

# M316D

Wheel Excavator



## Engine

Engine Model	Cat® C6.6 with ACERT™ Technology	
Net power (ISO 9249) at 1,800 rpm	118 kW	158 hp

## Weights

Operating Weight	17 000 to 19 200 kg	37,500 lb to 42,328 lb
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## Bucket Specifications

Bucket Capacities	0.38 to 1.26 m <sup>3</sup>	0.5 to 1.65 yd <sup>3</sup>
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## Working Ranges

Maximum Reach at Ground Level	9380 mm	30'10"
Maximum Digging Depth	6070 mm	19'11"

## Drive

Maximum Travel Speed	37 km/h	23 mph
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## Features

### Engine

The EPA Tier 3 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.

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**The D Series incorporates innovations for improved performance and versatility.**

**Increased lifting capacity, improved cycle times and ease of operation lead to increased productivity and lower operating costs.**

# Engine

Built for power, reliability, low maintenance, excellent fuel economy and low emissions.

## Powerful Performance

The Cat® C6.6 engine with ACERT™ Technology introduces a series of evolutionary, incremental improvements that provide breakthrough engine performance. The building blocks of ACERT Technology are fuel delivery, air management and electronic control. ACERT Technology optimizes engine performance while meeting EPA Tier 3 engine emission regulations. The Cat C6.6 engine in the M316D delivers a maximum gross power of 124 kW (166 hp) at a rated speed of 1,800 rpm.

## Low Fuel Consumption

The C6.6 is electronically controlled and uses Cat Common Rail Fuel System and fuel pump. This combination provides outstanding fuel consumption during both production and travel. When the system recognizes roading application the engine will operate at the most efficient system operating point to save fuel without compromising road performance.

## Low Noise, Low Vibration

The Cat C6.6 design improves operator comfort by reducing sound and vibration.

## Cooling System

An electronically controlled, hydraulic motor drives a variable speed on-demand fan for engine coolant and hydraulic oil. The optimum fan speed is determined based on coolant and hydraulic oil temperature resulting in reduced fuel consumption and lower sound levels. The electronic engine control continuously compensates for the varying fan load, providing consistent net power, regardless of operating conditions.

## One-Touch Low Idle Control

The two stage, one-touch Automatic Engine Speed Control reduces engine speed if no operation is performed, maximizing fuel efficiency and reducing sound levels.

## Waste Handling Package

The Waste Handling Package has been specifically developed for Cat Wheel Excavators working in waste transfer stations or other extremely dusty applications. This option features the following:

- An automatic, hydraulic reversible fan that reverses airflow after a set interval, manually adjustable between 5 and 60 minutes with a switch located inside the cab.
- A special dense wire mesh cooling system hood further reduces radiator clogging.
- Two cyclone filters provide clean filtered air to the engine compartment, air cleaner, aftercooler and air conditioner condenser.



# Hydraulics

Load-sensing hydraulic system provides fast cycle times, increased lift capacity and high bucket and stick forces to maximize your productivity in any job.



## Dedicated Swing Pump

A dedicated variable displacement piston pump and fixed displacement piston motor power the swing drive. This closed hydraulic circuit maximizes swing performance without reducing power to the other hydraulic functions, resulting in smoother combined movements.

## Heavy Lift Mode

This mode maximizes lifting performance by boosting the lifting capability of the excavator by 7%.

## Adjustable Hydraulic Sensitivity

This function allows the operator to adjust the aggressiveness of the machine according to the application. For precision work, one of four different levels of aggressiveness can be preselected.

## Proportional Auxiliary Hydraulics

Versatility of the hydraulic system can be expanded to utilize a wide variety of hydraulic work tools using multiple valve options.

- The Multi-Combined Valve is the core of the Tool Control System, allowing the operator to select up to ten preprogrammed work tools from the monitor. These preset hydraulic parameters support either one-way or two-way flow. The joystick sliding switches allow modulated control of the work tool.
- A dedicated Hammer circuit is the best option for tools that require one-way flow only, and do not require the flexibility provided by the Multi-Combined Valve.
- The Medium Pressure Function Valve provides proportional flow that is ideal for tilting buckets or rotating tools.
- A new feature for the D Series Wheel Excavators is the optional second High Pressure valve. In combination with the Multi-Combined Valve, it provides the possibility to operate the machine with work tools or in applications requiring a third auxiliary hydraulic function, such as a tilting/rotating work tool.

## Stick Regeneration Circuit

The stick regeneration circuit increases efficiency and helps increase controllability for higher productivity and lower operating costs.

## Quick Coupler

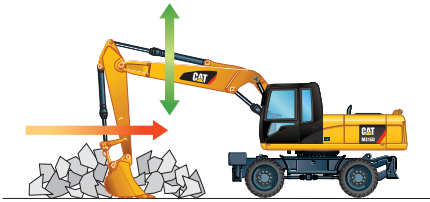
The machine can be optionally equipped with a dedicated hydraulic circuit to operate hydraulic quick couplers.

