

# Cat<sup>®</sup> 306 CR

MINI HYDRAULIC EXCAVATOR

### **F**EATURES:

The Cat® 306 CR Mini Excavator delivers maximum power and performance in a mini size to help you work in a wide range of applications.

### **ALL DAY COMFORT**

Your choice of a canopy or 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 help you get the job done more efficiently.

### 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. An optional 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.

### **CHOICES**

 Configure the machine to meet your specific application needs with a straight blade, angle blade, or Extra Tool Carrier (XTC).

### **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 C2.4 Tur	Cat C2.4 Turbo	
Rated Net Power @ 2,200 rpm			
U.S. EPA Tier 4 Final/EU Stage V	41.7 kW	55.9 hp	
ISO 9249/EEC 80/1269			
Gross Power			
ISO 14396	43.2 kW	57.9 hp	
Bore	87 mm	3.4 in	
Stroke	102.4 mm	4 in	
Displacement	2.43 L	148 in <sup>3</sup>	

### Weights

Minimum Operating Weight with Canopy*	6411 kg	14,136 lb
Maximum Operating Weight with Canopy**	7107 kg	15,671 lb
Minimum Operating Weight with Cab*	6485 kg	14,299 lb
Maximum Operating Weight with Cab**	7175 kg	15,821 lb

<sup>\*</sup>Minimum Weight is based on rubber tracks, operator, full fuel tank, standard stick, blade and bucket.



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

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Weight	Increase	from	Minimum	Configuration
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Counterweight	250 kg	551 lb
Long Stick	44 kg	97 lb
Steel Tracks with Pads	375 kg	827 lb
Angle Blade	102 kg	225 lb
XTC Carriage (no tool)	64 kg	141 lb

### **Travel System**

Travel Speed – High	5.0 km/h	3.1 mph
Travel Speed – Low	2.8 km/h	1.7 mph
Maximum Traction Force — High Speed	31 kN	6,969 lbf
Maximum Traction Force – Low Speed	56 kN	12,589 lbf
Ground Pressure – Minimum Weight	35.4 kPa	5.1 psi
Ground Pressure – Maximum Weight	39.1 kPa	5.7 psi
Gradeability (maximum)	30 degrees	

# **Service Refill Capacities**

Cooling System	10.0 L	2.6 gal
Engine Oil	8.0 L	2.1 gal
Fuel Tank	130 L	34.3 gal
Hydraulic Tank	39 L	10.3 gal
Hydraulic System	75 L	19.8 gal

# **Hydraulic System**

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow @ 2,400 rpm	173 L/min	46 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	210 bar	3,046 psi
Auxiliary Circuit – Primary		
Flow	90 L/min	24 gal/min
Pressure	245 bar	3,553 psi
Auxiliary Circuit – Secondary		
Flow	33 L/min	9 gal/min
Pressure	245 bar	3,553 psi
Digging Force – Stick (Standard)	29.5 kN	6,632 lbf
Digging Force - Stick (Long)	26.5 kN	5,957 lbf
Digging Force – Bucket	51.5 kN	11,578 lbf

# **Swing System**

Machine Swing Speed	11 rpm
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### **Blade**

Straight Blade Width	1980 mm	78 in
Straight Blade Height	390 mm	15.4 in
Angle Blade Width	1980 mm	78 in
Angle Blade Height	400 mm	15.7 in

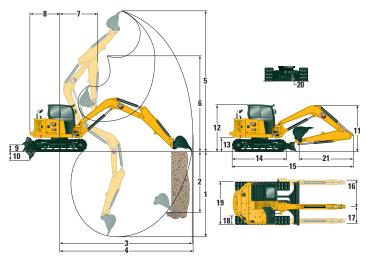
### **Certification - Cab**

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

<sup>•</sup> European Union Directive "2000/14/EC"



