



# Cat<sup>®</sup> 302 CR

## MINI EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 302 CR Mini Excavator delivers power and performance in a compact size to help you work in a wide range of applications.

#### ALL DAY COMFORT

- Choose either a canopy or a sealed and pressurized cab equipped with air conditioning, adjustable wrist rests, and a suspension seat option to 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 cab 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

### Engine

|                                    |         |                      |
|------------------------------------|---------|----------------------|
| Engine Model                       | C1.1    |                      |
| <b>Rated Net Power @ 2,400 rpm</b> |         |                      |
| ISO 9249/EEC 80/1269               | 14.3 kW | 19.2 hp              |
| <b>Gross Power</b>                 |         |                      |
| ISO 14396                          | 16.1 kW | 21.6 hp              |
| Bore                               | 77.0 mm | 3.0 in               |
| Stroke                             | 81.0 mm | 3.2 in               |
| Displacement                       | 1.1 L   | 69.0 in <sup>3</sup> |

### Weights

|  |         |          |
|--|---------|----------|
| Minimum Operating Weight with Canopy*  | 1945 kg | 4,288 lb |
| Maximum Operating Weight with Canopy** | 2100 kg | 4,630 lb |
| Minimum Operating Weight with Cab      | 2045 kg | 4,508 lb |
| Maximum Operating Weight with Cab      | 2200 kg | 4,850 lb |

\*Minimum Weight is based on rubber tracks, canopy, operator, fixed undercarriage and full fuel tank.

\*\*Maximum Weight is based on steel tracks, canopy, operator, expandable undercarriage and full fuel tank.

### Weight Increase from Minimum Configuration

|              |        |        |
|--------------|--------|--------|
| Cab          | 100 kg | 221 lb |
| Long Stick   | 10 kg  | 22 lb  |
| Steel Tracks | 60 kg  | 132 lb |



# 302 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 | 13.2 kN    | 2,967.5 lbf |
| Maximum Traction Force – Low Speed  | 20.0 kN    | 4,496.2 lbf |
| Ground Pressure – Minimum Weight    | 23.7 kPa   | 3.4 psi     |
| Ground Pressure – Maximum Weight    | 26.8 kPa   | 3.9 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        | 26.0 L | 6.9 gal |
| Hydraulic Tank   | 18.0 L | 4.8 gal |
| Hydraulic System | 26.0 L | 6.9 gal |

## Hydraulic System

|  |          |              |
|--|----------|--------------|
| Load Sensing Hydraulics with Variable Displacement Piston 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)                               | 11.3 kN  | 2,540.3 lbf  |
| Digging Force – Stick (long)                                   | 9.8 kN   | 2,203.1 lbf  |
| Digging Force – Bucket   | 19.6 kN  | 4,406.3 lbf  |

## Swing System

|                     |         |
|---------------------|---------|
| Machine Swing Speed | 9.8 rpm |
|---------------------|---------|

## Blade

|        |         |         |
|--------|---------|---------|
| Width* | 1090 mm | 42.9 in |
| Height | 225 mm  | 8.9 in  |

\*Expanded – 1300 mm (51 in)

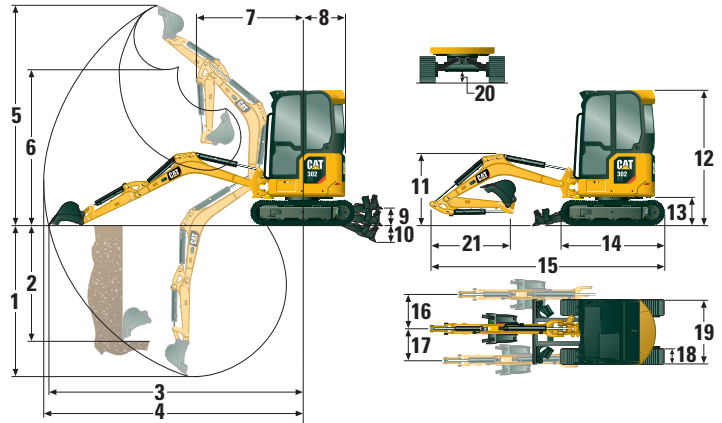
## Certification – Cab and Canopy

|                                       |                            |
|---------------------------------------|----------------------------|
| 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<br>(ISO 6396:2008)         | 73 dB(A) |
| Average Exterior Sound Pressure<br>(ISO 6395:2008) | 93 dB(A) |