## Hydraulic Snubbers

Caterpillar integrates its cylinder snubber technology into all Wheel Excavator boom and stick cylinders. These snubbers help cushion shocks, reduce sound and increase cylinder life.

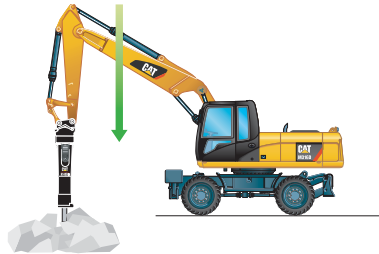
# SmartBoom™

Reduces stress and vibrations transmitted to the machine and provides a more comfortable environment.



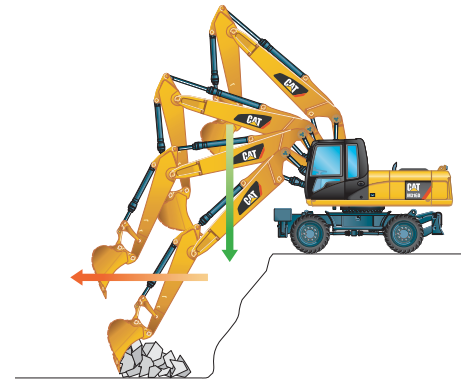
## Rock Scraping

Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows the operator to concentrate on stick and bucket, while boom freely goes up and down without using pump flow.



## Hammer Work

The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plate compactors.



## Truck Loading

Loading trucks from a bench is more productive and fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.

# Environmentally Responsible Design

The M316D helps build a better world and preserve the fragile environment.

## Fuel Efficiency

The D Series Wheel Excavators are designed for outstanding performance with high fuel efficiency. This means more work done in a day, less fuel consumed and minimal impact on our environment.

## Low Exhaust Emissions

The new Cat® C6.6 engine meets the EPA Tier 3 emissions regulations while offering increased performance, reliability and reduced fuel consumption and sound levels.

## Quiet Operation

Operator and spectator noise levels are extremely low as a result of the new variable speed fan and remote cooling system.

## Biodegradable Hydraulic Oil

The optional biodegradable hydraulic oil (Cat BIO HYDO Advanced HEES™) is formulated to provide excellent

high-pressure and high temperature characteristics, and is fully compatible with all hydraulic components. Cat BIO HYDO Advanced HEES™ is fully decomposed by soil or water microorganisms, providing a more environmentally sound alternative to mineral-based oils.

## Fewer Leaks and Spills

Lubricant fillers and drains are designed to minimize spills. Cat O-Ring Face Seals, Cat XT™ Hose and hydraulic cylinders are all designed to help prevent fluid leaks that can reduce the machine performance and cause harm to the environment.

## Longer Service Intervals

Working closely with your Cat dealer can help extend service intervals for engine oil, hydraulic oil, axle oil and coolant. Meaning fewer required fluids and fewer disposal, all adding up to lower operating costs.

# Operator Comfort

The interior layout maximizes operator space, provides exceptional comfort and reduces operator fatigue.



## Interior Operator Station

Improved visibility and ergonomics are some of the many new features of the D Series Wheel Excavators. The operator station provides maximum space and is designed for simplicity and functionality. Frequently used switches are centralized and are situated on the right-hand switch console. The left-hand seat console controls dozer blade and/or outriggers, and is tiltable for easy access to the cab. The fully automatic climate control adjusts temperature and air flow for exceptional operator comfort. Other comfort features include a cigar lighter, ashtray, cup/can holder, magazine rack and integrated mobile phone holder.

## Cab Construction

The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance to fatigue and vibration. This design allows the falling object guards to be bolted directly to the cab. The cab shell is attached to the frame with rubber mounts that limit vibration and sound transmitted from the frame, substantially reducing interior noise levels.

## Viewing Area

To maximize visibility, all glass is affixed directly to the cab, eliminating the use of window frames. Choice of fixed or easy-to-open split front windshield meet operator preference and application conditions.

- The 70/30 split front windshield stores the upper portion above the operator. The lower front windshield features a rounded design to maximize downward visibility and improves wiper coverage. Also features the one-touch action release system.
- The fixed front windshield is high impact resistant laminated glass.
- A large skylight provides superb upward visibility. The retractable sunscreen blocks direct sunlight.

## Heated Mirrors

Another new feature is electrically heated mirrors, increasing safety and visibility in cold conditions.

## Wipers

The parallel wiper system maximizes visibility in poor weather conditions. The wiper virtually covers the entire front windshield, cleaning the operator's immediate line of sight.



## Monitor

The new compact color monitor displays information in local language that is easy to read and understand. Functions include:

- 2 times 5 programmable “Quick Access” buttons for one-touch selection of favorite functions.
- Filter and oil change warnings are displayed when the number of hours reaches the maintenance interval.
- Tool select function allows the operator to select up to 10 predefined hydraulic work tools.
- Adjustable braking characteristics enable the operator to select three levels of travel motor retarder aggressiveness when releasing the travel pedal.
- Provides a rear camera view that is activated through the monitor menu.



