



Cat[®] 307.5

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 307.5 Mini Excavator delivers maximum power and performance in a mini size to help you work in a wide range of applications.

ALL DAY COMFORT

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

EASY TO OPERATE

- Controls are easy to use and the intuitive Next Generation Monitor provides customizable machine operator preferences and easy to read machine information.

STICK STEER TRAVEL MODE

- Moving around the job site is even easier with the Cat Stick Steer option. Easily switch from traditional travel controls with levers and pedals to joystick controls with a push of a button. The benefit of less effort and improved control is in your hands!

BIG PERFORMANCE IN A MINI DESIGN

- Increased lifting, swinging, travel and multi-functioning performance helps you get the job done more efficiently, and dig-to-blade allows for easy clean up.

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 retractable seat belt are just a few 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 with grouped service points and robust service panels.

LOWER OPERATING COSTS

- Equipped with features such as auto idle, auto engine shutdown, and efficient hydraulics with a variable displacement pump, the Cat Mini Excavator was designed with reducing your operating costs in mind.

UNMATCHED DEALER SUPPORT

- Your Cat dealer is here to help you reach your business goals. From providing equipment solutions to operator training to service needs and beyond, your Cat dealer is ready to help.



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Specifications

Engine

Engine Model Cat C2.4 Turbo

Net Power @ 2,400 rpm

ISO 9249, 80/1269/EEC 34.9 kW

Engine Power

ISO 14396 36.5 kW

Bore 87 mm

Stroke 102 mm

Displacement 2.43 L

- Meets China Nonroad Stage IV emission standard.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator.

Weights

Minimum Operating Weight with Cab* 7504 kg

Maximum Operating Weight with Cab** 8113 kg

*Minimum Weight is based on steel tracks, no extra counterweight, operator, full fuel tank, standard stick and bucket.

**Maximum Weight is based on steel tracks, extra counterweight operator, full fuel tank, standard stick, blade and bucket.

Weight Increase from Minimum Configuration

Extra Counterweight 250 kg

Blade 333 kg

Travel System

Travel Speed – High 5.0 km/h

Travel Speed – Low 3.1 km/h

Maximum Traction Force – High Speed 26.1 kN

Maximum Traction Force – Low Speed 62.4 kN

Ground Pressure – Minimum Weight 32.6 kPa

Ground Pressure – Maximum Weight 35.2 kPa

Gradeability (maximum) 30 degrees

Service Refill Capacities

Cooling System 10.0 L

Engine Oil 9.5 L

Fuel Tank 145 L

Hydraulic Tank 53 L

Hydraulic System 104 L

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump

Pump Flow @ 2,400 rpm 167 L/min

Operating Pressure – Equipment 285 bar

Operating Pressure – Travel 285 bar

Operating Pressure – Swing 250 bar

Auxiliary Circuit – Primary

Flow 131 L/min

Pressure 285 bar

Digging Force – Stick (standard) 37.8 kN

Digging Force – Bucket 54.6 kN

Swing System

Machine Swing Speed 10 rpm

Blade

Width 2280 mm

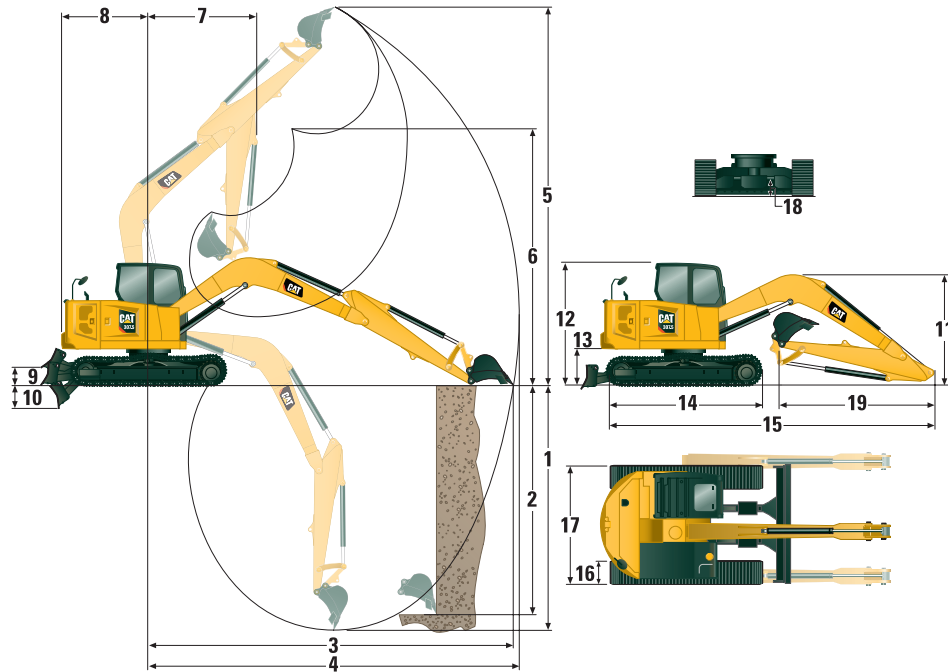
Height 431 mm

Certification – Cab

Roll Over Protective Structure (ROPS) ISO 12117-2:2008

Top Guard (optional) ISO 10262:1998 (Level I)