• European Union Directive “2000/14/EC”



## Dimensions

|   | Standard Stick     | Long Stick         |
|---|--------------------|--------------------|
| 1 Dig Depth                                     | 2370 mm (93.3 in)  | 2570 mm (101.2 in) |
| 2 Vertical Wall                                 | 1850 mm (72.8 in)  | 1940 mm (76.4 in)  |
| 3 Maximum Reach at Ground Level                 | 4040 mm (159.1 in) | 4210 mm (165.7 in) |
| 4 Maximum Reach                                 | 4110 mm (161.8 in) | 4270 mm (168.1 in) |
| 5 Maximum Dig Height                            | 3550 mm (139.8 in) | 3620 mm (142.5 in) |
| 6 Maximum Dump Clearance                        | 2560 mm (100.8 in) | 2640 mm (103.9 in) |
| 7 Boom in Reach                                 | 1660 mm (65.4 in)  | 1660 mm (65.4 in)  |
| 8 Tail Swing                                    | 750 mm (29.5 in)   | 750 mm (29.5 in)   |
| 9 Maximum Blade Height                          | 285 mm (11.2 in)   | 285 mm (11.2 in)   |
| 10 Maximum Blade Depth                          | 295 mm (11.6 in)   | 295 mm (11.6 in)   |
| 11 Boom Height in Shipping Position             | 1070 mm (42.1 in)  | 1020 mm (40.2 in)  |
| 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                 | 1850 mm (72.8 in)  | 1850 mm (72.8 in)  |
| 15 Overall Shipping Length†                     | 3900 mm (153.5 in) | 3880 mm (152.8 in) |
| 16 Boom Swing Right                             | 50 degrees         | 50 degrees         |
| 17 Boom Swing Left                              | 65 degrees         | 65 degrees         |
| 18 Track Belt/Shoe Width                        | 250 mm (9.8 in)    | 250 mm (9.8 in)    |
| 19 Track Width                                  |                    |                    |
| Retracted                                       | 1090 mm (42.9 in)  | 1090 mm (42.9 in)  |
| Expanded  | 1400 mm (55.12 in) | 1400 mm (55.12 in) |
| 20 Minimum Ground Clearance Below Undercarriage | 150 mm (5.9 in)    | 150 mm (5.9 in)    |
| 21 Stick Length                                 | 960 mm (37.8 in)   | 1160 mm (45.7 in)  |

†Overall Shipping Length depends on blade position during shipment.

## Lift Capacities – Minimum Configuration\*

| Lift Point Height |                |         | 2 m (6.6 ft) |             |             | Lift Point Radius (Maximum) |            |           |            |
|-------------------|----------------|---------|--------------|-------------|-------------|-----------------------------|------------|-----------|------------|
|                   |                |         | Over Front   |             | Over Side   | Over Front                  |            | Over Side | m (ft)     |
|                   |                |         | Blade Up     | Blade Down  |             | Blade Up                    | Blade Down |           |            |
| 2 m<br>(6.6 ft)   | Standard Stick | kg (lb) |              |             |             | 346 (769)                   | 376 (831)  | 294 (654) | 3.3 (10.8) |
|                   | Long Stick     | kg (lb) |              |             |             | 301 (665)                   | 301 (665)  | 269 (598) | 3.5 (11.7) |
| 1.5 m<br>(4.9 ft) | Standard Stick | kg (lb) | 549 (1,161)  | 549 (1,161) | 549 (1,161) | 311 (687)                   | 370 (817)  | 264 (584) | 3.5 (11.7) |
|                   | Long Stick     | kg (lb) |              |             |             | 287 (635)                   | 300 (661)  | 243 (539) | 3.7 (12.5) |
| 1 m<br>(3.3 ft)   | Standard Stick | kg (lb) | 711 (1,532)  | 906 (1,915) | 586 (1,265) | 293 (648)                   | 380 (836)  | 249 (550) | 3.6 (12.5) |
|                   | Long Stick     | kg (lb) | 720 (1,549)  | 771 (1,628) | 594 (1,280) | 272 (600)                   | 309 (680)  | 230 (508) | 3.8 (12.5) |
| 0 m<br>(0 ft)     | Standard Stick | kg (lb) | 675 (1,450)  | 959 (2,067) | 552 (1,189) | 296 (653)                   | 388 (856)  | 251 (553) | 3.5 (11.7) |
|                   | Long Stick     | kg (lb) | 668 (1,437)  | 988 (2,123) | 546 (1,176) | 273 (602)                   | 366 (806)  | 230 (508) | 3.7 (12.5) |