## Deluxe Seat

The optional deluxe seat, equipped with an active seat climate system, improves operator comfort. Cooled air flows through the seat cushions to reduce body perspiration. On cold days, a two-step seat heater keeps the operator warm and comfortable. The fully adjustable seat with adjustable lumbar support automatically adjusts to the driver's weight providing a more relaxed and comfortable environment.



## Lunch Box

A large storage compartment is located behind the operator's seat. The compartment provides sufficient room to store items such as a lunch box. A cover secures the contents during machine operation.



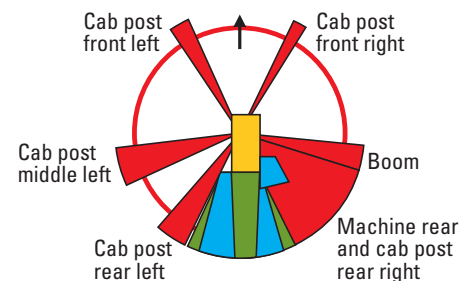
## Foot Pedals

Two-way pedals for travel and auxiliary circuits provide increased floor space, reducing the need to change positions. The foot pedal for auxiliary high-pressure circuit can be locked in the off position and used as a footrest for greater operator comfort.

## Cat Standard Rearview Camera

The rearview camera displays on the operator monitor. Together with the best in class visibility to the front, up, left and right, the rearview camera ensures the safe operation of the machine and fulfills the requirements of ISO 5006/EN474.

## Field of Vision



Legend:

Red: limitations due to cab post and/or boom

Blue: additional visibility due to mirrors

Green: additional visibility due to rearview camera



# Undercarriage

Undercarriage and axle design provides maximum strength, flexibility and mobility on wheels.

## Increased Travel Speed

The maximum travel speed for the M316D is 37 km/h (23 mph), reducing travel time between sites and increasing productivity.

## Heavy-Duty Axles and Stabilizers

The D Series undercarriage provides rigidity and long life. Effective hydraulic line routing, transmission protection and heavy-duty axles make the undercarriage perfect for wheel excavator applications. The front axle offers wide oscillating and steering angles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance.

## Advanced Disc Brake System

The disc brake system acts directly on the hub instead of the drive shaft to avoid planetary gear backlash. This solution minimizes the rocking effect associated with working free on wheels. The axle design lowers maintenance and lifetime costs. Oil change intervals are at 2,000 working hours, further reducing owning and operating costs.

## Fenders

The optional fenders provide excellent coverage of the front and rear tires, protecting the machine from mud and dirt. Water cannot splash up on the windscreen or cooler. The fenders further protect the machine from stones and debris being thrown up by the tires, providing additional safety for the machine, other vehicles and personnel working close to the excavator.



# Booms and Sticks

Designed for maximum flexibility to keep production high on all jobs.

## Design

Booms and sticks are welded, box section structures with thick, multiplate fabrications in high stress areas, for rugged performance and long service life.

## Flexibility

The choice of three booms and four sticks provides the right balance of reach and digging forces for all applications.

## Variable Adjustable (VA) Boom

The VA boom offers improved right side visibility and machine roading balance. When working in tight quarters or lifting heavy loads, the VA boom offers the best performance.

## One-Piece Boom

The one-piece boom fits best for all standard applications such as truck loading and digging. A unique straight section in the curve of the side plate reduces stress flow and helps increase boom life.

## Offset Boom

The large offset dimensions (left/right 2460 [8 ft 1 in]/ 2760 mm [9 ft 1 in]) allow you to dig along walls, over obstacles, to grade while driving, and to dig under laid tubes without damaging them. The combination with a tiltable ditch cleaning bucket lets you operate a highly versatile system.

