



# Cat<sup>®</sup> 305E CR

## MINI HYDRAULIC EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 305E CR Mini Hydraulic Excavator delivers high performance in a compact design to help you work in the tightest applications.

The 305E CR features the following:

- **Fingertip control for the boom swing and auxiliary hydraulic functions** makes operation easier while providing more room on the floor for the operator's feet.
- **Compact Radius Design** lets you work within confined areas. The radius of the upper body stays within 100 mm (4 in) of the undercarriage so the operator can concentrate on the work being done without having to worry about the back of the machine.
- **High digging forces, fast cycle times, and excellent stability** boosts your productivity.
- **Over 200 degrees of bucket rotation** provides greater material retention during truck loading and easier flat wall digging without having to reposition the machine.
- **100% pilot controls and a load sensing hydraulic system.**

### NEW STANDARD FEATURES ON THE 305E CR ARE MADE POSSIBLE WITH THE *COMPASS* (Complete Operation, Maintenance, Performance, And Security System) CONTROL PANEL:

- **Security System:** A standard anti-theft device uses a 5 digit alphanumeric password that is required to start the machine (when the security system is enabled).
- **Adjustable Work Tool Auxiliary Flow Control:** Simple adjustability of the hydraulic flow going down the boom and stick to the work tool. This is done by a simple selection from a flow of 1-15.
- **Continuous Flow:** Set the auxiliary flow in any direction and at any speed simply, safely, and easily on the right hand joystick.
- **Economy Mode:** Save up to 20% fuel while maintaining high productivity with a push of a button.

## Specifications

### Engine

Engine Model	Cat <sup>®</sup> C2.4	
<b>Rated Net Power @ 2,400 rpm</b>		
ISO 9249/EEC 80/1269	30 kW	40.2 hp
<b>Gross Power</b>		
ISO 14396	31.2 kW	41.8 hp
Bore	87 mm	3.4 in
Stroke	102.4 mm	4 in
Displacement	2.4 L	146 in <sup>3</sup>

### Weights\*

Operating Weight with Canopy	4915 kg	10,836 lb
Operating Weight with Cab	5088 kg	11,217 lb

\*Weight includes counterweight, rubber tracks, bucket, operator, full fuel and auxiliary lines.

### Travel System

Travel Speed – High	4.6 km/h	2.8 mph
Travel Speed – Low	2.6 km/h	1.6 mph
Max Traction Force – High Speed	24.1 kN	5,418 lb
Max Traction Force – Low Speed	45.2 kN	10,161 lb
Ground Pressure	28.2 kPa	4.1 psi
Gradeability (maximum)	30°	

### Service Refill Capacities

Cooling System	10.5 L	2.8 gal
Engine Oil	9.5 L	2.5 gal
Fuel Tank	63 L	16.6 gal
Hydraulic Tank	68.3 L	18 gal
Hydraulic System	78 L	20.6 gal

### Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow at 2,400 rpm	119.3 L/min	31.5 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	185 bar	2,690 psi
Auxiliary Circuit – Primary (186 bar/2,734 psi)	70 L/min	18.5 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	38 L/min	10 gal/min
Digging Force – Stick (standard)	24.7 kN	5,550 lb
Digging Force – Stick (long)	21.3 kN	4,788 lb
Digging Force – Bucket	44.7 kN	10,050 lb

### Swing System

Machine Swing Speed	9 rpm
Boom Swing – Left*	80°
Boom Swing – Right	50°

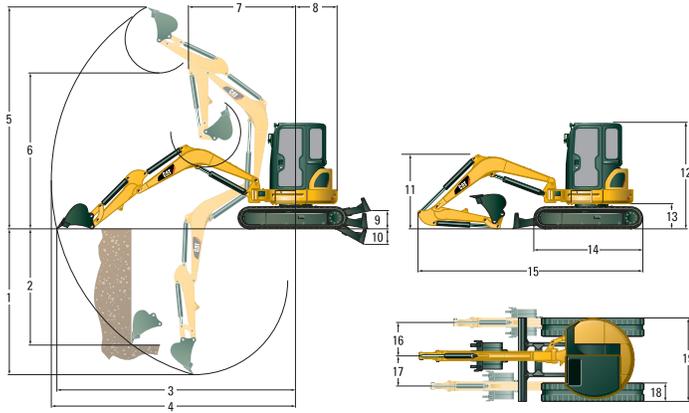
\*Automatic swing break, spring applied, hydraulic release.