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Dimensions

	Standard Stick
1 Dig Depth	4047 mm
2 Vertical Wall	3544 mm
3 Maximum Reach at Ground Level	6139 mm
4 Maximum Reach	6297 mm
5 Maximum Dig Height	7401 mm
6 Maximum Dump Clearance	5353 mm
7 Boom in Reach	1681 mm
8 Tail Swing	
with Extra Counterweight	1995 mm
without Extra Counterweight	1800 mm
9 Maximum Blade Height	363 mm
10 Maximum Blade Depth	414 mm
11 Boom Height in Shipping Position	2569 mm
12 Cab Height	2574 mm
13 Swing Bearing Height	789 mm
14 Overall Undercarriage Length	2880 mm
15 Overall Shipping Length	6130 mm
16 Track Belt/Shoe Width	450 mm
17 Overall Track Width	2200 mm
Width over Upper House	2250 mm
18 Ground Clearance	370 mm
19 Stick Length	1665 mm

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Lift Capacities – Minimum Configuration*

Lift Point Height			3 m			4.5 m			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m	Standard Stick	kg	1720	1720	1730			749	738	738	738	4.45
3 m	Standard Stick	kg	2139	2139	2167	1592	1592	1604	704	704	704	5.19
1.5 m	Standard Stick	kg	2718	2718	2770	1754	1754	1327	760	760	760	5.43
0 m	Standard Stick	kg	2844	2844	3369	1489	1489	1246	921	921	921	5.25

*Minimum Weight includes steel tracks, no extra counterweight, operator, full fuel tank, standard stick and bucket.

Lift Capacities – Maximum Configuration**

Lift Point Height			3 m			4.5 m			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	m
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m	Standard Stick	kg	1720	1720	1730			749	738	738	738	4.45
3 m	Standard Stick	kg	2139	2139	2167	1592	1592	1604	704	704	704	5.19
1.5 m	Standard Stick	kg	2718	2718	2770	1754	1754	1489	760	760	760	5.43
0 m	Standard Stick	kg	2844	2844	2893	1785	1785	1408	921	921	921	5.25

**Maximum Weight includes steel tracks with extra counterweight, operator, full fuel tank, standard stick, blade and bucket.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OPERATOR ENVIRONMENT – CAB AND CANOPY			OPERATOR ENVIRONMENT – CAB ONLY		
Top Guard ISO 10262 1998 Level I		✓	Operator Sound Pressure 72 dB(A) ISO 6396:2008	✓	
ROPS ISO 12117-2:2008	✓		HVAC with Automatic Temperature Control	✓	
Stick Steer Mode	✓		Integrated Lower Front Window	✓	
Travel Cruise Control	✓		Assisted Front Window Overhead Storage	✓	
Control Pattern Changer	✓		Rear Window Emergency Exit	✓	
Adjustable Wrist Rests	✓		LED Interior Light	✓	
Molded Footrests	✓		12V Power Socket	✓	
Removable, Washable Floor Mat	✓		Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only)	✓	
Travel Pedals and Hand Levers	✓		Skylight	✓	
Cat Key with Passcode Option	✓		Jog dial interface	✓	
Hydraulic Lockout Controls	✓		Suspension Seat	✓	
High Back, Suspension Seat	✓		UNDERCARRIAGE		
Retractable Seat Belt (75 mm/3 in)	✓		Greased and Lubricated Track	✓	
Coat Hook	✓		Hydraulic Track Adjusters	✓	
Cup Holder	✓		Tie Down Eyes on Track Frame	✓	
Literature Holder	✓		Dozer Straight Blade		✓
Mounting Bosses for Top and Front Guards	✓		Dozer Float	✓	
Signaling/Warning Horn	✓		Bolt-on, Reversible Wear Edge	✓	
Cab and (left side) Boom Work Lights	✓		Steel Tracks (450 mm/17.7 in wide)	✓	
Utility Space for Mobile Phone	✓				
Rain Visor	✓				
Next Generation Color LCD Monitor (IP66)	✓				
– Fuel Level and Coolant Temperature Gauges	✓				
– Maintenance and Machine Monitoring	✓				
– Performance and Machine Adjustments	✓				
– Numeric Security Code	✓				
– Multiple Languages	✓				
– Hour Meter with Wake Up Switch	✓				

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Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
BOOM, STICK AND LINKAGES			OTHER		
One Piece Boom (3700 mm/146 in)	✓		Locks on External Enclosure Doors	✓	
Standard Stick (1665 mm/65.5 in)	✓		Lockable Fuel Cap	✓	
Front Shovel Capable – Pin-on/Manual Coupler/Hydraulic Coupler for Cat Tools	✓		Rear Reflectors	✓	
Bucket (0.33 m ³ /0.43 yd ³)	✓		Additional Counterweight		✓
Hammer		✓	Water Jacket Heater		✓
1st Auxiliary Hydraulic Lines		✓			
ELECTRICAL					
12 Volt Electrical System	✓				
90 Ampere Alternator	✓				
650 CCA Maintenance Free Battery	✓				
Battery Disconnect	✓				
Circuit Breaker	✓				
Ignition Key Stop Switch	✓				
Signaling/Warning Horn	✓				
Product Link Elite (regulations apply)	✓				

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 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)*
 - ✓ 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.

**Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.*

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.0 kg of refrigerant which has a CO₂ equivalent of 1.430 metric tonnes.

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

Operator Sound Pressure* 72 dB(A) (ISO 6396:2008)

Average Exterior Sound Pressure** 99 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
 - Remote Flash and Remote Troubleshoot (if equipped)

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	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	100.00%

- 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 (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 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%

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

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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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