## Sticks

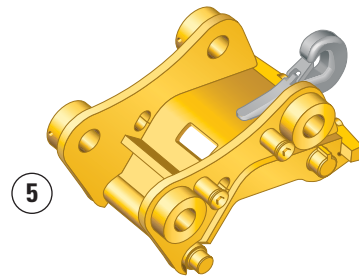
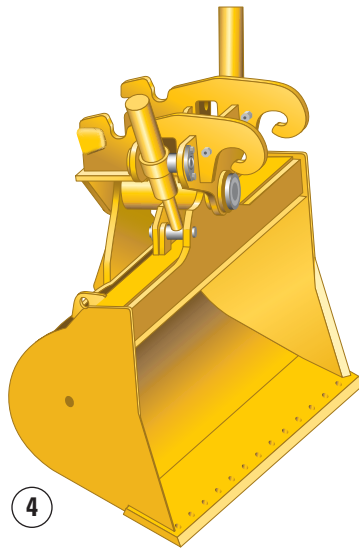
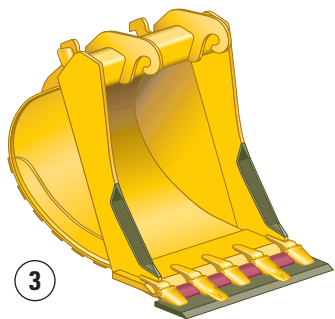
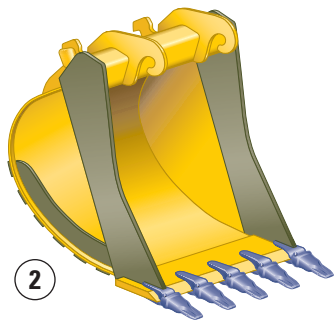
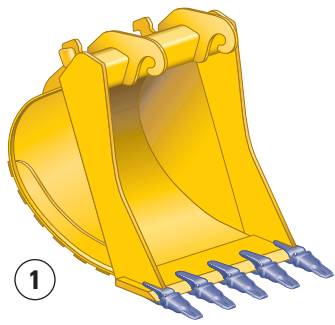
Four different stick lengths are offered to match different application requirements:

- Short stick (2100 mm [6 ft 11 in]) for maximum breakout force and lifting capability.
- Medium stick (2400 mm [7 ft 10 in]) for greater crowd force and lift capacity.
- Long stick (2600 mm [8 ft 6 in]) for greater depth and reach requirements.
- Industrial stick (3100 mm [10 ft 2 in]) for use with free-swinging grapples in material handling and industrial applications.



# Work Tools

A wide variety of Work Tools help optimize machine performance.



## Work Tools

Cat work tools are designed to function as an integral part of your excavator and to provide the best possible performance in your particular application. All work tools are performance-matched to Cat machines.

## Quick Couplers

Quick Couplers enable the operator to simply release one work tool and connect to another, making your hydraulic excavator highly versatile. Productivity also increases, as a carrier no longer needs to be idle between jobs. Caterpillar offers hydraulic and spindle quick coupler versions.

## Buckets

Caterpillar offers a wide range of specialized buckets, each designed and tested to function as an integral part of your excavator. Buckets feature the new Cat K Series™ Ground Engaging Tools.

- 1 **Excavation (X)**
- 2 **Extreme Excavation (EX)**
- 3 **Excavation Leveling**
- 4 **Ditch Cleaning**
- 5 **Quick Coupler**

# Purpose designed and built to Caterpillar's high durability standards.

## Hammers

Cat hammer series deliver very high blow rates, increasing the productivity of your tool carriers in demolition and construction applications. Wide oil flow acceptance ranges make the Cat hammers suitable for a wide range of carriers and provide a system solution from one safe source.

## Orange Peel Grapples

The Orange Peel Grapple is constructed of high-strength, wear-resistant steel, with a low and compact design that makes it ideal for dump clearance. There are several choices of tine and shell versions.

## Multi-Processors

Thanks to its single basic housing design, the Multi-Processor series of hydraulic demolition equipment makes it possible to use a range of jaw sets that can handle any demolition job. The Multi-Processor is the most versatile demolition tool on the market.

## Vibratory Plate Compactors

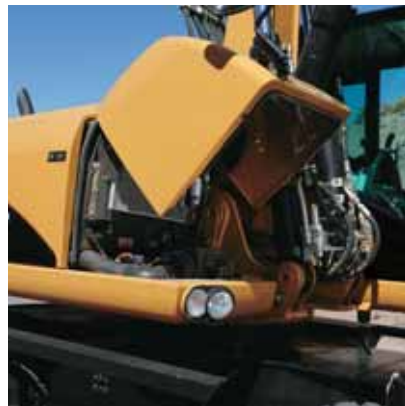
Cat compactors are performance-matched to Cat machines, and integrate perfectly with the Cat hammer line – brackets and hydraulic kits are fully interchangeable between hammers and compactors.

## Shears

Cat shears provide superior and effective scrap processing, and are highly productive in demolition environments. Shears are compatible with a matching Cat excavator, and bolt-on brackets are available for either stick or boom-mounted options.



# Serviceability and Complete Customer Support



## Ground Level Maintenance

Caterpillar designed its D Series Wheel Excavators with the operator and service technician in mind. Gull-wing doors, with pneumatically-assisted lift cylinders, effortlessly lift up to allow critical maintenance to be performed quickly and efficiently while maintaining operator safety.

## Extended Service Intervals

The D Series Wheel Excavator service and maintenance intervals have been extended to reduce machine service time, increase machine availability and reduce operating costs. Using S·O·S<sup>SM</sup> Scheduled Oil Sampling analysis, hydraulic oil change intervals can be extended up to 6,000 hours.

## Engine Oil

Cat engine oil is formulated to optimize engine life and performance. The specially formulated oil is more cost effective and increases engine oil change interval to 500 hours, providing industry leading performance and savings.

