

# 307E2

## Mini Hydraulic Excavator



### Bucket

Standard Bucket Size	0.33 m <sup>3</sup>
----------------------	---------------------

### Engine

Engine Model	Cat <sup>®</sup> C2.6 DI Turbo
Net Power	41.5 kW (55.6 hp)
Gross Power @ 2,000 rpm	43 kW (57.6 hp)

### Weights

Operating Weight	6900 kg
------------------	---------

## 307E2 Features

### Increased Performance

*Lower fuel consumption and higher fuel efficiency keeps you working all day.*

*Standard/Power dual mode offers the choice of lower fuel consumption or superior productivity.*

*Smooth new intuitive flow sharing "High Definition Hydraulic" system provides the level of control demanded in any application.*

### High Altitude and Cold Start Capability

*307E2 is equipped with the new Cat C2.6 DI Turbo engine with altitude capability to 2500 m and cold start capacity as low as -15.7 degrees.*

### Comfortable Cab

*The new design provides a spacious cab with ergonomic low effort controls and a suspension seat that keeps you comfortable all day.*

### Stability

*Conventional tail swing design with an extended counterweight provides excellent stability while maximizing lifting.*

### Maintenance

*Superior serviceability with the counterweight positioned low at the back and two big side doors, making all the maintenance points extremely easy to touch from ground level.*

## Contents

Performance .....	4
Undercarriage .....	5
Operator Comfort .....	6
Engine .....	7
Serviceability and Customer Support.....	8
Specifications.....	10
Standard Equipment.....	12
Optional Equipment.....	13
Notes.....	14





**The Cat 307E2 Mini Hydraulic Excavator delivers superior performance and comfort while reducing your fuel consumption and operating costs. The large spacious cab provides a comfortable work area. Intuitive seat-mounted controls are easy to use for greater job accuracy and efficiency. The standard tail swing design incorporates a counterweight that extends further back on the machine. This provides leverage to create a stable work platform during lifting and digging. The 307E2 sets the standard for conventional tail swing excavators in the eight-ton size class.**

# Performance

Powerful digging combined with smooth control.



## Hydraulics

Smooth responsive hydraulics give the level of control demanded by the customer in any application, from fine grading and dozing to backfilling.

Powerful bucket and stick digging forces combined with fast cycle times result in world class productivity and performance.

Maximum travel speed can be selected by an easily accessible foot switch on the cab floor allowing precise control by balancing travel speed with the torque needed for turning and traveling on inclines. Dozer blade float function enables easy ground leveling for landscaping and finish grade applications as well as more efficient job site clean-up.



## Lift Capacity

The new Cat E2 Series has industry leading lift capacity matched with outstanding stability. This provides the control required to meet the diverse and continually changing needs of the customer.

## Steel Track

The standard 450 mm triple grouser steel tracks provide optimum stability when lifting over the side, in demolition and heavy duty applications.

## Optional Dozer with Float Function

The dozer function is pilot controlled from inside the cab, providing smooth, proportional operation. The dozer float function is enabled by pushing the lever fully forward into the decent position. Site clean up and backfilling is easier as the operator does not have to adjust the blade height during travel.

## New Travel Motor and Swing Motor

New swing motor delivers smoother and improved swing performance. New travel motor provides more reliable traveling performance.



**Undercarriage**  
Excellent stability.



# Operator Comfort

Simple, easy operation allows the operator to focus on production.



## Operator Station

The redesigned operator environment provides the operator with a larger cab and more ingress and egress room. The clear flat floor space allows the operator plenty of leg room. An intuitive cab layout with ergonomic joysticks, standard spring suspension seat and clear display panel makes for ease of operation allowing the operator to focus on production. The cab also features the following:

- New console with larger, soft armrest and easy to use machine function buttons
- New monitor with battery pressure indication function
- Auto idle feature for improved fuel savings and lower noise levels

## 100% Pilot Controls

Delivers excellent machine control with fine modulation and lifetime “as new” performance eliminating the need for linkage and cable maintenance, lowering owning and operating costs and resulting in less downtime.





## Engine

Clean, quiet, efficient and powerful.



### **Powerful (Efficient DI Turbocharged) Engine and Load Sensing Hydraulics**

The Cat C2.6 41.5 kW (55.6 hp) engine is matched with a load sensing hydraulic system to provide excellent digging performance and smooth control. Low noise and vibration levels deliver comfortable operation with high altitude capability to 2500 m.

