

# **Cat**<sup>®</sup> 301.7 CR

MINI EXCAVATOR

#### FEATURES:

The Cat<sup>®</sup> 301.7 CR Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

#### **ALL DAY COMFORT**

 Adjustable wrist rests and a suspension seat option 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.

#### **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 COMPACT DESIGN**

 Strong lift and dig performance helps you get the job done faster. The compact radius design and retractable undercarriage lets you access and work in the tightest areas. Dig-to-blade and dozer float features allow 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 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**

C1.1	
14.3 kW	19.2 hp
16.1 kW	21.6 hp
77.0 mm	3.0 in
81.0 mm	3.2 in
1.1 L	69.0 in <sup>3</sup>
	14.3 kW 16.1 kW 77.0 mm 81.0 mm

#### Weights

Minimum Operating Weight with Canopy* Maximum Operating Weight with Canopy**	1786 kg 1843 kg	3,937 lb 4,063 lb			
*Minimum Weight is based on rubber track expandable undercarriage and full fuel ta		erator,			
**Maximum Weight is based on steel tracks, canopy, operator, expandable undercarriage and full fuel tank.					
Weight Increase from Minimum Co	nfiguration				

Long Stick	7 kg	15 lb
Steel Tracks	50 kg	110 lb
Expandable Undercarriage	Standard	



## **301.7 CR Mini Excavator**

#### **Travel System**

Travel Speed – High	4.4 km/h	2.7 mph
Travel Speed – Low	2.9 km/h	1.8 mph
Maximum Traction Force – High Speed	11.9 kN	2,675.2 lbf
Maximum Traction Force – Low Speed	18.4 kN	4,136.5 lbf
Ground Pressure – Minimum Weight	27.9 kPa	4.0 psi
Ground Pressure – Maximum Weight	28.7 kPa	4.2 psi
Gradeability (maximum)	30 degrees	

#### **Service Refill Capacities**

Cooling System	3.9 L	1.0 gal	
Engine Oil	4.4 L	1.2 gal	
Fuel Tank	22.0 L	5.8 gal	
Hydraulic Tank	18.0 L	4.8 gal	
Hydraulic System	26.0 L	6.9 gal	

#### **Hydraulic System**

Load Sensing Hydraulics with Variable D	)isplacement Pis	ton Pump
Pump Flow @ 2,400 rpm	66 L/min	17.4 gal/min
Operating Pressure – Equipment	245 bar	3,553.4 psi
Operating Pressure – Travel	245 bar	3,553.4 psi
Operating Pressure – Swing	147 bar	2,132.1 psi
Auxiliary Circuit – Primary		
Flow	33 L/min	8.7 gal/min
Pressure	245 bar	3,553.4 psi
Auxiliary Circuit – Secondary		
Flow	14 L/min	3.7 gal/min
Pressure	245 bar	3,553.4 psi
Digging Force – Stick (standard)	9.5 kN	2,135.7 lbf
Digging Force – Stick (long)	8.3 kN	1,865.9 lbf
Digging Force – Bucket	16.2 kN	3,641.9 lbf

#### **Swing System**

Machine Swing Speed

#### Blade

Width*	990 mm	39.0 in	
Height	225 mm	8.9 in	

9.8 rpm

93 dB(A)

\*Expanded – 1300 mm (51 in)

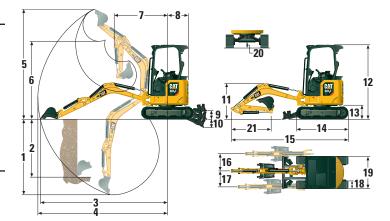
#### **Certification – Canopy**

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

Average Exterior Sound Pressure (ISO 6395:2008)

• European Union Directive "2000/14/EC"