## Air Filters

Cat air filters eliminate the use of service tools, reducing maintenance time. The air filter features a double-element construction with wall flow filtration in the main element and built-in mini-cyclone precleaners for superior cleaning efficiency. The air filters are constantly monitored for optimum performance. If airflow becomes restricted, a warning is displayed by the way of the in-cab monitor.

## Capsule Filter

The hydraulic return filter, a capsule filter, prevents contaminants from entering the system when the hydraulic oil is changed.

## Fuel Filters

Cat high efficiency fuel filters with a Stay-Clean Valve™ features a special media that removes more than 98% of particles, increasing fuel injector life. Both the primary and secondary fuel filters are located in the engine compartment and can be easily changed from ground level.

## Water Separator

The D Series is equipped with a primary fuel filter with water separator located in the engine compartment. For ease of service, the water separator can be easily accessed from ground level.

## Fuel Tank Drain

The durable, corrosion-free tank has a remote drain located at the bottom of the upper frame to remove water and sediment. The tank drain with hose connection allows simple, spill-free fluid draining.

# Simplified and easy maintenance save you time and money. Cat dealer services help you operate longer with lower costs.

## Front Compartment

The front compartment hood can be opened vertically, providing outstanding ground level access to the batteries, air-to-air aftercooler, air conditioner condenser and the engine air filter.

## Swing-out Air Conditioner Condenser

The air conditioning condenser swings out horizontally to allow complete cleaning on both sides as well as excellent access to the air-to-air aftercooler.

## Scheduled Oil Sampling

Caterpillar has specially developed S-O-S<sup>SM</sup> Oil Sampling Analysis to help ensure better performance, longer life and increased customer satisfaction. This thorough and reliable early warning system detects traces of metals, dirt and other contaminants in your engine, axle and hydraulic oil. It can predict potential trouble avoiding costly failures. Your Cat dealer can give you results and specific recommendations shortly after receiving your sample.

## Engine Inspection

The engine can be accessed from both ground level and the upper structure. The longitudinal layout ensures that all daily inspection items can be accessed from ground level.

## Anti-Skid Plates

They cover the top of the steps and upper structure to help prevent slipping during maintenance. The Anti-Skid plates reduce the accumulation of mud on the upper structure, improving the cleanliness and safety.

## Easy to Clean Coolers

Flat fins on all coolers reduce clogging, making it easier to remove debris. The main cooling fan and air conditioner condenser are both hinged for easier cleaning.

## Remote Greasing Blocks

For those hard to reach locations, greasing blocks have been provided to reduce maintenance time.

## Handrails and Steps

Large handrails and steps assist the operator in climbing on and off the machine.

## LED Rear Lights

Standard Light Emitting Diode (LED) rear lights provide increased visibility on the job site, higher durability and longer life.



# Versatility

A wide variety of optional factory-installed attachments are available to enhance performance and improve job site management.



## Tool Control

The integrated Tool Control system allows the operator to select up to 10 preset combinations. This eliminates the need to reset the hydraulic parameters each time a tool is changed. Individual flow and pressure can be programmed easily as well as one-way/two-way hydraulic functions. Each of the ten-programmed tools can even be given a specific name. The unique Cat proportional sliding switches and optional auxiliary pedal provide modulation to the tool to make precision work easy.

## Joystick Steering

The unique joystick steering option enables an operator to reposition the machine while traveling in first gear by the use of the slider switch on the right joystick. This enables the operator to keep both hands on the joysticks while simultaneously moving the implements and traveling. The operator can do more precise work faster with increased safety around the machine.

## Working and Travel Modes

There are 2 selectable working modes and one automatic travel setting. The operator can choose the best power setting for both engine and hydraulic power versus fuel efficiency.

- Economy Mode – used for lifting, pipe setting, grading, slope finishing and precise work while reducing fuel consumption.
- Power Mode – used for normal truck loading and digging applications, trenching or hammer use.
- Travel Mode – automatically set when the travel pedal is actuated. It provides maximum speed and drawbar pull.

## Product Link

Product Link allows remote monitoring of the machine, using a powerful telemetric system to transmit needed information to the customer and the dealer via a secure, web-based application, VisionLink™.

Critical information, such as event and diagnostic codes, is readily accessible, as are machine statistics, such as hour-meter reading, fuel consumption and idle time. Mapping functions include location and geo-fencing, which assist in servicing operations and in preventing unauthorized machine use. With Product Link, the customer and the dealer have an invaluable tool for more efficiently managing machines and fleets.

## Ride Control

The ride control system improves operator comfort and allows the machine to travel faster over rough terrain with improved ride quality for the operator. The ride control system features accumulators acting as shock absorbers to dampen the front part motion. Ride control can be activated through a button located on the soft switch panel in the cab.