# Serviceability and Customer Support

Easy access and minimal maintenance requirements keep you working.





### **Excellent Service Access and “One Side Maintenance” Engine**

Daily checks and regular service points including fuel and hydraulic oil fill are easily reached via the large steel rear door and two large side doors. The main hydraulic valve and lines are also easily reached through a removable floor plate and side panels.

The Cat C2.6 engine is with “one side maintenance” to offer superior maintenance convenience. The machine has durable steel body panels all around, offering good resistance to impact damage and helping to maintain the machine’s appearance and value.

S-O-S<sup>SM</sup> oil sampling valve allows easy sampling of the hydraulic fluid for preventative maintenance.



### **Customer Support – Unmatched Support Makes the Difference**

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Financing packages are flexible to meet your needs
- Unmatched parts availability keeps you working
- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production
- For more information on Cat products, dealer services and industry solutions, visit [www.cat.com](http://www.cat.com)

# 307E2 Mini Hydraulic Excavator Specifications

## Engine

Engine Model	Cat C2.6 DI Turbo
Net Power	41.5 kW (55.6 hp)
Gross Power @ 2,000 rpm	43 kW (57.6 hp)

- Meets China Stage III Nonroad emissions requirements.
- Net power rating per ISO 9249 and SAE J1349.

## Weights

Operating Weight	6900 kg
------------------	---------

## Engine Dimensions

Bore	87 mm
Stroke	110 mm
Displacement	2615 cm <sup>3</sup>

## Swing System

Machine Swing Speed	10.8 min <sup>-1</sup>
---------------------	------------------------

- Centralized lubrication.
- Automatic swing brake, spring applied hydraulic release.

## Hydraulic System

Operating Pressure – Equipment	28 MPa
Operating Pressure – Travel	28 MPa
Operating Pressure – Swing	24 MPa
Digging Force – Stick (standard)	37.1 kN
Digging Force – Bucket	50.6 kN

## Travel System

Travel Speed – High	5.1 km/h
Travel Speed – Low	3.2 km/h
Maximum Traction Force	56.9 kN
Gradeability (maximum) – High	30 Degrees

- Each track is driven by one independent two-speed motor.
- Drive modules are integrated into the roller frame for total protection.
- Straight line travel when tracking and operating the front linkage simultaneously.

## Electrical System

Type

- 60-amp alternator.
- 12-volt, heavy-duty batteries.

## Service Refill Capacities

Cooling System	11.9 L
Engine Oil	10.2 L
Fuel Tank	135 L
Hydraulic Tank	51 L
Hydraulic System	94 L

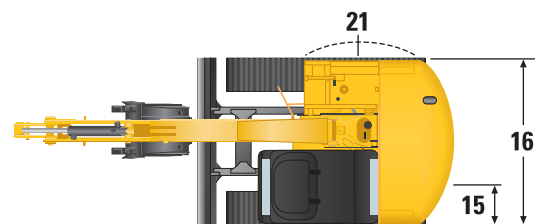
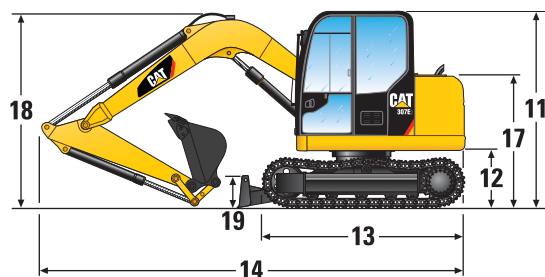
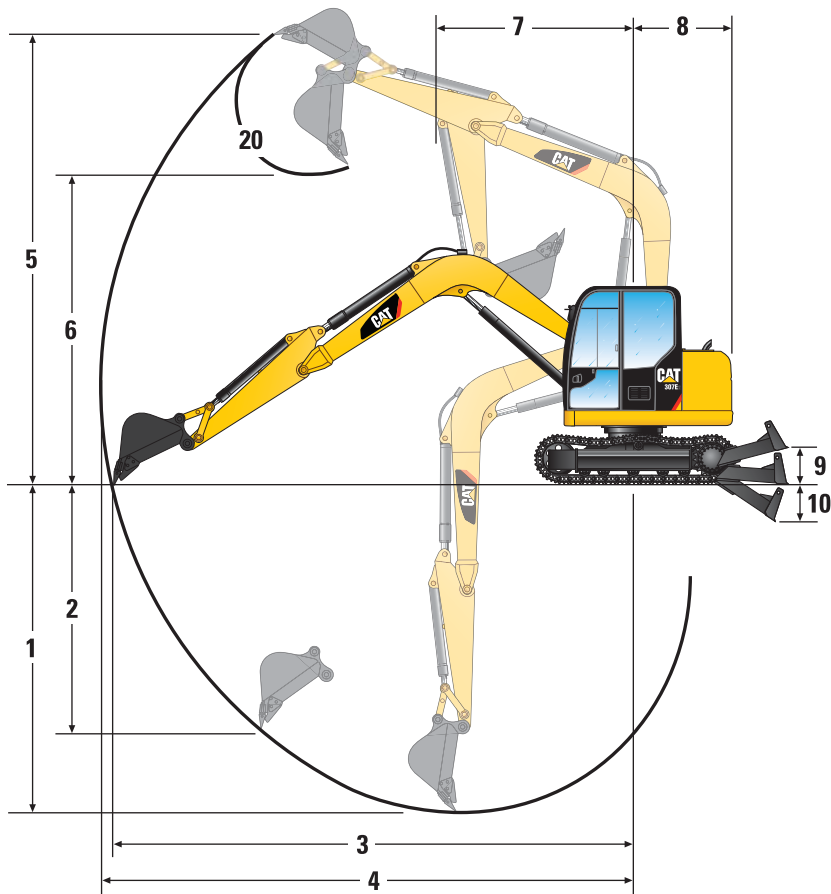
## Sound Levels

