

303E CR

Mini Hydraulic Excavator



Engine

Gross Power	18.5 kW	24.8 hp
Net Power	17.5 kW	23.5 hp

Weight

Operating Weight with Canopy	3310 kg	7,297 lb
Operating Weight with Cab	3530 kg	7,782 lb

***The Cat® 303E CR
Mini Hydraulic
Excavator delivers
high performance,
durability and
versatility in a
compact design
to help you work
in a variety of
applications.***



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Solid Performance in a Small Package

Compact and efficient design provides superior power.



Compact Radius

The 303E allows you to easily reposition within a confined space and increase your overall productivity. Proficient movement is enhanced as a result of the limited tailswing and swing boom design.



Transport

With an operating weight of 3200 kg (7,055 lb) and width of 1550 mm (60 in) the 303E is simple to load and position on a trailer with tie down points – getting you to the job site quicker.



Fuel Economy

Powered by the C1.3 engine, the 303E offers the performance and power required for your job with minimal fuel consumption.

Productivity and Durability

Designed for reliability.



Auxiliary Hydraulics

The 303E is ready to work. Hammer and two way lines with quick disconnect fittings are standard on every machine.

The quick disconnects are located close to the tool to reduce hose length and decrease owning and operating costs associated with hose replacement.

Hose routings provide superior protection and cylinder guards decrease opportunity for machine damage.

Thumb Ready Stick

The machine is configured with brackets and relief valves for simple and cost effective mounting of a hydraulic thumb.

Dozer Blade

The durable blade and dozer float function provide the required design and capability to increase overall efficiency.

Ground leveling and finishing applications are fast and easy with a single lever controlling all blade operation – up, down and float.

Spacious and Ergonomic Working Environment

Your safety and comfort is incorporated into the design of every Cat machine.

The adjustable suspension seat, retractable seat belt and adjustable wrist rests allow you to customize the operating station to meet your needs. Ergonomically designed joystick control and travel levers reduce fatigue and improve productivity.

An easy to use pattern control selector and informative gauge panel ensure optimal operation.

Cat Interlock System aids in job site safety. When the hydraulic lockout lever is in the up position no operational function is possible – including travel.

Travel alarm as standard safety offering. An audible alarm alerts job site operators of machine travel (optional in Europe).

ROPS/TOPS/TOP GUARD certification ensures the machine is prepared to protect you.

