



# Cat<sup>®</sup> 303.5 CR

## MINI EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 303.5 CR Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

#### ALL DAY COMFORT

- Choose either a canopy or a sealed and pressurized cab which can be equipped with air conditioning, adjustable wrist rests, and a suspension seat option to help keep you working comfortably all day long.

#### EASY TO OPERATE

- Controls are easy to use and the intuitive Next Generation LCD monitor provides easy to read machine information. An advanced touchscreen monitor can also be equipped.

#### 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 to move the machine and to operate the blade. The benefit of less effort and improved control is in your hands!

#### BIG PERFORMANCE IN A COMPACT DESIGN

- Strong lift and dig performance helps you get the job done faster. The compact radius design lets you access and work in the tightest areas. Dozer float 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 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. The unique tilt up cab or canopy lets you reach additional service areas when needed.

#### 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	C1.7 NA	
<b>Net Power @ 2,200 rpm</b>		
ISO 9249, 80/1269/EEC	17.6 kW	23.6 hp
<b>Gross Power @ 2,200 rpm</b>		
SAE J1995:2014	18.4 kW	24.7 hp
Bore	84.0 mm	3.3 in
Stroke	100.0 mm	3.9 in
Displacement	1.7 L	104.0 in <sup>3</sup>

- Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Net power advertised is the power available at the flywheel when the engine is at rated speed and rated power when the engine is installed with the factory configured fan, air intake system, exhaust system, and alternator with a minimum alternator load.

### Weights

Minimum Operating Weight with Canopy*	3585 kg	7,905 lb
Maximum Operating Weight with Canopy**	3985 kg	8,787 lb
Minimum Operating Weight with Cab*	3725 kg	8,214 lb
Maximum Operating Weight with Cab**	4125 kg	9,096 lb

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

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



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## Weight Increase from Minimum Configuration

Cab	140 kg	309 lb
Counterweight (extra)	250 kg	551 lb
Long Stick	20 kg	44 lb
Steel Tracks	130 kg	287 lb
Angle Blade	160 kg	353 lb

## Travel System

Travel Speed – High	4.5 km/h	2.8 mph
Travel Speed – Low	2.6 km/h	1.6 mph
Maximum Traction Force – High Speed	16.9 kN	3,799 lbf
Maximum Traction Force – Low Speed	31.0 kN	6,969 lbf
Ground Pressure – Minimum Weight	30.5 kPa	4.3 psi
Ground Pressure – Maximum Weight	35.1 kPa	5.2 psi
Gradeability (maximum)	30 degrees	

## Service Refill Capacities

Cooling System	7.0 L	1.8 gal
Engine Oil	6.0 L	1.6 gal
Fuel Tank	45.0 L	11.9 gal
Hydraulic Tank	20.0 L	5.3 gal
Hydraulic System	45.0 L	11.9 gal

## Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	100 L/min	26 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	181 bar	2,625 psi
Auxiliary Circuit – Primary		
Flow*	70 L/min	18 gal/min
Pressure*	245 bar	3,553 psi
Auxiliary Circuit – Secondary		
Flow*	25 L/min	7.0 gal/min
Pressure*	245 bar	3,553 psi
Digging Force – Stick (standard)	18.9 kN	4,249 lbf
Digging Force – Stick (long)	16.9 kN	3,799 lbf
Digging Force – Bucket	33.0 kN	7,419 lbf

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

## Swing System

Machine Swing Speed	9.0 rpm
Boom Swing – Left	75 Degrees
Boom Swing – Right	50 Degrees

## Blade

Width	1780 mm	70.1 in
Height	350 mm	13.8 in

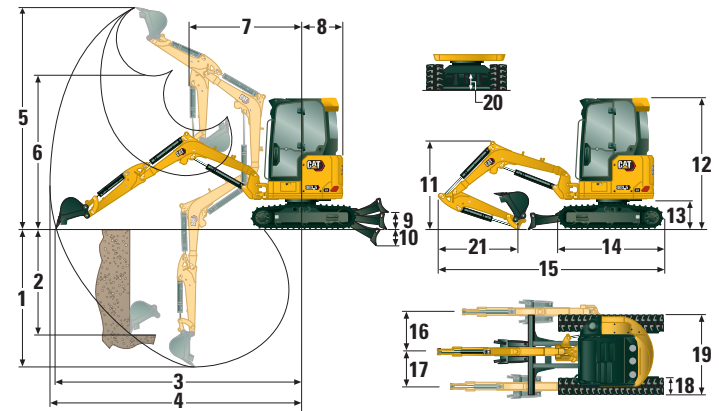
## Certification – Cab and Canopy

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)	78 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	94 dB(A)