Exterior Cab	99 dB(A)
Interior Cab	80 dB(A)

- Operator sound pressure levels measured per ISO 6396 (dynamic).

# 307E2 Mini Hydraulic Excavator Specifications

## Dimensions



### Standard Stick

1	4070 mm
2	3740 mm
3	6180 mm
4	6300 mm
5	7240 mm
6	5190 mm
7	1690 mm
8	1750 mm
9	390 mm
10	350 mm
11	2540 mm

### Standard Stick

12	775 mm
13	2760 mm
14	6070 mm
15	450 mm
16	2300 mm
17	1790 mm
18	2630 mm
19	450 mm
20	180 degree
21	1750 mm

## Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

### OPERATOR STATION

- Cab fully glazed
- Interior light
- Windshield wiper and washer
- Air conditioning, heater and defroster
- Openable upper front windshield
- Removable lower front windshield
- Skylight
- Rear polycarbonate and right glass window
- Sliding door window, tempered glass
- Rear window, emergency exit
- Seat, suspension, fabric covered
- Armrest
- Seatbelt
- Cup holder
- Literature compartment
- Floor mat
- Mirrors
- AM/FM radio
- Monitoring system, gauges and indicators
- Neutral lever hydraulic lockout
- Joystick pilot operated controls
- Travel control pedals with hand levers
- Dial type accelerator
- Cat HD batteries, (cold weather start)
- Alternator 60-amp
- Warning horn
- 12-volt electric starting
- Work lights, cab mounted
- Light, boom mounted
- Product Link™

### HYDRAULICS AND POWER TRAIN

- Cooling package, high ambient
- Extended life coolant –37° C
- Variable displacement load sense hydraulics
- Automatic swing parking brake
- Straight line travel
- Two speed travel
- Engine idle
- Boom lowering device (accumulator)
- Reverse swing damping valve
- Auxiliary hydraulic valve (one way/two way)

### UNDERCARRIAGE, BLADE AND TRACK

- Steel tracks, 450 mm
- Grease lubricated track seals
- Idler end track guiding guards

### OTHER

- Cat “One Key” system
- Fuel cap, lockable
- Heavy duty stick
- Counterweight
- Toolbox
- Bucket

## Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

### OPERATOR STATION

- Bolt-on FOGS capability
- Cab top guard
- Cab front guard

### HYDRAULICS AND POWER TRAIN

- Combined function auxiliary hydraulic circuit

### UNDERCARRIAGE, BLADE AND TRACK

- Dozer blade with float function
- Blade, weld on cutting edge 2300 mm

### OTHER

- Engine oil eco-drain valve
- Water jacket
- Manufacturing film – plate for year of manufacture for export machines

### WORK TOOLS

- Quick Couplers
  - Mechanical
- Thumbs
  - Hydraulic
  - Full Rotation
  - Stiff Link
- Auger
- Hammer
- Shear
- Compactor





For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

© 2016 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, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ7732-01 (03-2016)  
Replaces AEHQ7732  
(GN1)

