



# Cat<sup>®</sup> 310

## MINI HYDRAULIC EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 310 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. 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 C3.3B	
<b>Rated Net Power @ 2,200 rpm</b>		
U.S. EPA Tier 4 Final	52.4 kW	70.3 hp
EU Stage V	53.3 kW	71.5 hp
ISO 9249/EEC 80/1269		
<b>Gross Power</b>		
ISO 14396	55.4 kW	74.3 hp
Bore	94 mm	3.7 in
Stroke	120 mm	4.7 in
Displacement	3.33 L	203 in <sup>3</sup>

### Weights

Minimum Operating Weight with Cab*	9601 kg	21,166 lb
Maximum Operating Weight with Cab**	10 182 kg	22,447 lb

\*Minimum Weight is based on steel tracks, no counterweight, operator, full fuel tank, long 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
Steel Tracks with Pads	330 kg	728 lb



# 310 Mini Hydraulic Excavator

## Travel System

Travel Speed – High	4.9 km/h	3.1 mph
Travel Speed – Low	2.6 km/h	1.6 mph
Maximum Traction Force – High Speed	28.9 kN	6,497 lb
Maximum Traction Force – Low Speed	84.8 kN	19,064 lb
Ground Pressure – Minimum Weight	41.68 kPa	6 psi
Ground Pressure – Maximum Weight	44.2 kPa	6 psi
Gradeability (maximum)	30 degrees	

## Service Refill Capacities

Cooling System	10.0 L	2.6 gal
Engine Oil	11.2 L	3.0 gal
Fuel Tank	145 L	38 gal
Hydraulic Tank	53 L	14 gal
Hydraulic System	140 L	37 gal

## Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	233 L/min	62 gal/min
Operating Pressure – Equipment	285 bar	4,134 psi
Operating Pressure – Travel	285 bar	4,134 psi
Operating Pressure – Swing	230 bar	3,336 psi
Auxiliary Circuit – Primary		
Flow	131 L/min	35 gal/min
Pressure	285 bar	4,134 psi
Auxiliary Circuit – Secondary		
Flow	33 L/min	9 gal/min
Pressure	285 bar	4,134 psi
Digging Force – Stick	49.2 kN	11,060 lb
Digging Force – Bucket	77.7 kN	17,459 lb

## Swing System

Machine Swing Speed	10.6 rpm
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## Blade

Width (Standard)	2470 mm	97.2 in
Width (Wide)	2640 mm	103.9 in
Height	431 mm	17 in

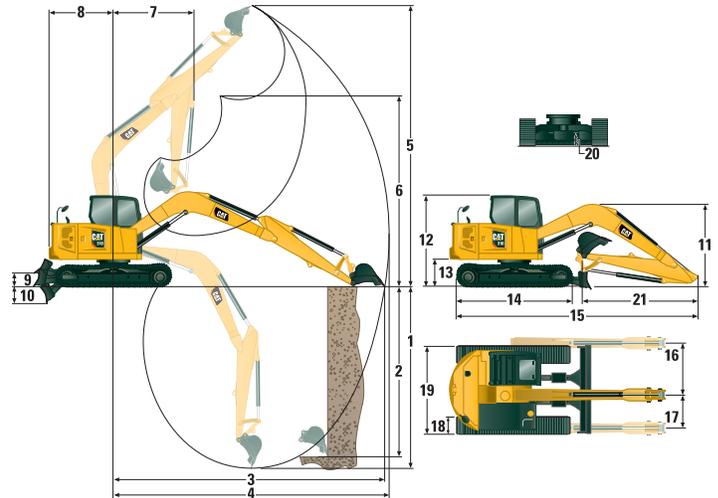
## Certification – Cab

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

## Sound

Operator Sound Pressure (ISO 6396:2008)	72 dB(A)
Average Exterior Sound Pressure (ISO 6395:2008)	99 dB(A)

• European Union Directive “2000/14/EC”



## Dimensions

1 Dig Depth	5174 mm	203.7 in
2 Vertical Wall	4836 mm	190.4 in
3 Maximum Reach at Ground Level	7511 mm	295.7 in
4 Maximum Reach	7644 mm	301.0 in
5 Maximum Dig Height	8007 mm	315.2 in
6 Maximum Dump Clearance	5866 mm	231.0 in
7 Boom in Reach	2272 mm	89.5 in
8 Tail Swing with Counterweight	1995 mm	78.5 in
Tail Swing without Counterweight	1800 mm	70.9 in
9 Maximum Blade Height	392 mm	15.5 in
10 Maximum Blade Depth	634 mm	25.0 in
11 Transport Height	2893 mm	113.9 in
12 Cab Height	2624 mm	103.3 in
13 Swing Bearing Height	839 mm	33.0 in
14 Overall Undercarriage Length	3301 mm	129.9 in
15 Overall Shipping Length	6579 mm	259.0 in
16 Boom Swing Right		0 degrees
17 Boom Swing Left		0 degrees
18 Track Belt/Shoe Width	450 mm	17.7 in
19 Overall Track Width	2470 mm	97.2 in
20 Ground Clearance	393 mm	15.5 in
21 Stick Length	2500 mm	98.4 in

