The Cat mini excavator is designed to help keep you safe on the job. Courtesy work lights and a fluorescent seat belt are just a couple of the safety features we've built into the machine.

SIMPLE SERVICE FOR LESS DOWNTIME

Maintenance is quick and easy on the Cat mini excavator. Routine check points are easy to access at ground level through the side doors. All machines are equipped with GPS for easy management.

LOWER OPERATING COSTS

- Cat C2.4 Turbo engine and hydraulics with a variable displacement electronic pump delivers fuel efficiency.
- Equipped with greased and lubricated tracks for significantly increased track life, the Cat mini excavator is designed with reducing your operating costs.

UNMATCHED DEALER SUPPORT

Your Cat dealer is here to help you reach your business goals, from providing equipment solutions to operator training and much more.



307 Mini Hydraulic Excavator

Specifications

Engine

Engine Model	Cat C2.4 Turbo
Rated Net Power @ 2,400 rpm	
ISO 9249/SAE J1349	34.9 kW
Gross Power – SAE J1995	36.5 kW
Bore	87 mm
Stroke	102 mm
Displacement	2.4 L

Weights*

Minimum Operating Weight with Cab*	7000 kg
Maximum Operating Weight with Cab**	7400 kg

*Minimum weight is based on operator, full fuel tank, standard stick, bucket (854 mm/0.33 m³) and no blade.

**Maximum weight is based on operator, full fuel tank, standard stick, bucket (854 mm/0.33 m³) and blade.

Bucket

With Standard Stick:	
Bucket Capacity	0.33 m ³
Bucket Width	854 mm

Front

Boom	3700 mm
Standard Stick	1665 mm

Swing System

Machine Swing Speed	10.8 rpm
Swing Torque	16.3 kN·m

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump	
Pump Flow at 2,000 rpm	147 L/min
Operating Pressure – Equipment	28 500 kPa
Operating Pressure – Travel	28 500 kPa
Operating Pressure – Swing	24 000 kPa
Digging Force – Stick (standard)	36.3 kN
Digging Force – Bucket	53.2 kN

Blade

Width	2300 mm
Height	450 mm
Dig Depth	350 mm
Lift Height	390 mm

Travel System

Travel Speed – High	5.1 km/h
Travel Speed – Low	3.2 km/h
Maximum Drawbar Pull	56.9 kN
Gradeability (maximum)	30°

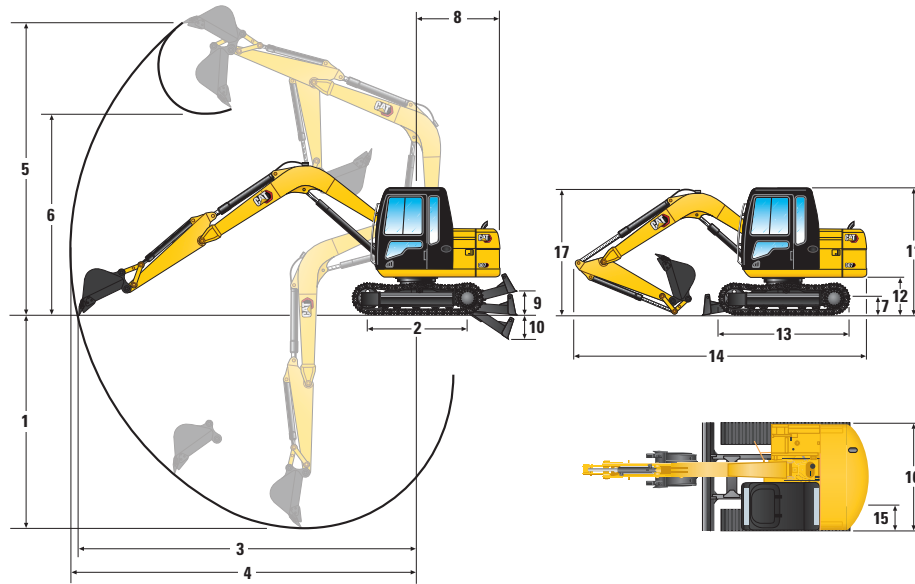
Service Refill Capacities

Swing Drive	Lubricated by hydraulic oil
Cooling System	11.9 L
Engine Oil	10.2 L
Fuel Tank	135 L
Hydraulic Tank	51 L
Hydraulic System	94 L
Final Drive	1.5 L

Certification – Cab and Canopy

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
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307 Mini Hydraulic Excavator



Dimensions*

1 Dig Depth	4070 mm
2 Length of Track on Ground	2120 mm
3 Maximum Reach at Ground Level	6160 mm
4 Maximum Reach	6300 mm
5 Maximum Dig Height	7240 mm
6 Maximum Dump Clearance	5200 mm
7 Ground Clearance, Frame	360 mm
8 Tail Swing Radius	1750 mm
9 Maximum Blade Height	390 mm
10 Maximum Blade Depth	350 mm
11 Cab Height	2540 mm
12 Ground Clearance, Counterweight	760 mm
13 Overall Track Length	2760 mm
14 Overall Shipping Length	6055 mm
15 Track Shoe Width	450 mm
16 Overall Shipping Width	2300 mm
17 Transport Height	2630 mm

*Working range and dimensions are for standard stick.