• European Union Directive “2000/14/EC”



## Dimensions

	Standard Stick	Long Stick
1 Dig Depth	2810 mm (110.6 in)	3110 mm (122.4 in)
2 Vertical Wall	2250 mm (88.6 in)	2390 mm (94.1 in)
3 Maximum Reach at Ground Level	5130 mm (202.0 in)	5380 mm (211.8 in)
4 Maximum Reach	5270 mm (207.5 in)	5510 mm (216.9 in)
5 Maximum Dig Height	4920 mm (193.7 in)	5020 mm (197.6 in)
6 Maximum Dump Clearance	3490 mm (137.4 in)	3600 mm (141.7 in)
7 Boom in Reach	1760 mm (69.3 in)	1860 mm (73.2 in)
8 Tail Swing		
without Counterweight	890 mm (35.0 in)	890 mm (35.0 in)
with Counterweight (extra)	1005 mm (39.6 in)	1005 mm (39.6 in)
9 Maximum Blade Height	385 mm (15.2 in)	385 mm (15.2 in)
10 Maximum Blade Depth	535 mm (21.1 in)	535 mm (21.1 in)
11 Boom Height in Shipping Position	1520 mm (59.8 in)	1750 mm (68.9 in)
12 Overall Shipping Height	2480 mm (97.6 in)	2480 mm (97.6 in)
13 Swing Bearing Height	565 mm (22.2 in)	565 mm (22.2 in)
14 Overall Undercarriage Length	2220 mm (87.4 in)	2220 mm (87.4 in)
15 Overall Shipping Length†	4800 mm (189.0 in)	4850 mm (190.9 in)
16 Boom Swing Right	870 mm (34.3 in)	870 mm (34.3 in)
17 Boom Swing Left	640 mm (25.2 in)	640 mm (25.2 in)
18 Track Belt/Shoe Width	300 mm (11.8 in)	300 mm (11.8 in)
19 Track Width	1780 mm (70.1 in)	1780 mm (70.1 in)
20 Ground Clearance	310 mm (12.2 in)	310 mm (12.2 in)
21 Stick Length	1260 mm (49.6 in)	1560 mm (61.4 in)

†Overall Shipping Length depends on blade position during shipment.

## Cab

Lift Capacities – Minimum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)					
			Over Front			Over Side	Over Front			Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	*917 (*2,022)	904 (1,993)	*835 (*1,841)	583 (1,285)	575 (1,268)	3.95 (13.0)		
	Long Stick	kg (lb)							*758 (*1,671)	514 (1,133)	507 (1,118)	4.26 (14.0)		
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	888 (1,958)	867 (1,911)	*809 (*1,784)	483 (1,065)	478 (1,054)	4.41 (14.5)		
	Long Stick	kg (lb)				*1033 (*2,377)	892 (1,967)	870 (1,918)	*750 (*1,653)	435 (959)	430 (948)	4.67 (15.3)		
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	833 (1,836)	813 (1,792)	*860 (*1,896)	454 (1,001)	449 (990)	4.54 (14.9)		
	Long Stick	kg (lb)				*1462 (*3,223)	831 (1,832)	811 (1,788)	*805 (*1,775)	410 (904)	406 (895)	4.79 (15.7)		
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	805 (1,775)	786 (1,733)	*947 (*2,088)	472 (1,041)	466 (1,027)	4.39 (14.4)		
	Long Stick	kg (lb)	*1345 (*2,965)	*1345 (*2,965)	*1345 (*2,965)	*1696 (*3,739)	793 (1,748)	774 (1,706)	*907 (*2,000)	424 (935)	420 (926)	4.63 (15.2)		

Minimum Weight includes cab, rubber tracks, no extra counterweight, operator, full fuel tank and blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)					
			Over Front			Over Side	Over Front			Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	*917 (*2,022)	*917 (*2,022)	*835 (*1,841)	720 (1,587)	663 (1,462)	3.95 (13.0)		
	Long Stick	kg (lb)							*758 (*1,671)	638 (1,407)	588 (1,296)	4.26 (14.0)		
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	1086 (2,394)	988 (2,178)	*809 (*1,784)	602 (1,327)	556 (1,226)	4.41 (14.5)		
	Long Stick	kg (lb)				*1033 (*2,377)	*1033 (*2,377)	992 (2,187)	*750 (*1,653)	546 (1,204)	504 (1,111)	4.67 (15.3)		
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	1031 (2,273)	936 (2,064)	*860 (*1,896)	568 (1,252)	524 (1,155)	4.54 (14.9)		
	Long Stick	kg (lb)				*1462 (*3,223)	1029 (2,269)	933 (2,057)	*805 (*1,775)	518 (1,142)	477 (1,052)	4.79 (15.7)		
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	1003 (2,211)	909 (2,004)	*947 (*2,088)	591 (1,303)	545 (1,202)	4.39 (14.4)		
	Long Stick	kg (lb)	*1345 (*2,965)	*1345 (*2,965)	*1345 (*2,965)	*1696 (*3,739)	991 (2,185)	897 (1,978)	*907 (*2,000)	536 (1,182)	494 (1,089)	4.63 (15.2)		

Maximum Weight includes cab, steel tracks, extra counterweight, operator, full fuel tank and blade.