**Cab unit includes sliding door and openable front window/removable lower window.*



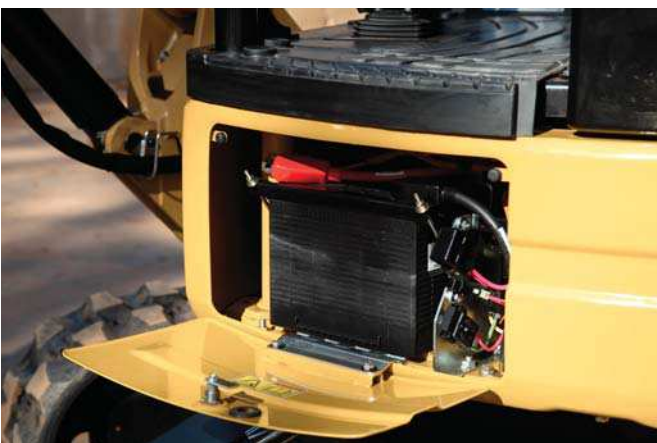
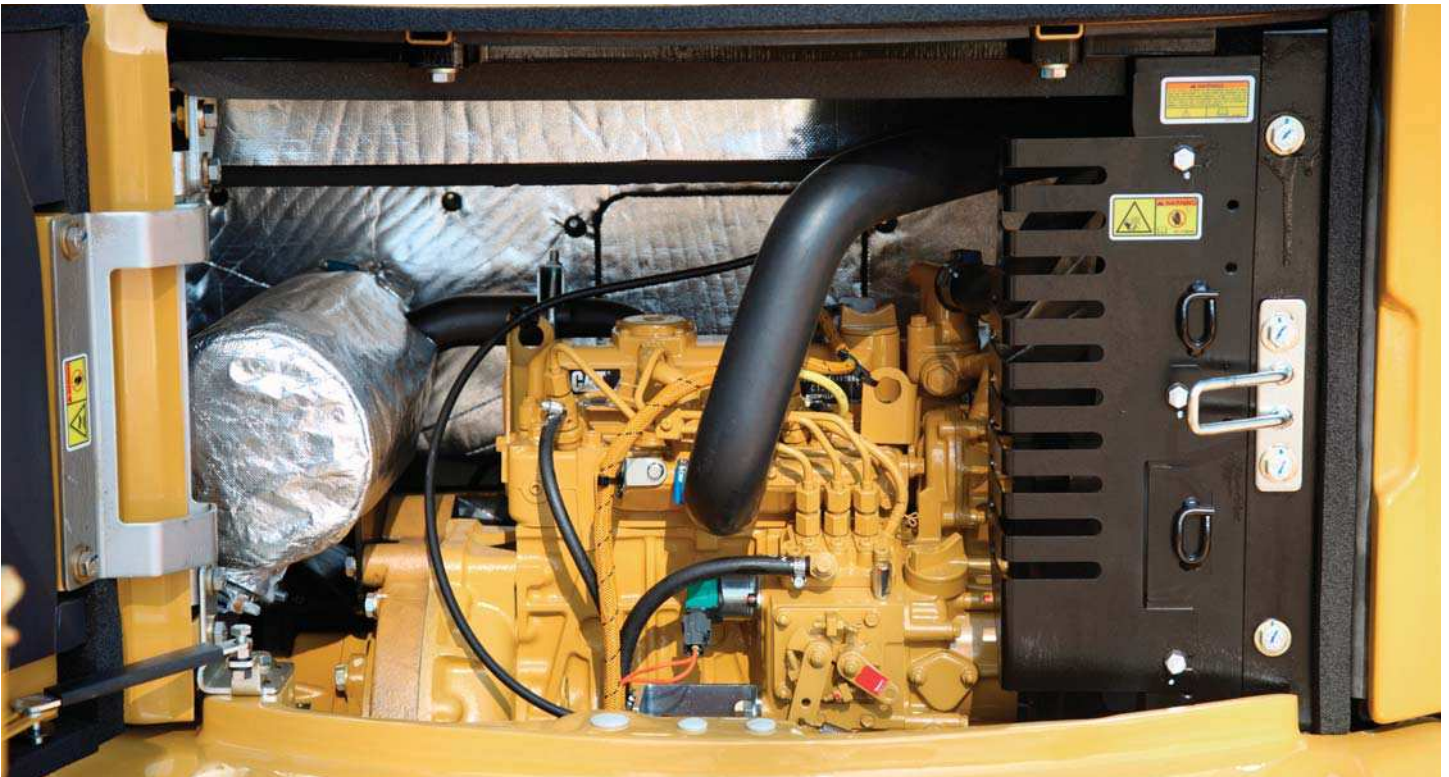
Superior Operating Experience

Safety and comfort all day.



Simple Service and Maintenance Access

Low cost of ownership.



Easy Maintenance Access and Extended Service Intervals

Ease of access to daily maintenance check points ensures your machine is in prime condition to complete any task.

Engine and hydraulic hoods are simple to open and offer outstanding visibility and convenience to check points.

500 hour engine oil and filter change period reduces operating costs and machine downtime.

Easy access to the engine oil check and fill, vertically mounted engine oil filter, starter motor and alternator, as well as the radiator and oil cooler all result in simplified cleaning and reduced maintenance times.

Unmatched Support and Solutions

Equipment, service and attachments to meet your needs.



Customized Solutions for Any Application

A range of tools is available to take advantage of the machine's versatility. All tools are matched to the machine to optimize performance and deliver excellent value through high productivity and long life.



Customer Support You Can Count On

Your Cat dealer is ready to assist you with your purchase decision and everything after.

Financing packages are flexible to meet your needs.

Superior parts availability keeps you working.