### **Dimensions**

		Standard Stick	Long Stick
1	Dig Depth	3710 mm (146 in)	4110 mm (162 in)
2	Vertical Wall	2710 mm (107 in)	3165 mm (125 in)
3	Maximum Reach at Ground Level	6130 mm (241 in)	6535 mm (257 in)
4	Maximum Reach	6295 mm (248 in)	6685 mm (263 in)
5	Maximum Dig Height	5835 mm (230 in)	6130 mm (241 in)
6	Maximum Dump Clearance	4325 mm (170 in)	4610 mm (181 in)
7	Boom in Reach	2485 mm (98 in)	2960 mm (117 in)
8	Tail Swing with Counterweight	1475 mm (58 in)	1475 mm (58 in)
	Tail Swing without Counterweight	1350 mm (53 in)	1350 mm (53 in)
9	Maximum Blade Height	415 mm (16 in)	415 mm (16 in)
10	Maximum Blade Depth	600 mm (24 in)	600 mm (24 in)
11	Transport Height	1755 mm (69 in)	2410 mm (95 in)
12	Cab Height	2545 mm (100 in)	2545 mm (100 in)
13	Swing Bearing Height	672 mm (26 in)	672 mm (26 in)
14	Overall Undercarriage Length	2580 mm (102 in)	2580 mm (102 in)
15	Overall Shipping Length	5975 mm (235 in)	5950 mm (234 in)
16	Boom Swing Right	910 mm (36 in)	910 mm (36 in)
17	Boom Swing Left	735 mm (29 in)	735 mm (29 in)
18	Track Belt/Shoe Width	400 mm (16 in)	400 mm (16 in)
19	Overall Track Width	1980 mm (78 in)	1980 mm (78 in)
	Width Over Upper House	1950 mm (77 in)	1950 mm (77 in)
20	Ground Clearance	306 mm (12 in)	306 mm (12 in)
21	Stick Length	1580 mm (62 in)	1980 mm (78 in)

### **Air Conditioning System**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1287). The system contains 0.9 kg of refrigerant which has a  $\rm CO_2$  equivalent of 1.287 metric tonnes.

# **Lift Capacities – Minimum Configuration**

		Lift Point radius 3 m (9.8 ft)			Lift Point radius 4.5 m (14.8 ft)			Lift Point radius (Maximum)				
			Over Front			Over Front			Over 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 (14.8 ft)	Standard Stick	kg (lb)							*1155 (*2,547)	*1155 (*2,547)	*1155 (*2,547)	4.16 (13.6)
3 m (9.8 ft)	Standard Stick	kg (lb)				*1615 (*3,561)	1175 (2,591)	960 (2,117)	*1055 (*2,326)	*1055 (*2,326)	760 (1,676)	5.18 (17.0)
1.5 m (4.9 ft)	Standard Stick	kg (lb)	*3470 (*7,651)	2040 (4,498)	1595 (3,517)	*1945 (*4,289)	1120 (2,470)	905 (1,996)	*1125 (*2,481)	830 (1,830)	675 (1,488)	5.51 (18.1)
0 m (0 ft)	Standard Stick	kg (lb)	*3555 (*7,839)	1955 (4,311)	1515 (3,341)	*2135 (*4,708)	1080 (2,381)	865 (1,907)	*1390 (*3,065)	860 (1,896)	695 (1,532)	5.32 (17.5)

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

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

		nt radius 3 m (9.8 ft)		Lift Point radius 4.5 m (14.8 ft)			Lift Point radius (Maximum)					
			Over Front			Over Front			Over 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 (14.8 ft)	Long Stick	kg (lb)				*1365 (*3,010)	*1365 (*3,010)	1150 (2,536)	*1145 (*2,525)	*1145 (*2,525)	*1145 (*2,525)	4.70 (15.4)
3 m (9.8 ft)	Long Stick	kg (lb)				*1420 (*3,131)	*1420 (*3,131)	1140 (2,514)	*1055 (*2,326)	*1055 (*2,326)	800 (1,764)	5.60 (18.4)
1.5 m (4.9 ft)	Long Stick	kg (lb)				*1780 (*3,925)	1315 (2,900)	1075 (2,370)	*1110 (*2,448)	875 (1,929)	720 (1,588)	5.90 (19.4)
0 m (0 ft)	Long Stick	kg (lb)	*3495 (*7,706)	2275 (5,016)	1785 (3,936)	*2085 (*4,597)	1255 (2,767)	1020 (2,249)	*1310 (*2,889)	900 (1,985)	735 (1,621)	5.73 (18.8)