### Blade

Width	1980 mm	78.0 in
Height	375 mm	14.8 in
Dig Depth	540 mm	21.3 in
Lift Height	420 mm	16.5 in



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## Dimensions

	Standard Stick		Long Stick	
1	3280 mm	10'9"	3670 mm	12'1"
2	2320 mm	7'7"	2630 mm	8'8"
3	5430 mm	17'10"	5810 mm	19'1"
4	5600 mm	18'5"	5960 mm	19'7"
5	5250 mm	17'3"	5440 mm	17'10"
6	3720 mm	12'2"	3920 mm	12'10"
7	2350 mm	7'8"	2530 mm	8'3"
8	1100 mm	3'7"	1100 mm	3'7"
9	405 mm	1'4"	405 mm	1'4"
10	555 mm	1'10"	555 mm	1'10"
11	1750 mm	5'9"	2150 mm	7'0"
12	2550 mm	8'4"	2550 mm	8'4"
13	615 mm	2'0"	615 mm	2'0"
14	2580 mm	8'5"	2580 mm	8'5"
15	5180 mm	17'0"	5290 mm	17'4"
16	785 mm	2'7"	785 mm	2'7"
17	695 mm	2'3"	695 mm	2'3"
18	400 mm	1'4"	400 mm	1'4"
19	1980 mm	6'6"	1980 mm	6'6"

## Lift Capacities at Ground Level\*

Lift Point Radius		3000 mm (9'8")		4500 mm (14'9")	
		Front	Side	Front	Side
Blade Down	kg	2340	1200	1260	640
	(lb)	(5,159)	(2,646)	(2,778)	(1,411)
Blade Up	kg	1450	1070	760	570
	(lb)	(3,197)	(2,359)	(1,676)	(1,257)

\*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. Lifting capacities are for standard stick.

## STANDARD EQUIPMENT

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable auxiliary flow control for work tools
- Adjustable wrist rests
- Alternator
- Anti-theft security system
- Automatic engine idle
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Boom cylinder guard
- Cab mounted work light
- Canopy with FOPS ISO 10262 (Level 1) and Tip-Over Protection (TOPS) ISO 12117
- Coat hook
- COMPASS display panel
- Cup holder
- Continuous flow
- Control pattern changer (not available in Europe)
- Dozer blade with float function
- Economy mode setting for up to 20% fuel savings
- Floor mat
- Foot travel pedals
- Gauges or indicators for fuel level engine coolant temperature, hour meter, engine oil pressure, air cleaner, alternator and glow plugs, service interval
- Horn
- Hydraulic oil cooler
- Lifting eye on bucket linkage (standard equipment for all regions except Europe)
- Lockable storage box
- Low maintenance linkage pin joints
- Maintenance free battery
- Rubber track
- Retractable seatbelt
- Standard stick
- Suspension seat, vinyl covered
- "Thumb ready" sticks (standard equipment for all regions except Europe)
- Travel alarm (optional in Europe)

## OPTIONAL EQUIPMENT

- Air conditioning
- Angle dozer blade with float function
- Beacon socket for canopy machines
- Boom check valve (Europe only)
- Boom mounted light
- Cab, radio ready with FOPS ISO 10262 (Level 1) and Tip-Over Protection (TOPS) ISO 12117 with heater/defroster, interior light and windshield wiper/washer
- Ecology drain valve for hydraulic tank
- High back suspension seat, fabric covered
- Hydraulic quick coupler lines
- Lifting eye on bucket linkage (optional in Europe, standard for all other regions)
- Long stick
- Mechanical quick coupler
- Mirrors for cab and canopy
- Seatbelt, 75 mm (3 in) wide (optional in Europe, standard in all other regions)
- Secondary auxiliary hydraulic lines
- Steel track and steel track with rubber pads

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