

Cat[®] 303 CR

MINI EXCAVATOR



FEATURES:

The Cat[®] 303 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	C1.1 Turbo	
Net Power @ 2,400 rpm		
ISO 9249, 80/1269/EEC	17.6 kW	23.6 hp
Gross Power @ 2,400 rpm		
SAE J1995:2014	18.4 kW	24.7 hp
Bore	77.0 mm	3.0 in
Stroke	81.0 mm	3.2 in
Displacement	1.1 L	69.0 in ³

- 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*	3025 kg	6,670 lb
Maximum Operating Weight with Canopy**	3425 kg	7,552 lb
Minimum Operating Weight with Cab*	3140 kg	6,924 lb
Maximum Operating Weight with Cab**	3545 kg	7,817 lb
EU: CE Plate Weight with Canopy***	3080 kg	6,791 lb
EU: CE Plate Weight with Cab***	3180 kg	7,012 lb

*Minimum Weight is based on fixed 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.

***CE Plate Weight is based on the most common EU configuration. Includes 75 kg (165 lb) operator and full fuel tank and excludes bucket.



303 CR Mini Excavator

Weight Increase from Minimum Configuration

Cab	115 kg	254 lb
Counterweight (light)	100 kg	221 lb
Counterweight (extra)	250 kg	551 lb
Long Stick	25 kg	55 lb
Steel Tracks	125 kg	276 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	14.7 kN	3,305 lbf
Maximum Traction Force – Low Speed	31.4 kN	7,059 lbf
Ground Pressure – Minimum Weight	27.6 kPa	4.0 psi
Ground Pressure – Maximum Weight	32.3 kPa	4.7 psi
Gradeability (maximum)	30 degrees	

Service Refill Capacities

Cooling System	4.0 L	1.1 gal
Engine Oil	4.0 L	1.1 gal
Fuel Tank	45.0 L	11.9 gal
Hydraulic Tank	18.0 L	4.8 gal
Hydraulic System	35.0 L	9.2 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	176 bar	2,553 psi
Auxiliary Circuit – Primary		
Flow*	65 L/min	17 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)	16.6 kN	3,732 lbf
Digging Force – Stick (long)	14.8 kN	3,327 lbf
Digging Force – Bucket	28.4 kN	6,385 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	1550 mm	61.0 in
Height	350 mm	13.8 in

