



# Cat<sup>®</sup> 303.5D CR

## MINI HYDRAULIC EXCAVATOR

### FEATURES:

The Cat<sup>®</sup> 303.5D CR Mini Hydraulic Excavator delivers high performance in a compact design to help you work in the tightest applications.

The 303.5D CR features the following:

- **Spacious, comfortable operator station** provides superior legroom and excellent visibility to minimize fatigue.
- **Zero Tail Swing design** lets you work within confined areas. The radius of the upper body stays within the width 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 increased stability** boost your productivity.
- **Load sensing hydraulics** provide smooth, powerful performance as well as increased fuel efficiency.
- **Fingertip control for the boom swing and auxiliary hydraulic functions** makes operation easier while providing more foot room.
- **Choice of stick lengths** are available to meet your application needs. Sticks come “thumb-ready” as standard with brackets and relief valves installed from the factory (optional in Europe).
- **Automatic 2-speed** improves maneuverability around the job site by balancing high speed and torque travel requirements.
- **Angle dozer blade** option can be positioned straight ahead or up to 25 degrees to the left or right for greater machine versatility.
- **Over 200 degrees of bucket rotation** provides greater material retention during truck loading and easier vertical wall digging without having to reposition the machine.
- **A variety of Cat Work Tools** are available including hammers, augers and thumbs. The Cat Quick Coupler makes work tool changes fast and easy.

## Specifications

### Engine

Engine Model	Mitsubishi S3Q2	
Rated Net Power (ISO 9249)	22 kW	30 hp
Gross Power	23.2 kW	31 hp
Bore	88 mm	3.5 in
Stroke	103 mm	4.1 in
Displacement	1.9 L	116 in <sup>3</sup>

### Weights\*

Operating Weight with Canopy	3540 kg	7,800 lb
Operating Weight with Cab	3700 kg	8,160 lb

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

### Travel System

Travel Speed – High	4.7 km/h	2.9 mph
Travel Speed – Low	2.7 km/h	1.7 mph
Maximum Traction Force – High Speed	17.0 kN	3,820 lb
Maximum Traction Force – Low Speed	31.0 kN	6,970 lb
Ground Pressure	30.4 kPa	4.4 psi

### Service Refill Capacities

Cooling System	5.3 L	1.4 gal
Engine Oil	5.7 L	1.5 gal
Fuel Tank	45 L	11.9 gal
Hydraulic Tank	33 L	8.7 gal
Hydraulic System	65 L	17.2 gal

### Hydraulic System\*\*

Pump Flow at 2,400 rpm	88 L/min	23.2 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	172 bar	2,495 psi
Auxiliary Circuit – Primary (186 bar/2,734 psi)	60 L/min	15.9 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	27 L/min	7.2 gal/min
Digging Force – Stick (standard)	18.9 kN	4,250 lb
Digging Force – Stick (long)	16.9 kN	3,799 lb
Digging Force – Bucket	33.0 kN	7,420 lb

\*\* Load sensing hydraulics with variable displacement piston pump.

### Swing System

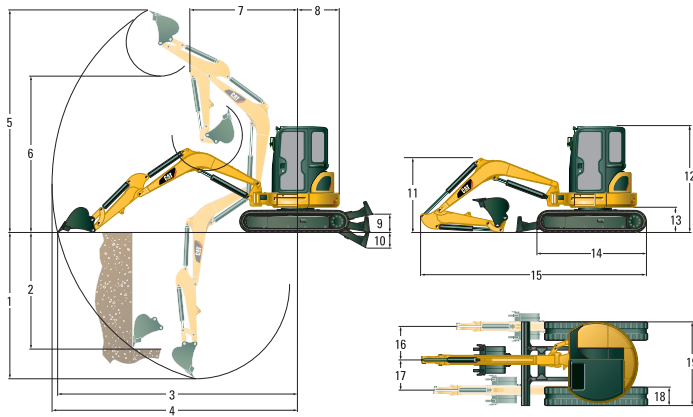
Machine Swing Speed	9 rpm
Boom Swing – Left (without stop)	80°
Boom Swing – Left (with stop)	55°
Swing – Right	50°

### Blade

Width	1780 mm	70.0 in
Height	325 mm	12.8 in
Dig Depth	470 mm	18.5 in
Lift Height	400 mm	15.8 in



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## Dimensions

	Standard Stick		Long Stick	
1	2880 mm	9'6"	3180 mm	10'4"
2	2320 mm	7'8"	2470 mm	8'2"
3	5060 mm	16'8"	5320 mm	17'6"
4	5200 mm	17'1"	5440 mm	17'10"
5	4920 mm	16'2"	5030 mm	16'6"
6	3520 mm	11'6"	3640 mm	11'11"
7	2060 mm	6'9"	2180 mm	7'2"
8	890 mm	2'11"	890 mm	2'11"
9	400 mm	1'4"	400 mm	1'4"
10	470 mm	1'7"	470 mm	1'7"
11	1420 mm	4'8"	1650 mm	5'4"
12	2500 mm	8'2"	2500 mm	8'2"
13	565 mm	1'10"	565 mm	1'10"
14	2220 mm	7'3"	2220 mm	7'3"
15	4730 mm	15'6"	4790 mm	15'9"
16	765 mm	2'6"	765 mm	2'6"
17	670 mm	2'2"	670 mm	2'2"
18	300 mm	1'0"	300 mm	1'0"
19	1780 mm	5'10"	1780 mm	5'10"

## Lift Capacities at Ground Level\*

Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		Front	Side	Front	Side
Blade Down	kg	1450	850	960	570
	(lb)	(3,197)	(1,874)	(2,116)	(1,257)
Blade Up	kg	870	790	580	530
	(lb)	(1,918)	(1,742)	(1,279)	(1,168)

\* 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 wrist rests
- Alternator
- 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), Tip-Over Protection (TOPS) ISO 12117
- Coat hook
- Cup holder
- Control pattern changer (not available in Europe)
- Dozer blade with float function
- 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 (optional in Europe)
- Lockable storage box
- Low maintenance linkage pin joints
- Maintenance free battery
- Rubber track
- Seatbelt, 76 mm (3 in) wide, retractable (optional in Europe)
- 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), Tip-Over Protection (TOPS) ISO 12117, heater/defroster, interior light and windshield wiper/washer
- Ecology drain valve for hydraulic tank
- Ecology drain valve for engine oil
- Fan and sun blind installation
- Front screen guard for cab and canopy
- High back suspension seat, fabric covered
- Hydraulic quick coupler lines
- Long stick
- Mechanical quick coupler
- Mirrors for cab and canopy
- Secondary auxiliary hydraulic lines
- Steel track and steel track with rubber pads

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