



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 Cat Stick Steer. 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 blade float allows for easy grading.

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. A back-up camera, 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.

Specifications

Engine

Engine Model	Cat C2.4 Turbo		
Rated Net Power @ 2,400 rpm			
U.S. EPA Tier 4 Final/EU Stage V			
ISO 9249/EEC 80/1269	40.9 kW	54.8 hp	
Gross Power			
SAE J1995	43.2 kW	57.9 hp	
Bore	87 mm	3.4 in	
Stroke	102.4 mm	4 in	
Displacement	2.43 L	148 in ³	

Weights

Minimum Operating Weight with Cab*	7505 kg	16,549 lb
Maximum Operating Weight with Cab**	8120 kg	17,905 lb

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

**Maximum Weight is based on steel tracks with rubber pads, counterweight, operator, full fuel tank, long stick, blade and no bucket.

Weight Increase from Minimum Configuration

Counterweight	250 kg	552 lb
Long Stick	82 kg	181 lb
Steel Tracks with Pads	285 kg	628 lb



307.5 Mini Hydraulic Excavator

Travel System

Travel Speed – High	5.0 km/h	3.1 mph
Travel Speed – Low	3.1 km/h	1.9 mph
Maximum Traction Force – High Speed	26.1 kN	5,856 lb
Maximum Traction Force – Low Speed	62.4 kN	14,035 lb
Ground Pressure – Minimum Weight	34.8 kPa	5.1 psi
Ground Pressure – Maximum Weight	37.7 kPa	5.5 psi
Gradeability (maximum)	30 degrees	

Service Refill Capacities

Cooling System	10 L	2.6 gal
Engine Oil	9.5 L	2.5 gal
Fuel Tank	145 L	38 gal
Hydraulic Tank	53 L	14 gal
Hydraulic System	110 L	29 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	167 L/min	44 gal/min
Operating Pressure – Equipment	285 bar	4,134 psi
Operating Pressure – Travel	285 bar	4,134 psi
Operating Pressure – Swing	250 bar	3,626 psi
Maximum Auxiliary Circuit – Primary		
Flow at Pump*	131 L/min	35 gal/min
Pressure at Pump*	285 bar	4,134 psi
Maximum Auxiliary Circuit – Secondary		
Flow at Pump*	33 L/min	9 gal/min
Pressure at Pump*	285 bar	4,134 psi
Digging Force – Stick (standard)	37.8 kN	8,504 lb
Digging Force – Stick (long)	33.7 kN	7,579 lb
Digging Force – Bucket	54.6 kN	12,272 lb

*Flow and pressure are not combinable. Under load, as flow rises pressure goes down.

Swing System

Machine Swing Speed	10 rpm
---------------------	--------

Blade

Width	2280 mm	90 in
Height	431 mm	17 in

Certification – Cab

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Tip Over Protective Structure (TOPS)	ISO 12117:1997
Top Guard	ISO 10262:1998 (Level I)

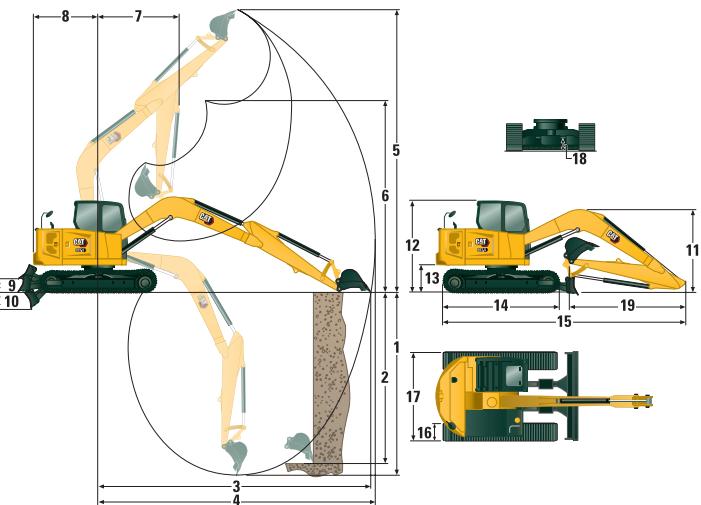
Sound

Operator Sound Pressure (ISO 6396:2008)	72 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	98 dB(A)

• European Union Directive "2000/14/EC"

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains .90 kg of refrigerant which has a CO₂ equivalent of 1.287 metric tonnes.