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## 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	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m (14.8 ft)	Long Stick	kg (lb)	2707 (5,968)	2707 (5,968)	2694 (5,939)	2547 (5,615)	2547 (5,615)	2554 (5,631)	1364 (3,007)	1364 (3,007)	1364 (3,007)	6.06 (19.9)
3 m (9.8 ft)	Long Stick	kg (lb)	3694 (8,144)	3694 (8,144)	3735 (8,234)	2865 (6,316)	2865 (6,316)	2884 (6,358)	1361 (3,000)	1361 (3,000)	1361 (3,000)	6.61 (21.7)
1.5 m (4.9 ft)	Long Stick	kg (lb)	4864 (10,723)	4864 (10,723)	4952 (10,917)	3278 (7,227)	3278 (7,227)	2304 (5,079)	1440 (3,175)	1440 (3,175)	1202 (2,650)	6.79 (22.3)
0 m (0 ft)	Long Stick	kg (lb)	5337 (11,766)	5337 (11,766)	3880 (8,554)	3502 (7,721)	2728 (6,014)	2136 (4,709)	1623 (3,578)	1623 (3,578)	1204 (2,654)	6.64 (21.8)

\*Minimum Weight includes steel tracks, no counterweight, operator, full fuel tank, long stick, 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	m (ft)
			Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up		
4.5 m (14.8 ft)	Long Stick	kg (lb)	2709 (5,972)	2709 (5,972)	2696 (5,944)	2548 (5,617)	2548 (5,617)	2556 (5,635)	1364 (3,007)	1364 (3,007)	1364 (3,007)	6.06 (19.9)
3 m (9.8 ft)	Long Stick	kg (lb)	3702 (8,162)	3702 (8,162)	3743 (8,252)	2868 (6,323)	2868 (6,323)	2887 (6,365)	1361 (3,000)	1361 (3,000)	1361 (3,000)	6.61 (21.7)
1.5 m (4.9 ft)	Long Stick	kg (lb)	4871 (10,739)	4871 (10,739)	4959 (10,933)	3280 (7,231)	3280 (7,231)	2537 (5,593)	1441 (3,177)	1441 (3,177)	1441 (3,177)	6.79 (22.3)
0 m (0 ft)	Long Stick	kg (lb)	5337 (11,766)	5337 (11,766)	4295 (9,469)	3502 (7,721)	3014 (6,645)	2370 (5,225)	1624 (3,580)	1624 (3,580)	1347 (2,970)	6.64 (21.8)

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

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## EQUIPMENT

### ENGINE

- Cat C3.3B 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 (–35° F)
- Ecology Drain

### HYDRAULICS

- Smart Tech Electronic Pump
- Variable Displacement Piston Pump
- Load Sensing/Flow Sharing Hydraulics
- Power On Demand
- Hydraulic Temperature Monitoring
- Certified Accumulator
- Hydro Advanced Hydraulic Oil

### OPERATOR ENVIRONMENT

- Sealed and Pressurized Cab
- Operator Sound Pressure 72 dB(A) ISO 6396
- 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
- Retractable Seat Belt (75 mm/3 in)
- Coat Hook
- Cup Holder
- LED Interior Light
- Literature Holder
- 12V Power Socket
- Radio – Bluetooth®, USB, Auxiliary, Microphone
- Skylight
- Mounting Bosses for Top and Front Guards
- ROPS – ISO 12117-2:2008
- TOPS – ISO 12117:1997
- Top Guard – ISO 10262:1998 (Level II)
- Color LCD Monitor
  - Fuel Level and Coolant Temperature Gauges
  - Maintenance and Machine Monitoring
  - Performance and Machine Adjustments
  - Numeric Security Code
  - Multiple Languages
  - Camera Ready
  - Hour Meter with Wake Up Switch
  - Jog Dial Control Interface

### UNDERCARRIAGE

- Greased and Lubricated Track
- Hydraulic Track Adjusters
- Tie Down Eyes on Track Frame
- Dozer Blade
- Dozer Float
- Bolt-on, Reversible Wear Edge
- Steel Tracks (450 mm/17.7 in wide)

### BOOM, STICK AND LINKAGES

- One Piece Boom (4300 mm/169.3 in)
- Long Stick (2500 mm/98.4 in)
- Front Shovel Capable (Pin-On/Manual Coupler/Hydraulic Coupler – not available in all regions)
- Thumb Ready (not available in all regions)
- Certified Lifting Eye (not available in all regions)

### ELECTRICAL

- 12 Volt Electrical System
- 90 Ampere Alternator
- 850 CCA Maintenance Free Battery
- Circuit Breaker
- Ignition Key Stop Switch
- Signaling/Warning Horn
- Product Link™ Elite Lite (regulations apply)
- Travel Alarm

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

- Rain Visor
- Air Suspension Heated Seat

### ELECTRICAL

- Rearview Camera
- Rotating Beacon

### OTHER

- Attachments including Buckets, Augers and Hammers
- Steel Track with Rubber Pads
- Wide Steel Tracks (600 mm/23.6 in)
- 2nd Auxiliary Hydraulic Lines
- Boom and Stick Hose Burst Check Valves
- Bucket Linkage with Lift Eye
- Track Guides
- Water Jacket Heater
- Refueling Pump
- Cab Guarding

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