



Cat® M322D

WHEEL EXCAVATOR

FEATURES:

- **Engine** – The EU Stage IIIA compliant C6.6 offers increased performance and reliability while reducing fuel consumption and sound levels.
- **Environmentally Responsible Design** – Helping to protect our environment, the engine has low operator and spectator sound levels, longer filter change intervals and is more fuel-efficient.
- **Hydraulics** – The state of the art load-sensing hydraulic system combined with a separate dedicated swing pump provides fast cycle times, increased lift capacity and high bucket and stick forces. This combination maximizes your productivity in any job.
- **Serviceability** – For increased safety, all daily maintenance points are accessible from ground level. A centralized greasing system allows lubrication of critical points.
- **Operator Comfort** – The totally redesigned operator station maximizes comfort while increasing safety. The available auto-weight adjusted air-suspension seat with heated and cooled ventilated cushions improves operator comfort. Safety is enhanced by the new color monitor and standard rear-mounted camera.
- **Undercarriage** – Various undercarriage configuration with blade and outriggers are available to provide the best solution for you.

Specifications

Engine

Engine Model	Cat® C6.6 with ACERT™ Technology
Ratings	2,000 rpm
Gross Power	129 kW (175 hp)
Net Power	
ISO 9249	123 kW (167 hp)
80/1269/EEC	123 kW (167 hp)
Bore	105 mm
Stroke	127 mm
Displacement	6.6 L
Cylinders	6
Maximum Torque at 1,400 rpm	750 N·m

- All engine horsepower (hp) are metric.
- EU Stage IIIA compliant.
- Full engine net power up to 3000 m altitude.

Hydraulic System

Tank Capacity	220 L
System	350 L
Maximum Pressure	
Implement Circuit	
Normal	350 bar
Heavy Lift	375 bar
Travel Circuit	350 bar
Auxiliary Circuit	
High Pressure	350 bar
Medium Pressure	185 bar
Swing Mechanism	340 bar

Hydraulic System (cont'd)

Maximum Flow	
Implement/Travel Circuit	350 L/min
Auxiliary Circuit	
High Pressure	250 L/min
Medium Pressure	50 L/min
Swing Mechanism	112 L/min

Weights

VA Boom*	
Rear Dozer Only	19 650 kg
Rear Dozer, Front Outriggers	20 850 kg
Front and Rear Outriggers	21 100 kg
One-Piece Boom*	
Rear Dozer Only	19 000 kg
Rear Dozer, Front Outriggers	20 200 kg
Front and Rear Outriggers	20 450 kg
Sticks	
Short (2200 mm)	650 kg
Medium (2500 mm)	700 kg
Long (2900 mm)	780 kg
Dozer Blade	920 kg
Outriggers	1260 kg
Counterweight	
Standard	3900 kg
Optional	4400/5400 kg

- Machine weight with medium stick, 4400 kg counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.



M322D Wheel Excavator

Transmission

Forward/Reverse	
1st Gear	7 km/h
2nd Gear	25 km/h
Creeper Speed	
1st Gear	3 km/h
2nd Gear	12 km/h
Drawbar Pull	112 kN
Maximum Gradeability	60%

Swing Mechanism

Swing Speed	9 rpm
Swing Torque	56 kN-m

Tires

- Standard
- 11.00-20 (dual pneumatic)
- Optional
- 10.00-20 (dual solid rubber)

Sound Levels

Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 103 dB(A).

Undercarriage

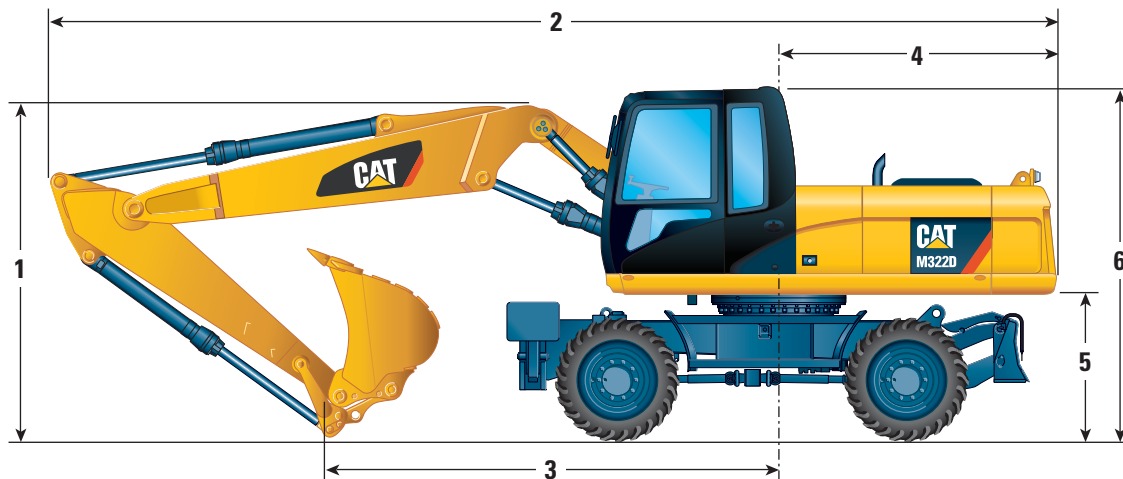
Ground Clearance	380 mm
Maximum Steering Angle	35°
Oscillation Axle Angle	± 9°
Minimum Turning Radius	
Standard Axle	
Outside of Tire	6800 mm
End of VA Boom	7800 mm
End of One-Piece Boom	9300 mm

Service Refill Capacities

Fuel Tank	385 L
Cooling	37 L
Engine Crankcase	15 L
Rear Axle Housing (differential)	14 L
Front Steering Axle (differential)	11 L
Final Drive	2.5 L
Powershift Transmission	2.5 L

Cab/ROPS/FOGS

- Cat cab with integrated Roll Over Protective Structure (ROPS) meets ISO 12117-2:2008 criteria.
- Cab with Falling Object Guard Structure (FOGS) meets ISO 10262.