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

## Lift Capacities – Maximum Configuration\*\*

| Lift Point Height |                |         | 2 m (6.6 ft) |             |             | Lift Point Radius (Maximum) |            |           |            |
|-------------------|----------------|---------|--------------|-------------|-------------|-----------------------------|------------|-----------|------------|
|                   |                |         | Over Front   |             | Over Side   | Over Front                  |            | Over Side | m (ft)     |
|                   |                |         | Blade Up     | Blade Down  |             | Blade Up                    | Blade Down |           |            |
| 2 m<br>(6.6 ft)   | Standard Stick | kg (lb) |              |             |             | 377 (833)                   | 377 (833)  | 344 (766) | 3.3 (10.8) |
|                   | Long Stick     | kg (lb) |              |             |             | 302 (667)                   | 302 (667)  | 302 (667) | 3.5 (11.7) |
| 1.5 m<br>(4.9 ft) | Standard Stick | kg (lb) | 526 (1,444)  | 526 (1,114) | 526 (1,444) | 361 (799)                   | 370 (816)  | 309 (684) | 3.5 (11.7) |
|                   | Long Stick     | kg (lb) |              |             |             | 300 (660)                   | 300 (660)  | 286 (633) | 3.7 (12.5) |
| 1 m<br>(3.3 ft)   | Standard Stick | kg (lb) | 820 (1,765)  | 890 (1,880) | 680 (1,466) | 341 (753)                   | 379 (834)  | 292 (644) | 3.6 (12.5) |
|                   | Long Stick     | kg (lb) | 749 (1,582)  | 749 (1,582) | 687 (1,482) | 308 (678)                   | 308 (678)  | 271 (598) | 3.8 (12.5) |
| 0 m<br>(0 ft)     | Standard Stick | kg (lb) | 781 (1,678)  | 964 (2,078) | 644 (1,386) | 343 (757)                   | 389 (857)  | 293 (646) | 3.5 (11.7) |
|                   | Long Stick     | kg (lb) | 775 (1,666)  | 992 (2,129) | 638 (1,373) | 318 (700)                   | 364 (802)  | 271 (596) | 3.7 (12.5) |

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

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## 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

- Cab or Canopy
- ROPS – ISO 12117-2: 2008
- TOPS – ISO 12117: 1997
- Top Guard – ISO 10262: 1998 (Level II)
- Cab HVAC or Heat Only
- Next Generation Standard LCD Monitor
- Machine Security – Standard Key with Pass Code or Push to Start with Fob
- Adjustable Wrist Rests
- Fabric or Vinyl Seat
- Retractable High Visibility Seat Belt (75 mm/3 in)
- Coat Hook
- Cup Holder
- Cab Interior Light
- Cab Radio
- Storage Pocket
- Skylight
- Washable Floor Mat
- Travel Pedals and Levers
- Next Generation Stick Steer
- Hydraulic Lockout – All Controls
- Machine 2-Point Lifting
- Tilt-up Cab or Canopy
- Bluetooth® Capable (Cab only)

### UNDERCARRIAGE

- Fixed or Expandable Undercarriage
- Rubber Belt or Steel Track (250 mm/9.8 in wide)
- Dozer Blade with Float
- Tie Downs on Track Frame

### BOOM, STICK AND LINKAGES

- One Piece Boom (1850 mm/73 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, Halogen
- Pattern Changer

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

- Mirrors Left and Right

### ELECTRICAL

- Product Link™
- 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

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