# M316D Wheel Excavator Specifications

## Engine

Engine Model	Cat® C6.6 with ACERT™ Technology	
Ratings	1,800 rpm	
Gross Power	124 kW	166 hp
Net Power		
ISO 9249	118 kW	158 hp
80/1269/EEC	118 kW	158 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	6.6 L	403 in <sup>3</sup>
Cylinders	6	
Maximum Torque at 1,400 rpm	785 N·m	579 lb ft

- EPA Tier 3 compliant.
- Full engine net power up to 3000 m (1.86 mi) altitude.

## Hydraulic System

Tank Capacity	135 L	36 gal
System	230 L	61 gal
Maximum Pressure		
Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	375 bar	5,439 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	185 bar	2,683 psi
Swing Mechanism	370 bar	5,366 psi
Maximum Flow		
Implement/Travel Circuit	250 L/min	66 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	66 gal/min
Medium Pressure	50 L/min	13 gal/min
Swing Mechanism	80 L/min	21 gal/min

## Weights

VA Boom*		
Rear Dozer Only	16 650 kg	36,707 lb
Rear Dozer, Front Outriggers	17 650 kg	38,912 lb
Front and Rear Outriggers	17 850 kg	39,352 lb
One-Piece Boom*		
Rear Dozer Only	16 150 kg	35,605 lb
Rear Dozer, Front Outriggers	17 150 kg	37,809 lb
Front and Rear Outriggers	17 350 kg	38,250 lb
Offset Boom*		
Rear Dozer Only	17 150 kg	37,809 lb
Rear Dozer, Front Outriggers	18 150 kg	40,014 lb
Front and Rear Outriggers	18 350 kg	40,455 lb
Sticks		
Short – 2100 mm (6'11")	470 kg	1,036 lb
Medium – 2400 mm (7'10")	514 kg	1,133 lb
Long – 2600 mm (8'6")	530 kg	1,168 lb
Industrial – 3100 mm (10'2")	450 kg	992 lb
Dozer Blade	740 kg	1,700 lb
Outriggers	1030 kg	2,270 lb
Counterweight		
Standard	3700 kg	8,157 lb
Optional	4100 kg	9,039 lb

• Machine weight with medium stick, 4100 kg (9,039 lb) counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

## Transmission

Forward/Reverse		
1st Gear	8 km/h	5 mph
2nd Gear	37 km/h	23 mph
Creeper Speed		
1st Gear	3 km/h	2 mph
2nd Gear	13 km/h	8 mph
Drawbar Pull	97 kN	21,806 lb
Maximum Gradeability	63%	

## Swing Mechanism

Swing Speed	10.5 rpm	
Swing Torque	40 kN·m	29,502 lb ft

## 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)		

## Undercarriage

Ground Clearance	370 mm	15 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	± 9°	
Minimum Turning Radius		
Standard Axle		
Outside of Tire	6400 mm	21 ft
End of VA Boom	7000 mm	23 ft
End of One-Piece Boom	8300 mm	27 ft
Wide Axle		
Outside of Tire	6500 mm	21 ft
End of VA Boom	7100 mm	23 ft
End of One-Piece Boom	8500 mm	28 ft

## Service Refill Capacities

Fuel Tank	310 L	82 gal
Cooling	36 L	9.5 gal
Engine Crankcase	15 L	4 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	10.5 L	2.8 gal
Final Drive	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

## 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).		

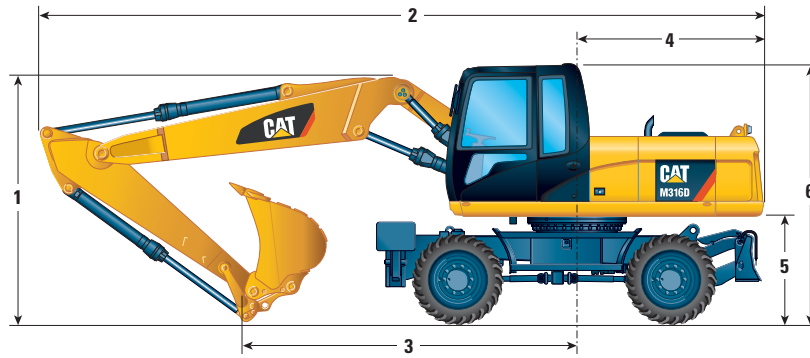
## Cab/ROPS/FOGS

- 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.

# M316D Wheel Excavator Specifications

## Dimensions

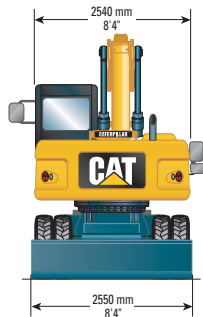
All dimensions are approximate.