#### Dimensions

		Standard Stick	Long Stick
1	Dig Depth	2350 mm (92.5 in)	2540 mm (100.0 in)
2	Vertical Wall	1800 mm (70.9 in)	1890 mm (74.4 in)
3	Maximum Reach	3900 mm (153.5 in)	4060 mm (159.8 in)
	at Ground Level		
4	Maximum Reach	3970 mm (156.3 in)	4130 mm (162.6 in)
5	Maximum Dig Height	3430 mm (135.0 in)	3490 mm (137.4 in)
6	Maximum Dump Clearance	2450 mm (96.5 in)	2510 mm (98.8 in)
7	Boom in Reach	1630 mm (64.2 in)	1620 mm (63.8 in)
8	Tail Swing	650 mm (25.6 in)	650 mm (25.6 in)
9	Maximum Blade Height	270 mm (10.6 in)	270 mm (10.6 in)
10	Maximum Blade Depth	265 mm (10.4 in)	265 mm (10.4 in)
11	Boom Height in	1090 mm (42.9 in)	1040 mm (40.9 in)
	Shipping Position		
12	Overall Shipping Height	2300 mm (90.6 in)	2300 mm (90.6 in)
13	Swing Bearing Height	442 mm (17.4 in)	442 mm (17.4 in)
14	Overall Undercarriage Length	1590 mm (62.6 in)	1590 mm (62.6 in)
15	Overall Shipping Length†	3620 mm (142.5 in)	3590 mm (141.3 in)
16	Boom Swing Right	50 degrees	50 degrees
17	Boom Swing Left	65 degrees	65 degrees
18	Track Belt/Shoe Width	230 mm (9.1 in)	230 mm (9.1 in)
19	Track Width		
	Retracted	990 mm (39.0 in)	990 mm (39.0 in)
	Expanded	1300 mm (51.18 in)	1300 mm (51.18 in)
20	Minimum Ground Clearance	150 mm (5.9 in)	150 mm (5.9 in)
	Below Undercarriage		
21	Stick Length	960 mm (37.8 in)	1160 mm (45.7 in)

<sup>†</sup>Overall Shipping Length depends on blade position during shipment.

				2 m (6.6 ft) Lift Point Ra					2 m (6.6 ft) Lift Point Radius (Maximum)		nt Radius (Maximum)		
			Over	Front		Over	Front		m				
	Lift Point Height		Blade Up Blade Down		<b>Over Side</b>	Blade Up Blade Down		Over Side	(ft)				
2 m	Standard Stick	kg (lb)				232 (517)	336 (744)	246 (549)	3.1 (10.0)				
(6.6 ft)	Long Stick	kg (lb)				210 (467)	268 (593)	223 (497)	3.3 (10.8)				
1.5 m	Standard Stick	kg (lb)	442 (946)	442 (946)	442 (946)	204 (452)	329 (726)	217 (481)	3.3 (10.8)				
(4.9 ft)	Long Stick	kg (lb)				186 (412)	265 (585)	199 (440)	3.5 (11.7)				
1 m	Standard Stick	kg (lb)	435 (938)	775 (1,644)	458 (988)	190 (420)	336 (740)	203 (448)	3.4 (11.7)				
(3.3 ft)	Long Stick	kg (lb)	441 (950)	636 (1,351)	464 (1,000)	174 (384)	273 (600)	186 (411)	3.6 (12.5)				
0 m	Standard Stick	kg (lb)	398 (858)	938 (2,018)	422 (909)	189 (418)	398 (877)	202 (446)	3.4 (11.7)				
(0 ft)	Long Stick	kg (lb)	394 (848)	946 (2,031)	417 (899)	172 (380)	323 (712)	185 (407)	3.6 (11.7)				

### <u>Lift Capacities – Minimum Configuration\*</u>

\*Minimum Weight includes rubber tracks, canopy, operator, full fuel tank, expanded undercarriage, and no bucket.