Maximum Weight includes steel tracks, extra counterweight, operator, full fuel tank, long stick, blade and no bucket.

### **EQUIPMENT**

### **ENGINE**

- Cat C2.4T 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

- Side by Side Engine and Hydraulic Oil Cooler
- 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
- Auxiliary Hydraulic Lines:
- 1 and 2-way (combined function)
- Auxiliary Line Quick Disconnects
- Adjustable Auxiliary Flow
- Continuous Flow
- Adjustable Auxiliary Relief

(continued on next page)

<sup>\*</sup>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.

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### **EQUIPMENT** (continued)

### **OPERATOR ENVIRONMENT**

- Canopy or Sealed and Pressurized Cab
- Operator Sound Pressure 72 dB(A) ISO 6396:2008
- 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
- Hydraulic Lockout Controls
- High Back, Suspension Seat
- Retractable Seat Belt (75 mm/3 in)
- Coat Hook
- Cup Holder
- Literature Holder
- Mounting Bosses for Top and Front Guards
- ROPS ISO 12117-2:2008
- TOPS ISO 12117:1997
- Signaling/Warning Horn
- Cab and (left side) Boom Work Lights
- Utility Space for Mobile Phone

- 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
- Cab Machines Only
  - HVAC with Automatic Temperature Control
  - Integrated Lower Front Window
  - Assisted Front Window Overhead Storage
  - Rear Window Emergency Exit
  - LED Interior Light
  - 12V Power Socket
  - Radio Bluetooth®, USB, Auxiliary, Microphone
  - Skylight

### **UNDERCARRIAGE**

- Greased and Lubricated Track
- Hydraulic Track Adjusters
- Tie Down Eyes on Track Frame
- Dozer Straight Blade
- Dozer Float
- Bolt-on, Reversible Wear Edge
- Rubber Tracks

### **BOOM. STICK AND LINKAGES**

- One Piece Boom (3055 mm/120.3 in)
- Standard Stick (1580 mm/62.2 in)
- Long Stick (1980 mm/78.0 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
- 650 CCA Maintenance Free Battery
- Battery Disconnect
- Circuit Breaker
- Ignition Key Stop Switch
- Signaling/Warning Horn
- Product Link<sup>TM</sup> Basic (regulations apply, not available in all regions)
- Travel Alarm

### **OTHER**

- Locks on External Enclosure Doors
- Lockable Fuel Cap
- Beacon Socket
- Rear Reflectors

### **OPTIONAL EQUIPMENT**

# OPERATOR ENVIRONMENT

- Cab (see details above)Next Generation Advanced Monitor
  - Touch Screen
  - Site Reference System
  - High Definition Camera Capable
- Rain Visor
- Air Suspension Heated Seat with Cab
- Top Guard ISO 10262:1998 (Level II)

### **ELECTRICAL**

- Product Link Elite (regulations apply, not available in all regions)
- Rearview Camera
- Rotating Beacon

### OTHER

- Attachments including Buckets, Augers and Hammers
- Angle Blade
- Extra Tool Carrier (XTC)

- Steel Tracks (450 mm/17.7 in wide)
- Steel Track with Rubber Pads
- 2nd Auxiliary Hydraulic Lines
- Additional Counterweight
- Boom and Stick Hose Burst Check Valves
- Bucket Linkage with Lift Eye
- 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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