Dimensions (All dimensions are approximate.)

		VA Boom			One-Piece Boom		
		2200	2500	2900	2200	2500	2900
Stick Length	mm						
1 Shipping Height	mm	3260	3230	3250	3300	3250	3290
2 Shipping Length	mm	9430	9440	9430	9650	9640	9650
3 Support Point	mm	4160	3660	3420	4240	3720	3440
4 Tail Swing Radius	mm		2820			2820	
5 Counterweight Clearance	mm		1310			1310	
6 Cab Height	mm		3200			3200	
With 1200 mm Fixed Cab Riser	mm		4400			4400	

STANDARD EQUIPMENT

ELECTRICAL

- Alternator, 75 A
- Lights
 - Boom working light
 - Cab interior light
 - Roading lights two front
 - Roading lights two LED modules rear
 - Rotating beacon on cab
 - Working lights, cab mounted (front and rear)
- Main shut-off switch
- Maintenance free batteries
- Signal/warning horn

ENGINE

- Automatic engine speed control
- Automatic starting aid
- Cat C6.6 with ACERT Technology EU Stage IIIA compliant
- Fuel/water separator with level indicator

HYDRAULICS

- Heavy lift mode
- Load-sensing Plus hydraulic system
- Manual work modes (economy, power)
- Separate swing pump
- Stick regeneration circuit

OPERATOR STATION

- ROPS cab structure compliant with 2006/42/EC and tested according to ISO 12117-2:2008
- Adjustable armrests
- Air conditioner, heater and defroster with automatic climate control
- Ash tray with cigarette lighter (24 volt)
- Beverage cup/can holder
- Bolt-on FOGS capability
- Bottle holder
- Bottom mounted parallel wiping system that covers the upper and lower windshield glass
- Camera mounted on counterweight displays through cab monitor
- Coat hook
- Floor mat, washable, with storage compartment
- Fully adjustable suspension seat
- Instrument panel and gauges
 - Information and warning messages in local language
 - Gauges for fuel level, engine coolant and hydraulic oil temperature
 - Filters/fluids change interval
 - Indicators for headlights, turning signal, low fuel, engine dial setting
 - Clock with 10-day backup battery

OPERATOR STATION (cont'd)

- Laminated front windshield
- Left side console, tiltable, with lock out for all controls
- Literature compartment behind seat
- Literature holder in right console
- Mobile phone holder
- Parking brake
- Positive filtered ventilation
- Power supply, 12V-7A
- Rear window, emergency exit
- Retractable seat belt
- Skylight
- Sliding door windows
- Steering column, tiltable
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight

UNDERCARRIAGE

- Heavy-duty axles, advanced travel motor, adjustable braking force
- Oscillating front axle with remote greasing
- Tires, 11.00-20 16 PR, dual
- Tool box in undercarriage
 - Second tool box for undercarriage
- Two-piece drive shaft

OTHER EQUIPMENT

- Automatic swing brake
- Counterweight, 3900 kg
- Mirrors, frame and cab
- Product Link ready
- Tool box in upperframe, lockable

M322D Wheel Excavator

OPTIONAL EQUIPMENT

AUXILIARY CONTROLS AND LINES

- Auxiliary boom and stick lines
- Anti-drift valves for bucket, stick, VA boom and tool control/multi-function circuits
- Basic control circuits:
 - Single action
 - One-way, high pressure circuit, for hammering application
 - Medium pressure
 - Two-way, medium pressure circuit, for rotating or tilting of work tools
 - Tool control/multi function
 - One/two-way high pressure for hammer application or opening and closing of a work tool
 - Programmable flow and pressure for up to 10 work tools – selection via monitor
 - Second high pressure
 - Additional two-way, high pressure circuit, for tools requiring a second high or medium pressure function
 - Quick coupler control
- Cat BIO HYDO Advanced HEEST™ biodegradable hydraulic oil
- Generator with valve and priority function
- Lowering control devices for boom and stick
- SmartBoom™

FRONT LINKAGE

- Booms
 - One-piece boom, 5650 mm
 - VA boom (two piece), 5440 mm
- Bucket linkage with diverter valve
- Sticks
 - 2200, 2500, 2900 mm

ELECTRICAL

- Back-up alarm with three selectable modes
- Heavy-duty maintenance free batteries
- Refueling pump

OPERATOR STATION

- Adjustable hydraulic sensitivity
- CD/MP3 Radio (12V) at rear location including speakers and 12V converter
- Falling objects guard
- Joystick steering
- Seat, adjustable high-back
 - mechanical suspension
 - air suspension (vertical)
 - deluxe with headrest, air suspension
- Headrest
- Travel speed lock
- Vandalism guards
- Visor for rain protection
- Windshield
 - One-piece high impact resistant
 - 70/30 split, openable

UNDERCARRIAGE

- Dozer blade, rear mounted
- Outriggers, front and/or rear mounted
- Spacer rings for tires

OTHER EQUIPMENT

- Auto-lube system (implements and swing gear)
- Cat Machine Security System
- Cat Product Link
- Counterweight, 4400 or 5400 kg
- Mirrors heated, frame and cab
- Ride Control
- Tires (see pg. 2)
- Waste Handling Package