

# **Cat**<sup>®</sup> 310

# MINI HYDRAULIC EXCAVATOR

#### **FEATURES:**

The Cat® 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	
Rated Net Power @ 2,200 rpm		
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		
Gross Power		
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	Τ
Maximum Operating Weight with Cab**	10 182 kg	22,447 lb	

<sup>\*</sup>Minimum Weight is based on steel tracks, no 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	



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

# **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 Disp	lacement Pisto	n 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

# Blade

Width (Standard)	2470 mm	97 in
Width (Wide)	2640 mm	104 in
Height	431 mm	17 in

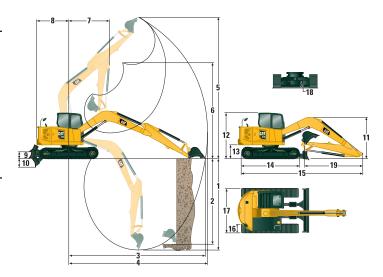
# **Certification – Cab**

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**

	11011010110		
1	Dig Depth	5211 mm	205 in
2	Vertical Wall	4873 mm	192 in
3	Maximum Reach at Ground Level	7518 mm	296 in
4	Maximum Reach	7644 mm	301 in
5	Maximum Dig Height	7970 mm	314 in
6	Maximum Dump Clearance	5829 mm	230 in
7	Boom in Reach	2272 mm	90 in
8	Tail Swing with Counterweight	1995 mm	79 in
	Tail Swing without Counterweight	1800 mm	71 in
9	Maximum Blade Height	355 mm	14 in
10	Maximum Blade Depth	671 mm	26 in
11	Transport Height	2884 mm	114 in
12	Cab Height	2607 mm	103 in
13	Swing Bearing Height	822 mm	32 in
14	Overall Undercarriage Length	3200 mm	126 in
15	Overall Shipping Length	6579 mm	259 in
16	Track Belt/Shoe Width	450 mm	18 in
17	Overall Track Width	2470 mm	97 in
18	Ground Clearance	356 mm	14 in
19	Stick Length	2500 mm	98 in

# **310 Mini Hydraulic Excavator**

# **Lift Capacities – Minimum Configuration\***

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

<sup>\*</sup>Minimum Weight includes steel tracks, no counterweight, operator, full fuel tank, long stick, blade and no bucket.

# **Lift Capacities – Maximum Configuration\*\***

		3 m (9.8 ft)	4.5 m (14.8 ft)			Lift Point Radius (Maximum)						
			0ver	Front		0ver	Front		0ver	Front		
			Blade	Blade	Over	Blade	Blade	Over	Blade	Blade	Over	m
	Lift Point Height		Down	Up	Side	Down	Up	Side	Down	Up	Side	(ft)
4.5 m	Long Stick	kg	2709	2709	2696	2548	2548	2556	1364	1364	1364	6.06
(14.8 ft)		(lb)	(5,972)	(5,972)	(5,944)	(5,617)	(5,617)	(5,635)	(3,007)	(3,007)	(3,007)	(19.9)
3 m	Long Stick	kg	3702	3702	3743	2868	2868	2887	1361	1361	1361	6.61
(9.8 ft)		(lb)	(8,162)	(8,162)	(8,252)	(6,323)	(6,323)	(6,365)	(3,000)	(3,000)	(3,000)	(21.7)
1.5 m	Long Stick	kg	4871	4871	4959	3280	3280	2537	1441	1441	1441	6.79
(4.9 ft)		(lb)	(10,739)	(10,739)	(10,933)	(7,231)	(7,231)	(5,593)	(3,177)	(3,177)	(3,177)	(22.3)
0 m	Long Stick	kg	5337	5337	4295	3502	3014	2370	1624	1624	1347	6.64
(0 ft)		(lb)	(11,766)	(11,766)	(9,469)	(7,721)	(6,645)	(5,225)	(3,580)	(3,580)	(2,970)	(21.8)

<sup>\*\*</sup>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
- HYDO 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 Kev 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
- 60 Ampere Alternator
- 900 CCA Maintenance Free Battery
- Battery Disconnect
- Ignition Key Stop Switch
- Signaling/Warning Horn
- Product Link<sup>™</sup> 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 with Case Drain
- Boom and Stick Hose Burst Check Valves
- Bucket Linkage with Lift Eve
- Track Guides
- Water Jacket Heater
- Refueling Pump
- Cab Guarding

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

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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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