Dimensions

	Standard Stick	Long Stick
1 Dig Depth	4100 mm (161.4 in)	4642 mm (182.8 in)
2 Vertical Wall	3597 mm (141.6 in)	4113 mm (161.9 in)
3 Maximum Reach at Ground Level	6151 mm (242.1 in)	6670 mm (262.6 in)
4 Maximum Reach	6297 mm (247.9 in)	6805 mm (267.9 in)
5 Maximum Dig Height	7348 mm (289.3 in)	7765 mm (305.7 in)
6 Maximum Dump Clearance	5300 mm (208.6 in)	5717 mm (225.1 in)
7 Boom in Reach	1681 mm (66.2 in)	2250 mm (88.6 in)
8 Tail Swing		
with Counterweight	1930 mm (76.0 in)	1930 mm (76.0 in)
without Counterweight	1800 mm (70.9 in)	1800 mm (70.9 in)
9 Maximum Blade Height	370 mm (14.6 in)	370 mm (14.6 in)
10 Maximum Blade Depth	407 mm (16.0 in)	407 mm (16.0 in)
11 Height		
Boom Transport – No Tools*	2570 mm (101.2 in)	2550 mm (100.4 in)
Boom Working – With Tools**	2730 mm (107.5 in)	3150 mm (124.0 in)
12 Cab Height	2541 mm (100.0 in)	2541 mm (100.0 in)
13 Swing Bearing Height	756 mm (29.7 in)	756 mm (29.7 in)
14 Overall Undercarriage Length	2760 mm (108.7 in)	2760 mm (108.7 in)
15 Overall Shipping Length		
with Counterweight	6230 mm (245.3 in)	6250 mm (246.1 in)
without Counterweight	6100 mm (240.2 in)	6120 mm (240.9 in)
16 Track Belt/Shoe Width	450 mm (17.7 in)	450 mm (17.7 in)
17 Overall Track Width	2200 mm (86.6 in)	2200 mm (86.6 in)
Width over Upper House	2250 mm (88.6 in)	2250 mm (88.6 in)
18 Ground Clearance	370 mm (14.6 in)	370 mm (14.6 in)
19 Stick Length	1665 mm (65.6 in)	2208 mm (86.9 in)

*Boom Height when stick is pinned in transport position with no attachments.

**Boom Height when stick is pinned in working position with attachments.

Standard Stick offers only one pin position.

307.5 Mini Hydraulic Excavator

Lift Capacities – Minimum Configuration

Lift Point Height			3 m (9.8 ft)			4.5 m (14.8 ft)			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m (14.8 ft)	Standard Stick	kg (lb)	*2350 *(5,182)	*2350 *(5,182)	*2350 *(5,182)				*1235 *(2,723)	*1235 *(2,723)	*1235 *(2,723)	4.22 (13.8)
	Long Stick	kg (lb)	*1955 *(4,311)	*1955 *(4,311)	*1955 *(4,311)	*1740 *(3,837)	*1740 *(3,837)	*1740 *(3,837)	*1180 *(2,602)	*1180 *(2,602)	*1180 *(2,602)	4.84 (15.9)
3 m (9.8 ft)	Standard Stick	kg (lb)	*4311 *(6,229)	*2825 *(6,229)	*2825 *(6,229)	*2180 *(4,807)	1650 (3,638)	1510 (3,330)	*1155 *(2,547)	*1155 *(2,547)	*1155 *(2,547)	5.00 (16.4)
	Long Stick	kg (lb)	*2430 *(5,358)	*2430 *(5,358)	*2430 *(5,358)	*1965 *(4,333)	1665 (3,671)	1520 (3,352)	*1120 *(2,470)	*1120 *(2,470)	*1120 *(2,470)	5.54 (18.2)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*3525 *(7,773)	2915 (6,428)	2585 (5,700)	*2355 *(5,193)	1565 (3,451)	1425 (3,142)	*1205 *(2,657)	*1205 *(2,657)	*1205 *(2,657)	5.27 (17.3)
	Long Stick	kg (lb)	*3225 *(7,111)	*3225 *(7,111)	2625 (5,788)	*2205 *(4,862)	1555 (3,429)	1410 (3,109)	*1165 *(2,569)	*1165 *(2,569)	940 (2,073)	5.78 (19.0)
0 m (0 ft)	Standard Stick	kg (lb)	*3645 *(8,037)	2735 (6,031)	2415 (5,325)	*2375 *(5,237)	1490 (3,285)	1350 (2,977)	*1395 *(3,076)	*1395 *(3,076)	1135 (2,503)	5.10 (16.7)
	Long Stick	kg (lb)	*3600 *(7,938)	2695 (5,942)	2375 (5,237)	*2335 *(5,149)	1455 (3,208)	1315 (2,900)	*1315 *(2,900)	1040 (2,293)	945 (2,084)	5.62 (18.4)