## Canopy

Lift Capacities – Minimum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)					
			Over Front			Over Side	Over Front			Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	884 (1,949)	866 (1,909)	*835 (*1,841)	555 (1,224)	549 (1,210)	3.95 (13.0)		
	Long Stick	kg (lb)							*764 (*1,684)	490 (1,080)	485 (1,069)	4.26 (14.0)		
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	846 (1,865)	829 (1,828)	*809 (*1,784)	458 (1,010)	455 (1,003)	4.41 (14.5)		
	Long Stick	kg (lb)				*1034 (*2,280)	851 (1,876)	834 (1,839)	*755 (*1,664)	413 (911)	411 (906)	4.67 (15.3)		
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	791 (1,744)	776 (1,711)	*860 (*1,896)	429 (946)	427 (941)	4.54 (14.9)		
	Long Stick	kg (lb)				*1461 (*3,221)	788 (1,737)	772 (1,702)	*809 (*1,784)	389 (858)	387 (853)	4.79 (15.7)		
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	763 (1,682)	749 (1,651)	*947 (*2,088)	446 (983)	443 (977)	4.39 (14.4)		
	Long Stick	kg (lb)	*1351 (*2,978)	*1351 (*2,978)	*1351 (*2,978)	*1694 (*3,735)	749 (1,651)	735 (1,620)	*908 (*2,002)	402 (886)	399 (880)	4.63 (15.2)		

Minimum Weight includes canopy, rubber tracks, no extra counterweight, operator, full fuel tank and blade.

Lift Capacities – Maximum Configuration			Lift Point Radius – 2 m (6.6 ft)			Lift Point Radius – 3 m (9.8 ft)			Lift Point Radius (Maximum)					
			Over Front			Over Side	Over Front			Over Side	Over Front		Over Side	m (ft)
			Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up	kg (lb)		Blade Down	Blade Up		
3 m (9.8 ft)	Standard Stick	kg (lb)				*917 (*2,022)	*917 (*2,022)	*917 (*2,022)	*835 (*1,841)	691 (1,523)	639 (1,409)	3.95 (13.0)		
	Long Stick	kg (lb)							*758 (*1,671)	612 (1,349)	566 (1,248)	4.26 (14.0)		
2 m (6.6 ft)	Standard Stick	kg (lb)				*1176 (*2,593)	1044 (2,302)	953 (2,101)	*809 (*1,784)	577 (1,272)	534 (1,177)	4.41 (14.5)		
	Long Stick	kg (lb)				*1033 (*2,277)	*1033 (*2,277)	956 (2,108)	*750 (*1,653)	523 (1,153)	483 (1,065)	4.67 (15.3)		
1 m (3.3 ft)	Standard Stick	kg (lb)				*1547 (*3,411)	989 (2,180)	901 (1,986)	*860 (*1,896)	544 (1,199)	504 (1,111)	4.54 (14.9)		
	Long Stick	kg (lb)				*1462 (*3,223)	987 (2,176)	898 (1,980)	*805 (*1,775)	495 (1,091)	458 (1,010)	4.79 (15.7)		
0 m (0 ft)	Standard Stick	kg (lb)				*1676 (*3,695)	961 (2,199)	874 (1,927)	*947 (*2,088)	566 (1,248)	523 (1,153)	4.39 (14.4)		
	Long Stick	kg (lb)	*1345 (*2,965)	*1345 (*2,965)	*1345 (*2,965)	*1696 (*3,739)	949 (2,092)	862 (1,900)	*907 (*2,000)	513 (1,131)	473 (1,043)	4.63 (15.2)		

Maximum Weight includes canopy, steel tracks, extra counterweight, operator, full fuel tank and blade.

\*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. Lifting capacities are for standard stick.