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

	2 m (6.6 ft)						Lift Point Radius (Maximum)			
			Over	Front		Over	Front		m	
	Lift Point Height		Blade Up	Blade Down	Over Side	Blade Up	Blade Down	Over Side	(ft)	
2 m	Standard Stick	kg (lb)				240 (535)	336 (744)	255 (569)	3.1 (10.0)	
(6.6 ft)	Long Stick	kg (lb)				217 (484)	268 (593)	231 (515)	3.3 (10.8)	
1.5 m	Standard Stick	kg (lb)	442 (946)	442 (946)	442 (946)	212 (469)	329 (726)	225 (499)	3.3 (10.8)	
(4.9 ft)	Long Stick	kg (lb)				193 (428)	265 (585)	206 (457)	3.5 (11.7)	
1 m	Standard Stick	kg (lb)	449 (970)	775 (1,644)	474 (1,023)	197 (436)	336 (740)	211 (465)	3.4 (11.7)	
(3.3 ft)	Long Stick	kg (lb)	455 (982)	636 (1,351)	480 (1,035)	181 (399)	273 (600)	194 (427)	3.6 (12.5)	
0 m	Standard Stick	kg (lb)	413 (890)	938 (2,018)	438 (944)	197 (434)	398 (877)	210 (464)	3.4 (11.7)	
(0 ft)	Long Stick	kg (lb)	408 (879)	946 (2,031)	433 (933)	179 (395)	323 (712)	192 (424)	3.6 (11.7)	

\*\*Maximum Weight includes steel tracks, canopy, operator, full fuel tank, expanded undercarriage, and no bucket.

## 301.7 CR Mini Excavator

#### **EQUIPMENT**

#### ENGINE

- Cat C1.1 Engine (U.S. EPA Tier 4 Final/ EU Stage V)
- Automatic Engine Idle
- Automatic Engine Shutdown
- Automatic Two Speed Travel
- Fuel Water Separator
- Power on Demand (not available in all regions)
- Variable Displacement Piston Pump
- Load Sensing/Flow Sharing Hydraulics

#### HYDRAULICS

- Smart Tech Electronic Pump
- Accumulator
- Automatic Swing Brake
- Auxiliary Hydraulic Lines
- One and Two Way Auxiliary Flow
- Continuous Auxiliary Flow
- Auxiliary Line Quick Disconnects

#### **OPERATOR ENVIRONMENT**

- Canopy Only
- ROPS ISO 12117-2:2008
- TOPS ISO 12117:1997
- Top Guard ISO 10262:1998 (Level I)
- Next Generation Standard LCD Monitor
- Machine Security Standard Key with Pass Code or Push to Start with Fob
- Adjustable Wrist Rests
- Vinyl Seat (with or without suspension)
  Retractable High Visibility Seat Belt (75 mm/3 in)
- Coat Hook
- Cup Holder
- Storage Pocket
- Skylight
- Washable Floor Mat
- Travel Pedals and Levers
- Next Generation Stick Steer
- Hydraulic Lockout All Controls
- Machine 2-Point Lifting
- Tilt-up Canopy

#### UNDERCARRIAGE

- Expandable Undercarriage
- Rubber Belt or Steel Track (230 mm/9 in wide)
- Dozer Blade with Float
- Tie Downs on Track Frame

#### **BOOM, STICK AND LINKAGES**

- One Piece Boom (1780 mm/70 in)
- Standard Stick (960 mm/37.8 in) or Long Stick (1160 mm/45.7 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 Battery
- Software (machine and monitor)
- Maintenance Free Battery
- Warning Horn
- 12 Volt Power Socket
- Boom Light, HalogenPattern Changer

#### **OPTIONAL EQUIPMENT**

#### **OPERATOR ENVIRONMENT**

Mirrors Left and Right

#### ELECTRICAL

- Product Link<sup>™</sup>
- LED Front Lights
- LED Front and Rear Lights
- LED Boom Light
- Battery Disconnect

#### OTHER

- Attachments including Buckets, Augers and Hammers
- Travel Alarm (standard in some regions)
- Water Jacket Heater
- Eco Drain
- Guard, Canopy
- Guard, Mesh
- Quick Coupler Lines
- Thumb Bracket (standard in some regions)
- Secondary Auxiliaries
- Bio Oil Capable
- No Travel Pedals and Levers
- Boom Lowering Check Valve
- Stick Lowering Check Valve

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

#### © 2019 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 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.

AEH08145-03 (05-2019) Replaces AEH08145-02 (Global excluding China and Japan)