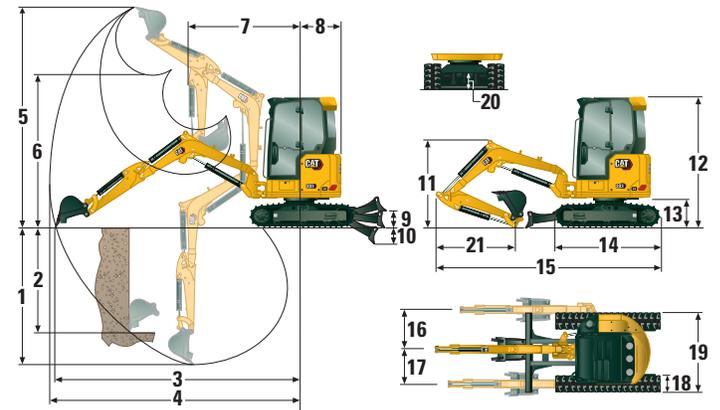
Certification – Cab and Canopy

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	2650 mm (104.3 in)	2950 mm (116.1 in)
2 Vertical Wall	1820 mm (71.7 in)	2070 mm (81.5 in)
3 Maximum Reach at Ground Level	4830 mm (190.2 in)	5110 mm (201.2 in)
4 Maximum Reach	4980 mm (196.1 in)	5240 mm (206.3 in)
5 Maximum Dig Height	4510 mm (177.6 in)	4650 mm (183.1 in)
6 Maximum Dump Clearance	3170 mm (124.8 in)	3310 mm (130.3 in)
7 Boom in Reach	1750 mm (68.9 in)	1910 mm (75.2 in)
8 Tail Swing		
without Counterweight	775 mm (30.5 in)	775 mm (30.5 in)
with Counterweight (light)	845 mm (33.3 in)	845 mm (33.3 in)
with Counterweight (extra)	890 mm (35.0 in)	890 mm (35.0 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	1600 mm (63.0 in)	1920 mm (75.6 in)
12 Overall Shipping Height	2480 mm (97.6 in)	2480 mm (97.6 in)
13 Swing Bearing Height	570 mm (22.4 in)	570 mm (22.4 in)
14 Overall Undercarriage Length	2070 mm (81.5 in)	2070 mm (81.5 in)
15 Overall Shipping Length†	4510 mm (177.6 in)	4560 mm (179.5 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	1550 mm (61.0 in)	1550 mm (61.0 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	m (ft)	
			Blade Down	Blade Up	Blade Down		Blade Up					
3 m (9.8 ft)	Standard Stick	kg (lb)				*792 (*1,746)	630 (1,389)	548 (1,208)	*848 (*1,870)	441 (972)	385 (849)	3.67 (12.0)
	Long Stick	kg (lb)							*741 (*1,634)	376 (829)	327 (721)	3.99 (13.1)
2 m (6.6 ft)	Standard Stick	kg (lb)				*998 (*2,200)	601 (1,325)	520 (1,146)	*864 (*1,905)	349 (769)	303 (668)	4.16 (13.6)
	Long Stick	kg (lb)				*839 (*1,850)	604 (1,332)	522 (1,151)	*767 (*1,691)	304 (670)	263 (580)	4.43 (14.5)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1352 (*2,981)	553 (1,219)	475 (1,047)	*903 (*1,991)	321 (708)	278 (613)	4.29 (14.1)
	Long Stick	kg (lb)				*1227 (*2,705)	549 (1,210)	470 (1,036)	*808 (*1,781)	281 (619)	242 (534)	4.55 (14.9)
0 m (0 ft)	Standard Stick	kg (lb)	*1280 (*2,822)	1003 (2,211)	823 (1,814)	*1522 (*3,355)	525 (1,157)	448 (988)	*955 (*2,105)	335 (739)	289 (637)	4.11 (13.5)
	Long Stick	kg (lb)	*1277 (*2,815)	974 (2,147)	795 (1,753)	*1480 (*3,263)	511 (1,127)	433 (955)	*862 (*1,900)	290 (639)	249 (546)	4.39 (14.4)

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	m (ft)	
			Blade Down	Blade Up	Blade Down		Blade Up					
3 m (9.8 ft)	Standard Stick	kg (lb)				*792 (*1,746)	*792 (*1,746)	647 (1,426)	*848 (*1,870)	573 (1,263)	464 (1,023)	3.67 (12.0)
	Long Stick	kg (lb)							*741 (*1,634)	495 (1,091)	399 (880)	3.99 (13.1)
2 m (6.6 ft)	Standard Stick	kg (lb)				*998 (*2,200)	773 (1,704)	620 (1,367)	*864 (*1,905)	461 (1,016)	372 (820)	4.16 (13.6)
	Long Stick	kg (lb)				*839 (*1,850)	776 (1,711)	622 (1,371)	*767 (*1,691)	408 (899)	328 (723)	4.43 (14.5)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1352 (*2,981)	725 (1,598)	576 (1,270)	*903 (*1,991)	429 (946)	345 (761)	4.29 (14.1)
	Long Stick	kg (lb)				*1227 (*2,705)	721 (1,590)	571 (1,259)	*808 (*1,781)	381 (840)	304 (670)	4.55 (14.9)
0 m (0 ft)	Standard Stick	kg (lb)	*1280 (*2,822)	*1280 (*2,822)	990 (2,183)	*1522 (*3,355)	697 (1,537)	549 (1,210)	*955 (*2,105)	449 (990)	360 (794)	4.11 (13.5)
	Long Stick	kg (lb)	*1277 (*2,815)	*1277 (*2,815)	962 (2,121)	*1480 (*3,263)	683 (1,506)	535 (1,179)	*862 (*1,900)	395 (871)	314 (692)	4.39 (14.4)