# 303.5 CR Mini Excavator

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>ENGINE</b>			<b>OPERATOR ENVIRONMENT (continued)</b>		
Cat® C1.7 NA Engine (U.S. EPA Tier 4 Final/EU Stage V)	✓		Next Generation Color LCD Monitor (IP66)	✓	
Automatic Engine Idle	✓		– Fuel Level and Coolant Temperature Gauges	✓	
Automatic Engine Shutdown	✓		– Maintenance and Machine Monitoring	✓	
Automatic Two Speed Travel	✓		– Performance and Machine Adjustments	✓	
Fuel Water Separator	✓		– Numeric Security Code	✓	
Power on Demand (not available in all regions)	✓		– Multiple Languages	✓	
Variable Displacement Piston Pump	✓		– Hour Meter with Wake Up Switch	✓	
Load Sensing/Flow Sharing Hydraulics	✓		– Jog Dial (cab only)	✓	
<b>HYDRAULICS</b>			Next Generation Advanced Monitor		✓
Smart Tech Electronic Pump	✓		– Touch Screen		✓
Accumulator	✓		– Site Reference System		✓
Automatic Swing Brake	✓		– High Definition Camera Capable (IP68 and IP69K)		✓
Auxiliary Hydraulic Lines	✓		– Numeric Security Code		✓
One and Two Way Auxiliary Flow	✓		<b>UNDERCARRIAGE</b>		
Continuous Auxiliary Flow	✓		Rubber Belt (300 mm/11.8 in wide)	✓	
Auxiliary Line Quick Disconnects	✓		Steel Track (300 mm/11.8 in wide)		✓
<b>OPERATOR ENVIRONMENT</b>			Dozer Blade	✓	
Tilt-up Canopy or Tilt-Up Cab	✓		Dozer Blade Float	✓	
Cab with Air Conditioning		✓	Tie Downs on Track Frame	✓	
Cab with Heater		✓	<b>BOOM, STICK AND LINKAGES</b>		
Top Guard ISO 10262:1998 Level I	✓		One Piece Boom (2400 mm/94.5 in)	✓	
ROPS – ISO 12117-2:2008	✓		Standard Stick (1260 mm/49.6 in)	✓	
TOPS – ISO 12117:1997	✓		Long Stick (1560 mm/61.4 in)		✓
Stick Steer Mode	✓		Front Shovel Capable	✓	
Travel Cruise Control	✓		Pin-On	✓	
Control Pattern Changer (optional in some regions)	✓		Dual Lock Manual Coupler		✓
Adjustable Wrist Rests	✓		Hydraulic Coupler		✓
Washable Floor Mat	✓		Thumb Ready (not available in all regions)	✓	
Travel Pedals and Hand Levers	✓		Certified Lifting Eye (optional in some regions)	✓	
No Travel Pedals and Hand Levers (optional in some regions)		✓	Attachments including Couplers, Thumbs, Buckets, Augers and Hammers		✓
Machine Security	✓		2nd Auxiliary Hydraulic Lines		✓
Standard Key with Pass Code	✓		Bucket Divert Lines		✓
Push to Start with Key Fob/Pass Code		✓	Boom Lowering Check Valve		✓
Fabric Suspension Seat (Cab only)	✓		Stick Lowering Check Valve		✓
Vinyl Suspension Seat (Canopy only)	✓		Hydraulic Quick Coupler Lines (not available in all regions)		✓
Vinyl Non-Suspension Seat (Canopy only) (not available in all regions)		✓	<b>ELECTRICAL</b>		
Hydraulic Lockout – All Controls	✓		12 Volt Battery	✓	
Retractable High Visibility Seat Belt (75 mm/3 in)	✓		Software (machine and monitor)	✓	
Coat Hook	✓		Maintenance Free Battery	✓	
Cup Holder	✓		Battery Disconnect	✓	
Storage Pocket	✓		Signaling/Warning Horn	✓	
Skylight	✓		12 Volt Power Socket	✓	
Mounting Bosses for Front	✓		Product Link PL243 (regulations apply)		✓
Signaling/Warning Horn	✓		Product Link PLE643 (regulations apply)		✓
Interior Light (Cab only)	✓		Travel Alarm (standard in some regions)		✓
Boom Light, Halogen (not available in all regions)	✓		<b>GUARDING</b>		
LED Front Lights		✓	Polycarbonate Half Height Front Guard (Canopy only)		✓
LED Front and Rear Lights		✓	Polycarbonate Front Guard (ISO 10262:1998 Level I and EN356 P5A)		✓
LED Boom Light		✓	Heavy Duty Front Guard ISO 10262:1998 Level II		✓
Utility Space for Mobile Phone	✓		<b>OTHER</b>		
Mirrors Left and Right		✓	Bio Oil Capable		✓
Camera		✓	Eco Drain		✓
Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only) (Cab only)		✓	Extra Counterweight (250 kg/551 lb)		✓

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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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