307 Mini Hydraulic Excavator

Lift Capacities

Lift Point Height		Lift Point Radius (3.0 m)			Lift Point Radius (4.5 m)			Lift Point Radius (Maximum)			
		Over Front			Over Front			Over Front			m
		Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	
4.5 m	kg	*1726	*1726	*1726				*729	*729	*729	4.50
3.0 m	kg	*2206	*2206	*2206	*1743	*1743	*1743	*797	*797	*797	5.13
1.5 m	kg	*3004	*3004	*3004	*1981	1865	1636	*873	*873	*873	5.40
0.0 m	kg	*3184	*3184	2896	*2127	1753	1529	*1035	*1035	*1035	5.25
-1.5 m	kg	*3106	*3106	2557	*1890	1728	1504	*1545	*1545	1447	4.62

The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 (GB/T 13331-2014) and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Lifting capacities are for machine with standard stick, 0.33 m³ bucket, blade and steel track.

*Hydraulic limit.

Machine: Standard boom, standard stick, 0.33 m³ bucket, with blade, steel track.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
Diesel engine, C2.4 Turbo	✓		Hour meter	✓	
Auto idle	✓		Retractable seat belt (50 mm width)	✓	
Two speed travel with manual shift	✓		Hydraulic activation control lever (lock out) for all controls	✓	
Cat one key security system	✓		Two travel control hand levers	✓	
Door locks and cap locks	✓		Capability to install one additional pedal for auxiliary hydraulic control	✓	
Signaling/warning horn	✓		Seat with suspension	✓	
Product Link™ – monitors machine hours and location	✓		450 mm triple grouser track shoes with holes (for rubber pad)	✓	
Muffler with cover	✓		Towing eye on base frame	✓	
Radial seal air filter, double element	✓		Rearview mirror, mounted on right hand side of upper frame	✓	
Stacked cooling package	✓		Light Group	✓	
Auxiliary hydraulic valve	✓		Blade		✓
Accumulator	✓		Auxiliary line		✓
Cab:	✓		B8 hammer		✓
– ROPS – ISO 12117-2:2008	✓				
– Mechanical suspension seat	✓				
– Openable front windshield with assist device	✓				
– Removable lower windshield	✓				
– Windshield wiper and washer	✓				
– Interior lighting	✓				
– Coat hook	✓				
– Radio	✓				
– Two stereo speakers	✓				
– Antenna	✓				
– Cup holder	✓				
– Storage pocket	✓				
– Mounting for front and top guard (mounting boss)	✓				

307 Mini Hydraulic Excavator

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability>.

Engine

- The Cat® C2.4 Turbo Diesel Engine, China Nonroad Stage IV emission standard.
 - Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 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.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

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 (1.98 lb) of refrigerant which has a CO₂ equivalent of 1.287 metric tonnes (1.419 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Sound Performance

Dynamic Operating Sound Pressure <80 dB(A)
(ISO 6396:2008)*

Average Exterior Sound Pressure <90 dB(A)
(ISO 6395:2008)**

*The declared dynamic operator sound pressure levels per ISO 6396:2008. The measurements were conducted with the cab doors and windows closed.

**The labeled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Advanced hydraulic systems balance power and efficiency
 - Power On Demand provides full time efficiency and power when you need it and is transparent to the operator
 - Auto idle and auto engine shutdown
 - Extended maintenance intervals reduce fluid and filter consumption

Recycling

- The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

	Material Type	Machine Model
		307
Weight Percentage (%)	Steel	65.52
	Iron	21.19
	Rubber	3.50
	Mixed Metal	2.20
	Other	1.89
	Nonferrous Metal	1.81
	Plastic	1.55
	Fluid	1.47
	Mixed-Metal and Nonmetal	0.85
	Mixed Nonmetallic	0.01
	Uncategorized	0.00
	Total	100

- A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714:2007 (Earth-moving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714:2007 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following values in the table may vary.

Recyclability	96%
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- The data provided above was based on the product configuration as provided by the individual product group.

307 Mini 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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