



Cat[®] 305E2 CR

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 305E2 CR Mini Hydraulic Excavator delivers high performance, durability and versatility in a compact design to help you work in a variety of applications. The 305E2 CR features the following:

- **Spacious operator environment** offers industry leading comfort, ergonomically designed 100% pilot controls and excellent visibility for superior productivity and safety on the job.
- **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 Definition Hydraulic System** provides a load sensing and flow sharing capability leading to operational precision, efficient performance and greater controllability.
- **Broad range of Cat Work Tools** makes the Cat Mini Hydraulic Excavator a versatile machine able to meet the requirements of any job site.
- **Over 200 degrees of bucket rotation** provides greater material retention during truck loading and easier flat wall digging without having to reposition the machine.
- **Convenient service and maintenance requirements** include ease of access to daily check points, 500 hour engine oil and filter change period, 500 hour grease interval on front implement, S-O-SSM oil sampling valve and overall long term durability which reduces operating costs and machine downtime.
- **COMPASS Control Panel** is a standard feature that allows the operator to easily adjust auxiliary flows to achieve the optimal work tool performance, activate auto idle or economy mode for improved fuel efficiency and utilize the security system to ensure protection of valuable assets with the simple touch of a button.
- **Cat dealers offer you unmatched customer support** with excellent equipment management services, equipment maintenance and fast parts availability, resulting in optimized performance, reliability and profit.

Specifications

Engine

Engine Model*	Cat C2.4	
Rated Net Power @ 2,200 rpm ISO 9249/EEC 80/1269	30 kW	40.2 hp
Gross Power 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 ³

*Meets U.S. EPA Tier 4 Interim/EU Stage IIIA emission standards.

Weights*

Weight – Canopy, Standard Stick	4975 kg	10,970 lb
Weight – Canopy, Long Stick	5020 kg	11,069 lb
Weight – Cab, Standard Stick	5140 kg	11,334 lb
Weight – Cab, Long Stick	5185 kg	11,443 lb

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

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

Travel System

Travel Speed – High	4.4 km/h	2.7 mph
Travel Speed – Low	2.8 km/h	1.7 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 – Canopy	29.5 kPa	4.3 psi
Ground Pressure – Cab	30.5 kPa	4.4 psi
Gradeability (maximum)	30°	

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow at 2,400 rpm	150 L/min	39.6 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	216 bar	3,132 psi
Auxiliary Circuit – Primary (186 bar/2,734 psi)	80 L/min	21.1 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	25 L/min	6.6 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



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Swing System

Machine Swing Speed	10 rpm
Boom Swing – Left* (without stop)	80°
Boom Swing – Left* (with stop)	60°
Boom Swing – Right	50°

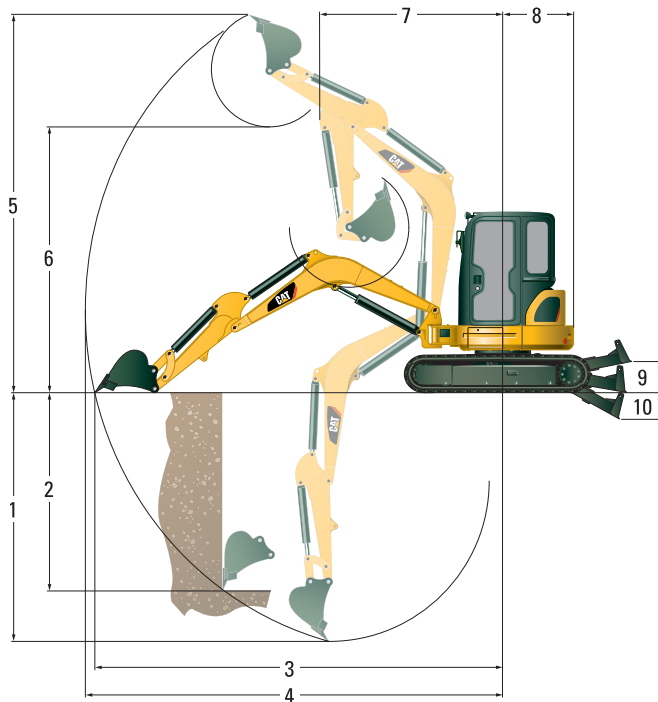
*Automatic swing brake, spring applied, hydraulic release.

Blade

Width	1980 mm	78.0 in
Height	375 mm	14.8 in
Dig Depth	555 mm	21.9 in
Lift Height	405 mm	15.9 in

Operating Specifications

Stick Length – Standard	1350 mm	52 in
Stick Length – Long	1750 mm	67 in



Undercarriage

Number of Carrier Rollers	3
Number of Track Rollers	3
Track Roller Type	Triple Flange

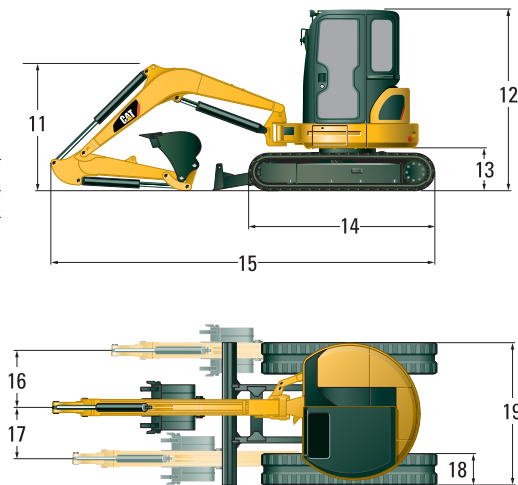
Certification – Cab and Canopy

Roll Over Protective Structure (ROPS)	ISO 12117-2
Tip Over Protective Structure (TOPS)	ISO 12117
Top Guard	ISO 10262 (Level I)

Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		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.



Dimensions

	Standard Stick		Long Stick			Standard Stick		Long Stick	
	mm	in	mm	in		mm	in	mm	in
1 Dig Depth	3280	129	3670	144	11 Boom Height in Shipping Position	1750	69	2150	85
2 Vertical Wall	2320	91	2630	104	12 O/A Shipping Height	2550	100	2550	100
3 Maximum Reach at Ground Level	5330	210	5810	229	13 Swing Bearing Height	615	24	615	24
4 Maximum Reach	5600	220	5960	235	14 O/A Undercarriage Length	2580	102	2580	102
5 Maximum Dig Height	5250	207	5440	214	15 O/A Shipping Length	5180	204	5290	208
6 Maximum Dump Clearance	3720	129	3920	154	16 Boom Swing Right	785	31	785	31
7 Boom In Reach	2350	93	2530	100	17 Boom Swing Left	695	27	695	27
8 Tail Swing	1100	43	1100	43	18 Track Belt/Shoe Width	400	16	400	16
9 Maximum Blade Height	405	16	405	16	19 O/A Track Width	1980	78	1980	78
10 Maximum Blade Depth	555	22	555	22					

STANDARD EQUIPMENT

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- 100% pilot control joysticks
- Adjustable auxiliary flow control for work tools
- Adjustable armrests
- 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
- 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 fuel cap
- 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
- Block heater
- Boom check valve
- Boom mounted light
- Cab, radio ready with FOPS ISO 10262 (Level 1), ROPS ISO 12117-2 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
- Long stick
- Mirrors for cab and canopy
- Quick Coupler, mechanical or hydraulic
- Secondary auxiliary hydraulic lines
- Steel track and steel track with rubber pads
- Stick check valve

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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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