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	m (ft)	
			Blade Down	Blade Up	Blade Down		Blade Up					
3 m (9.8 ft)	Standard Stick	kg (lb)				*792 (*1,746)	603 (1,329)	526 (1,160)	*848 (*1,870)	420 (926)	368 (811)	3.67 (12.0)
	Long Stick	kg (lb)							*741 (*1,634)	357 (787)	312 (688)	3.99 (13.1)
2 m (6.6 ft)	Standard Stick	kg (lb)				*998 (*2,200)	574 (1,265)	498 (1,098)	*864 (*1,905)	331 (730)	289 (637)	4.16 (13.6)
	Long Stick	kg (lb)				*839 (*1,850)	576 (1,270)	500 (1,102)	*767 (*1,691)	288 (635)	250 (551)	4.43 (14.5)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1352 (*2,981)	526 (1,160)	453 (999)	*903 (*1,991)	304 (670)	264 (582)	4.29 (14.1)
	Long Stick	kg (lb)				*1227 (*2,705)	522 (1,151)	448 (988)	*808 (*1,781)	264 (582)	228 (503)	4.55 (14.9)
0 m (0 ft)	Standard Stick	kg (lb)	*1280 (*2,822)	952 (2,099)	784 (1,728)	*1522 (*3,355)	498 (1,098)	426 (939)	*955 (*2,105)	317 (699)	275 (606)	4.11 (13.5)
	Long Stick	kg (lb)	*1277 (*2,815)	923 (2,035)	756 (1,667)	*1480 (*3,263)	483 (1,065)	411 (906)	*862 (*1,900)	273 (602)	235 (518)	4.39 (14.4)

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	m (ft)	
			Blade Down	Blade Up	Blade Down		Blade Up					
3 m (9.8 ft)	Standard Stick	kg (lb)				*792 (*1,746)	774 (1,706)	627 (1,382)	*848 (*1,870)	552 (1,217)	449 (990)	3.67 (12.0)
	Long Stick	kg (lb)							*741 (*1,634)	476 (1,049)	385 (849)	3.99 (13.1)
2 m (6.6 ft)	Standard Stick	kg (lb)				*998 (*2,200)	746 (1,645)	600 (1,323)	*864 (*1,905)	443 (977)	359 (791)	4.16 (13.6)
	Long Stick	kg (lb)				*839 (*1,850)	748 (1,649)	601 (1,325)	*767 (*1,691)	391 (862)	315 (694)	4.43 (14.5)
1 m (3.3 ft)	Standard Stick	kg (lb)				*1352 (*2,981)	698 (1,539)	555 (1,224)	*903 (*1,991)	412 (908)	332 (732)	4.29 (14.1)
	Long Stick	kg (lb)				*1227 (*2,705)	694 (1,530)	550 (1,213)	*808 (*1,781)	365 (805)	292 (644)	4.55 (14.9)
0 m (0 ft)	Standard Stick	kg (lb)	*1280 (*2,822)	1269 (2,798)	954 (2,103)	*1522 (*3,355)	670 (1,477)	529 (1,166)	*955 (*2,105)	431 (950)	346 (763)	4.11 (13.5)
	Long Stick	kg (lb)	*1277 (*2,815)	1240 (2,734)	927 (2,044)	*1480 (*3,263)	655 (1,444)	514 (1,133)	*862 (*1,900)	378 (833)	301 (664)	4.39 (14.4)

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 CR Mini Excavator

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ENGINE			OPERATOR ENVIRONMENT (continued)		
Cat® C1.1 Turbo 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)	✓	
HYDRAULICS			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	✓		UNDERCARRIAGE		
Continuous Auxiliary Flow	✓		Rubber Belt (300 mm/11.8 in wide)	✓	
Auxiliary Line Quick Disconnects	✓		Steel Track (300 mm/11.8 in wide)		✓
OPERATOR ENVIRONMENT			Dozer Blade	✓	
Tilt-up Canopy or Tilt-Up Cab	✓		Dozer Blade Float	✓	
Cab with Air Conditioning		✓	Tie Downs on Track Frame	✓	
Cab with Heater		✓	BOOM, STICK AND LINKAGES		
Top Guard ISO 10262:1998 Level I	✓		One Piece Boom (2200 mm/86.6 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)		✓	ELECTRICAL		
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)	✓		GUARDING		
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		✓	OTHER		
Utility Space for Mobile Phone	✓		Bio Oil Capable		✓
Mirrors Left and Right		✓	Eco Drain		✓
Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only) (Cab only)		✓	Water Jacket Heater		✓
			Extra Counterweight (250 kg/551 lb)		✓

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

© 2021 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.

AEHQ8350-00 (04-2021)
Build Number: 07A
(Global excluding
China and Japan)