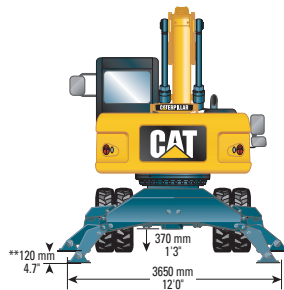
		VA Boom				One-Piece Boom				Offset Boom	
		2100 (6'11")	2400 (7'10")	2600 (8'6")	*3100 (10'2")	2100 (6'11")	2400 (7'10")	2600 (8'6")	*3100 (10'2")	2100 (6'11")	2400 (7'10")
Stick Length	mm (ft/in)										
<b>1</b> Shipping Height	mm (ft/in)	3170 (10'5")	3170 (10'5")	3170 (10'5")	3330 (10'11")	3170 (10'5")	3170 (10'5")	3170 (10'5")	3330 (10'11")	3170 (10'5")	3170 (10'5")
<b>2</b> Shipping Length	mm (ft/in)	8550 (28'1")	8550 (28'1")	8540 (28'0")	8510 (27'11")	8390 (27'6")	8400 (27'7")	8400 (27'7")	8405 (27'7")	8550 (28'1")	8540 (28'0")
<b>3</b> Support Point	mm (ft/in)	3910 (12'10")	3650 (12'0")	3550 (11'8")	3630 (11'11")	3560 (11'8")	3270 (10'9")	3150 (10'4")	3230 (10'7")	4020 (13'2")	3780 (12'5")
<b>4</b> Tail Swing Radius		2280 mm (7'6")				2280 mm (7'6")				2280 mm (7'6")	
<b>5</b> Counterweight Clearance		1280 mm (4'2")				1280 mm (4'2")				1280 mm (4'2")	
<b>6</b> Cab Height		3170 mm (10'5")				3170 mm (10'5")				3170 mm (10'5")	
With 1200 mm (4 ft) Fixed Cab Riser		4370 mm (14'4")				4370 mm (14'4")				4370 mm (14'4")	
Overall Machine Width		2550 mm (8'4")				2550 mm (8'4")				2550 mm (8'4")	
Wide Gauge Axle		2750 mm (9'0")				2750 mm (9'0")				2750 mm (9'0")	

\* Industrial stick

\*\* Maximum tire clearance with outrigger fully down

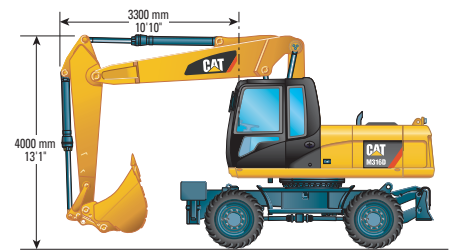


Undercarriage with dozer only

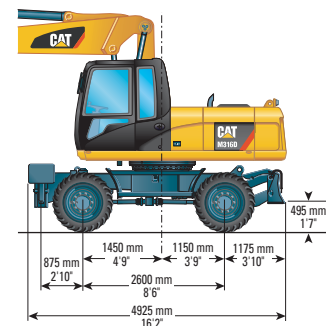
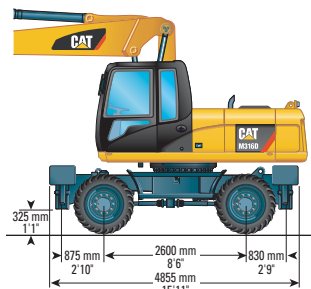
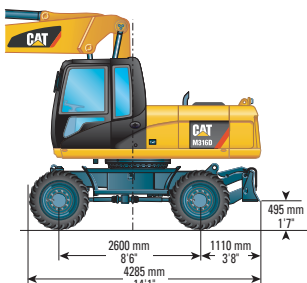