Minimum Weight includes steel tracks, no counterweight, operator, full fuel tank, blade and no bucket.

Lift Capacities – Maximum Configuration

Lift Point Height			3 m (9.8 ft)			4.5 m (14.8 ft)			Lift Point Radius (Maximum)			
			Over Front		Over Side	Over Front		Over Side	Over Front		Over Side	
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m (14.8 ft)	Standard Stick	kg (lb)	*2350 *(5,182)	*2350 *(5,182)	*2350 *(5,182)				*1235 *(2,723)	*1235 *(2,723)	*1235 *(2,723)	4.22 (13.8)
	Long Stick	kg (lb)	*1955 *(4,311)	*1955 *(4,311)	*1955 *(4,311)	*1740 *(3,837)	*1740 *(3,837)	*1740 *(3,837)	*1180 *(2,602)	*1180 *(2,602)	*1180 *(2,602)	4.84 (15.9)
3 m (9.8 ft)	Standard Stick	kg (lb)	*2825 *(6,229)	*2825 *(6,229)	*2825 *(6,229)	*2180 *(4,807)	1875 (4,134)	1710 (3,771)	*1155 *(2,547)	*1155 *(2,547)	*1155 *(2,547)	5.00 (16.4)
	Long Stick	kg (lb)	*2430 *(5,358)	*2430 *(5,358)	*2430 *(5,358)	*1965 *(4,333)	*1965 *(4,333)	*1965 *(4,333)	*1120 *(2,470)	*1120 *(2,470)	*1120 *(2,470)	5.54 (18.2)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*3525 *(7,773)	*3525 *(7,773)	2935 (6,472)	*2355 *(5,193)	1790 (3,947)	1625 (3,583)	*1205 *(2,657)	*1205 *(2,657)	*1205 *(2,657)	5.27 (17.3)
	Long Stick	kg (lb)	*3225 *(7,111)	*3225 *(7,111)	*3225 *(7,111)	*2205 *(4,862)	1780 (3,925)	1610 (3,550)	*1165 *(2,569)	*1165 *(2,569)	*1165 *(2,569)	5.78 (19.0)
0 m (0 ft)	Standard Stick	kg (lb)	*3645 *(8,037)	3135 (6,913)	2760 (6,086)	*2375 *(5,237)	1715 (3,782)	1555 (3,429)	*1395 *(3,076)	*1395 *(3,076)	1100 (2,426)	5.10 (16.7)
	Long Stick	kg (lb)	*3600 *(7,938)	3100 (6,836)	2725 (6,009)	*2335 *(5,149)	1680 (3,704)	1515 (3,342)	*1315 *(2,900)	*1315 *(2,900)	1100 (2,426)	5.62 (18.4)

Maximum Weight includes steel tracks with rubber pads, counterweight, operator, full fuel tank, blade and no bucket.

*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart.