303E CR Mini Hydraulic Excavator Specifications

Engine

Engine Model	Cat C1.3	
Rated Net Power @ 2,400 rpm		
ISO 9249/EEC 80/1269	17.5 kW	23.5 hp
Gross Power		
ISO 14396	18.5 kW	24.8 hp
Bore	78 mm	3.1 in
Stroke	88 mm	3.5 in
Displacement	1.26 L	77 in ³

Weights*

Operating Weight with Canopy	3310 kg	7,297 lb
Operating Weight with Cab	3530 kg	7,782 lb

*Weight includes counterweight, rubber tracks, bucket, operator, full fuel and auxiliary lines.

Travel System

Travel Speed – High	4.5 km/h	2.8 mph
Travel Speed – Low	2.4 km/h	1.5 mph
Max Traction Force – High Speed	15.2 kN	3,417 lb
Max Traction Force – Low Speed	30.9 kN	6,946 lb
Ground Pressure	32.2 kPa	4.6 psi
Gradeability (maximum)	30°	

Service Refill Capacities

Cooling System	4.7 L	1.2 gal
Engine Oil	5.7 L	1.5 gal
Fuel Tank	45 L	11.8 gal
Hydraulic Tank	47 L	12.4 gal
Hydraulic System	65 L	17.2 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow at 2,400 rpm	87.6 L/min	23.1 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 (186 bar/2,734 psi)	60 L/min	15.9 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	27 L/min	7.1 gal/min
Digging Force – Stick (standard)	16.6 kN	3,731 lb
Digging Force – Bucket	28.4 kN	6,384 lb

Swing System

Machine Swing Speed	9 rpm
Boom Swing – Left*	80°
Boom Swing – Right	50°

*Automatic swing brake, spring applied, hydraulic release.

Blade

Width	1550 mm	60 in
Height	335 mm	13 in
Dig Depth	472 mm	19 in
Lift Height	402 mm	16 in

Undercarriage

Number of Carrier Rollers	3
Number of Track Rollers	3
Track Roller Type	Double Flange

Certification – Cab and Canopy

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

Lift Capacities at Ground Level*

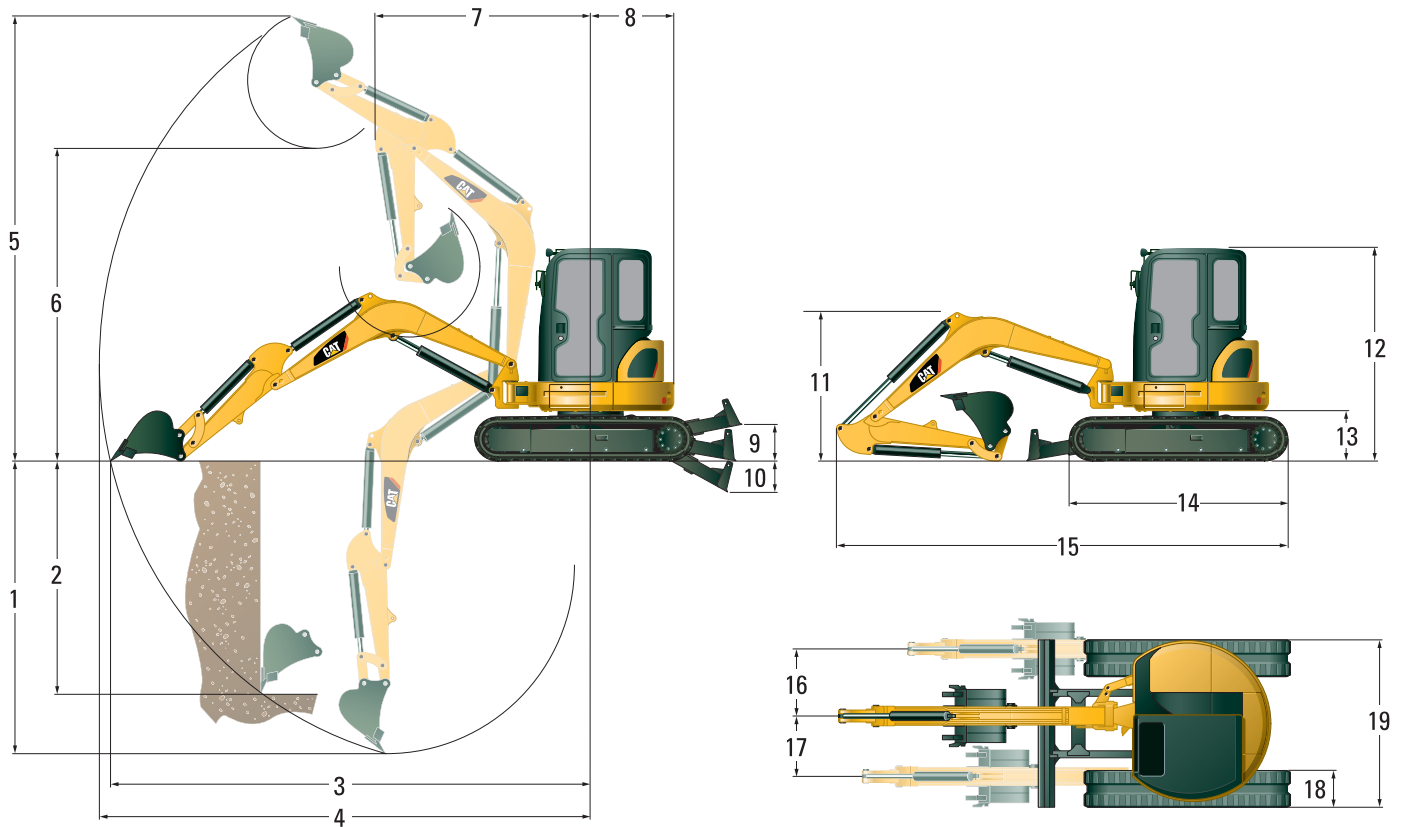
Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		Front	Side	Front	Side
Blade Down	kg	1170	540	670	310
	(lb)	(2,580)	(1,191)	(1,477)	(684)
Blade Up	kg	570	480	280	280
	(lb)	(1,257)	(1,058)	(617)	(617)

