



Cat[®] M318D

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	1,800 rpm
Gross Power	130 kW (177 hp)
Net Power	
ISO 9249	124 kW (169 hp)
80/1269/EEC	124 kW (169 hp)
Bore	105 mm
Stroke	127 mm
Displacement	6.6 L
Cylinders	6
Maximum Torque at 1,400 rpm	805 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	170 L
System	255 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	310 bar

Hydraulic System (cont'd)

Maximum Flow	
Implement/Travel Circuit	290 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	17 850 kg
Rear Dozer, Front Outriggers	18 900 kg
Front and Rear Outriggers	19 100 kg
One-Piece Boom*	
Rear Dozer Only	17 350 kg
Rear Dozer, Front Outriggers	18 350 kg
Front and Rear Outriggers	18 550 kg
Sticks	
Short (2200 mm)	550 kg
Medium (2500 mm)	580 kg
Long (2800 mm)	600 kg
Industrial (3300 mm)	520 kg
Dozer Blade	740 kg
Outriggers	1030 kg
Counterweight	4000 kg

- Machine weight with medium stick, 4000 kg counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.



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Transmission

Forward/Reverse	
1st Gear	8 km/h
2nd Gear	37 km/h
Creeper Speed	
1st Gear	3 km/h
2nd Gear	13 km/h
Drawbar Pull	99 kN
Maximum Gradeability	60%

Swing Mechanism

Swing Speed	10.5 rpm
Swing Torque	48 kN-m

Tires

- Standard
- 10.00-20 (dual pneumatic)
- Optional
- 11.00-20 (dual pneumatic)
 - 18 R 19.5 XF (single pneumatic)
 - 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

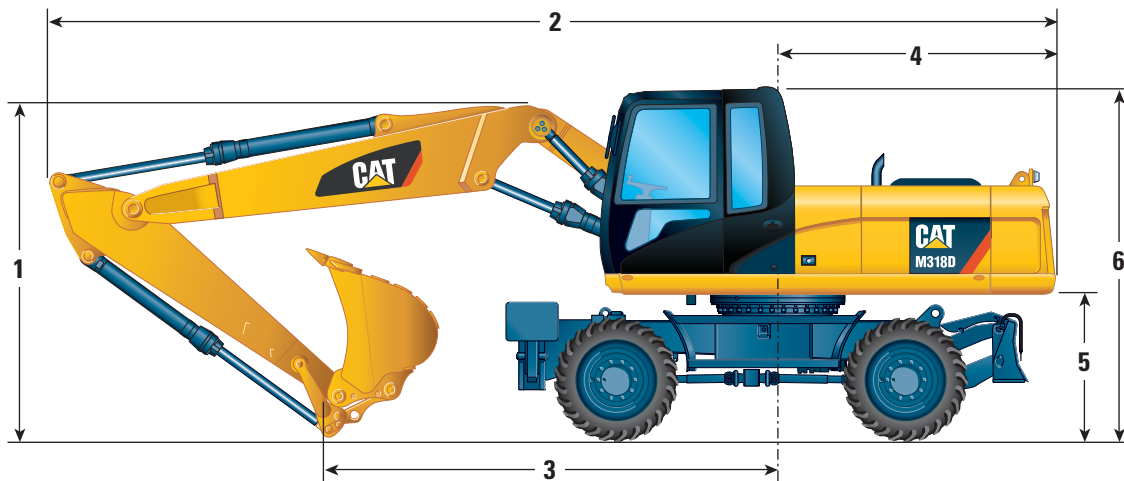
Ground Clearance	370 mm
Maximum Steering Angle	35°
Oscillation Axle Angle	± 9°
Minimum Turning Radius	
Standard Axle	
Outside of Tire	6400 mm
End of VA Boom	7000 mm
End of One-Piece Boom	8300 mm
Wide Axle	
Outside of Tire	6500 mm
End of VA Boom	7100 mm
End of One-Piece Boom	8500 mm

Service Refill Capacities

Fuel Tank	385 L
Cooling	36 L
Engine Crankcase	15 L
Rear Axle Housing (differential)	14 L
Front Steering Axle (differential)	10.5 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	2800	*3300	2200	2500	2800	*3300
Stick Length	mm	2200	2500	2800	*3300	2200	2500	2800	*3300
1 Shipping Height	mm	3170	3170	3300	3330	3190	3210	3330	3290
2 Shipping Length	mm	8870	8550	8820	8850	8870	8960	8950	9000
3 Support Point	mm	3920	3650	3510	3270	3810	3490	3310	3080
4 Tail Swing Radius	mm			2565				2565	
5 Counterweight Clearance	mm			1275				1275	
6 Cab Height	mm			3170				3170	
With 1200 mm Fixed Cab Riser	mm			4370				4370	
Overall Machine Width	mm			2550				2550	
Wide Gauge Axle	mm			2750				2750	

* Industrial stick

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, 10.00-20 16 PR, dual
- Tool boxes (right- and left-hand side) in undercarriage
- Two-piece drive shaft

OTHER EQUIPMENT

- Automatic swing brake
- Counterweight, 4000 kg
- Mirrors, frame and cab
- Product Link ready
- Tool box in upperframe, lockable

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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, 5350 mm
 - VA boom (two piece), 5260 mm
- Bucket linkage with diverter valve
- Sticks
 - 2200, 2500, 2800 mm
 - 3300 mm industrial with drop nose

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
- Travel speed lock
- Vandalism guards
- Visor for rain protection
- Windshield
 - One-piece high impact resistant
 - 70/30 split, openable

UNDERCARRIAGE

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

OTHER EQUIPMENT

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

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

AEHQ6259 (05-11)

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