307.5 Mini Hydraulic Excavator

Standard and Optional Equipment

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

	Standard	Optional	Standard	Optional
ENGINE				
Cat C2.4 Diesel Engine (U.S. EPA Tier 4 Final/EU Stage V) – Electronic Engine, Turbo, Diesel Particulate Filter (DPF)	✓			✓
Automatic Engine Idle	✓			
Automatic Engine Shutdown	✓			
Automatic Swing Brake	✓			
Automatic Two Speed Travel	✓			
Fuel Water Separator with Indicator	✓			
Radial Seal – Double Element Air Filter	✓			
Extended Life Coolant, -37° C (-37° F)	✓			
HYDRAULICS				
Smart Tech Electronic Pump	✓			
Variable Displacement Piston Pump	✓			
Load Sensing/Flow Sharing Hydraulics	✓			
Power On Demand	✓			
Hydraulic Temperature Monitoring	✓			
Certified Accumulator	✓			
HYDO Advanced Hydraulic Oil	✓			
OPERATOR ENVIRONMENT				
Top Guard ISO 10262 1998 Level I	✓			
ROPS ISO 12117-2:2008	✓			
Stick Steer Mode	✓			
Travel Cruise Control	✓			
Control Pattern Changer	✓			
Adjustable Wrist Rests	✓			
Molded Footrests	✓			
Removable, Washable Floor Mat	✓			
Travel Pedals and Hand Levers	✓			
Cat Key with Passcode Option	✓			
HVAC with Automatic Temperature Control	✓			
Hydraulic Lockout Controls	✓			
Integrated Lower Front Window	✓			
Assisted Front Window Overhead Storage	✓			
Rear Window Emergency Exit	✓			
Fabric, High Back, Suspension Seat	✓			
Air Suspension Heated Seat	✓			
Retractable Seat Belt (75 mm/3 in)	✓			
Coat Hook	✓			
Cup Holder	✓			
LED Interior Light	✓			
Literature Holder	✓			
Mounting Bosses for Top and Front Guards	✓			
12V Power Socket	✓			
Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only)	✓			
Skylight	✓			
Signaling/Warning Horn	✓			
Cab and (left side) Boom Work Lights	✓			
Utility Space for Mobile Phone	✓			
Rain Visor	✓			
Next Generation Color LCD Monitor (IP66)	✓			
– Jog Dial Interface (cab machines only)	✓			
– Fuel Level and Coolant Temperature Gauges	✓			
– Maintenance and Machine Monitoring	✓			
– Performance and Machine Adjustments	✓			
– Numeric Security Code	✓			
– Multiple Languages	✓			
– Camera Ready (IP68 & IP69K)	✓			
– Hour Meter with Wake Up Switch	✓			
OPERATOR ENVIRONMENT (CONTINUED)				
Next Generation Advanced Monitor (below are all included with Next Generation Advanced Monitor option)				
– Jog Dial Control Interface				
– Touch Screen				
– Site Reference System				
– High Definition Camera Capable (IP68 & IP69K)				
– Numeric Security Code				
UNDERCARRIAGE				
Greased and Lubricated Track			✓	
Tie Down Eyes on Track Frame			✓	
Dozer Straight Blade			✓	
Dozer Float			✓	
Bolt-on, Reversible Wear Edge			✓	
Steel Tracks (450 mm/17.7 in wide)			✓	
Wide Steel Tracks (600 mm/23.6 in)			✓	
Steel Track with Rubber Pads			✓	
Track Guides			✓	
BOOM, STICK AND LINKAGES				
One Piece Boom (3700 mm/145.7 in)			✓	
Standard Stick (1665 mm/65.6 in)			✓	
Long Stick (2200 mm/86.6 in)			✓	
Front Shovel Capable – Pin-on/Manual Coupler/Hydraulic Coupler for Cat Tools			✓	
Thumb Ready (not available in all regions)			✓	
Attachments including Buckets, Augers and Hammers			✓	
2nd Auxiliary Hydraulic Lines			✓	
Boom Lowering Check Valve			✓	
Stick Lowering Check Valve			✓	
Bucket Linkage with Lift Eye			✓	
Certified Lifting Eye (optional in some regions)			✓	
ELECTRICAL				
12 Volt Electrical System			✓	
90 Ampere Alternator			✓	
900 CCA Maintenance Free Battery			✓	
Battery Disconnect			✓	
Ignition Key Stop Switch			✓	
Product Link™ Basic (regulations apply)			✓	
Product Link Elite (regulations apply)			✓	
Travel Alarm			✓	
Rearview Camera			✓	
Rotating Beacon			✓	
GUARDING				
Heavy Duty Front Guard ISO 10262 1998 Level II			✓	
Mesh Front Guard ISO 10262 1998 Level I			✓	
Overhead Cab Guard ISO 10262 1998 Level II			✓	
Polycarbonate Front Window EN356 P5A (Cab Only)			✓	
Track Guards			✓	
OTHER				
Locks on External Enclosure Doors			✓	
Lockable Fuel Cap			✓	
Beacon Socket			✓	
Rear Reflectors			✓	
Water Jacket Heater			✓	
Refueling Pump			✓	

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, "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.

AEHQ8158-02 (11-2020)

Replaces AEHQ8158-01

Build Number: 07A

(North America and Europe)