*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.

303E CR Mini Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate.



1 Dig Depth	2750 mm	108 in
2 Vertical Wall	1960 mm	77 in
3 Maximum Reach at Ground Level	4810 mm	189 in
4 Maximum Reach	4950 mm	195 in
5 Maximum Dig Height	4530 mm	178 in
6 Maximum Dump Clearance	3150 mm	124 in
7 Boom In Reach	2110 mm	83 in
8 Tail Swing	890 mm	35 in
9 Maximum Blade Height	402 mm	16 in
10 Maximum Blade Depth	472 mm	19 in
11 Boom Height in Shipping Position	1590 mm	63 in
12 O/A Shipping Height	2500 mm	98 in
13 Swing Bearing Height	565 mm	22 in
14 O/A Undercarriage Length	2210 mm	87 in
15 O/A Shipping Length	4470 mm	176 in
16 Boom Swing Right	825 mm	32 in
17 Boom Swing Left	610 mm	24 in
18 Track Belt/Shoe Width	300 mm	12 in
19 O/A Track Width	1550 mm	60 in

Standard Equipment

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

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable armrests
- Alternator
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Boom cylinder guard
- Cab mounted work light
- Canopy with Top Guard ISO 10262 (Level 1), ROPS ISO 12117-2 and TOPS ISO 12117
- Coat hook
- Cup holder
- Control pattern changer
- Dozer blade with float function
- Foot travel pedals
- Gauges or indicators for fuel level engine coolant temperature, hour meter, engine oil pressure, air cleaner, alternator and glow plugs, service interval
- Horn
- Hydraulic oil cooler
- Lifting eye on bucket linkage (standard equipment for all regions except Europe)
- Lockable storage box
- Low maintenance linkage pin joints
- Maintenance free battery
- Rubber track
- Retractable seatbelt
- Standard stick
- Suspension seat, vinyl covered
- “Thumb ready” sticks
- Travel alarm (optional in Europe)

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- Beacon socket for canopy machines
- Boom mounted light
- Cab, Top Guard ISO 10262 (Level 1), ROPS ISO 12117-2 and TOPS ISO 12117
- High back suspension seat, fabric covered
- Mechanical quick coupler
- Mirrors for cab and canopy
- Steel track

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