Undercarriage with 2 sets of outriggers

Roading position with 2400 mm (7'10") stick

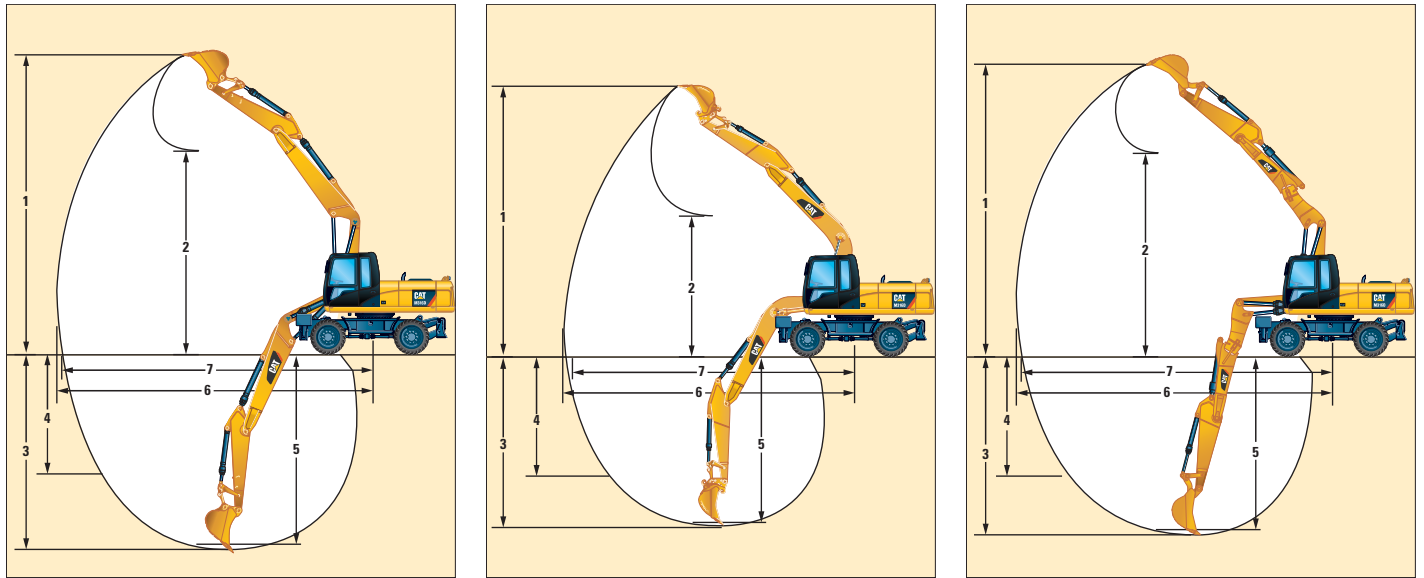


Undercarriage with 1 set of outriggers and dozer





## Working Ranges



		VA Boom				One-Piece Boom				Offset Boom	
		2100 (6'11")	2400 (7'10")	2600 (8'6")	*3100 (10'2")	2100 (6'11")	2400 (7'10")	2600 (8'6")	*3100 (10'2")	2100 (6'11")	2400 (7'10")
Stick Length	mm (ft/in)										
<b>1</b> Digging Height	mm (ft/in)	10 060 (32'0")	10 250 (33'8")	10 400 (34'2")	8970 (29'5")	9000 (29'7")	9090 (29'10")	9210 (30'3")	7720 (25'4")	9960 (32'8")	10 150 (33'4")
<b>2</b> Dump Height	mm (ft/in)	6970 (22'11")	7160 (23'6")	7320 (24'0")	3980 (13'1")	6020 (19'9")	6130 (20'2")	6250 (20'6")	3200 (10'6")	7150 (23'5")	7340 (24'1")
<b>3</b> Digging Depth	mm (ft/in)	5570 (18'3")	5870 (19'3")	6070 (19'11")	5030 (16'6")	5370 (17'8")	5670 (18'7")	5870 (19'3")	4820 (15'10")	5450 (17'11")	5750 (18'11")
<b>4</b> Vertical Wall Digging Depth	mm (ft/in)	3700 (12'2")	3900 (12'10")	4070 (13'4")	–	3490 (11'6")	3630 (11'11")	3800 (12'6")	–	4100 (13'6")	4320 (14'2")
<b>5</b> Depth 2.5 m (8'2") Straight Clean-Up	mm (ft/in)	5350 (17'7")	5670 (18'7")	5880 (19'4")	–	5150 (16'11")	5470 (18'0")	5680 (18'8")	–	5200 (17'1")	5520 (18'1")
<b>6</b> Reach	mm (ft/in)	9100 (29'11")	9360 (30'9")	9560 (31'5")	8370 (27'6")	8900 (29'3")	9160 (30'1")	9350 (30'8")	8130 (26'8")	8970 (29'5")	9240 (30'4")
<b>7</b> Reach at Ground Level	mm (ft/in)	8910 (29'3")	9190 (30'2")	9380 (30'10")	8170 (26'10")	8710 (28'7")	8970 (29'5")	9170 (30'1")	7920 (25'0")	8780 (28'10")	9060 (29'9")
Bucket Forces (ISO 6015)	kN (lbf)	101 (22,705)	101 (22,705)	101 (22,705)	–	101 (22,705)	101 (22,705)	101 (22,705)	–	101 (22,705)	101 (22,705)
Stick Forces (ISO 6015)	kN (lbf)	81 (18,209)	74 (16,635)	71 (15,961)	–	81 (18,209)	74 (16,635)	71 (15,961)	–	81 (18,209)	74 (16,635)

\* Industrial stick has no bucket linkage. All dimensions refer to sticknose.

Values 1-7 are calculated with bucket and quick coupler with a tip radius of 1552 mm (5'1").

Breakout force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1405 mm (4'7").





# M316D Wheel Excavator Specifications

## Bucket Specifications

Contact your Cat dealer for special bucket requirements.

Pin-On Buckets								Variable Adjustable Boom 5200 mm (17'1")												
Stick Length								2100 mm (6'11")				2400 mm (7'10")				2600 mm (8'6")				
	Width		Weight*		Capacity (ISO)		Adapters	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	
	mm	in	kg	lb	m <sup>3</sup>	yd <sup>3</sup>														
Excavation	600	24	459	1,012	0.38	0.50	3													
	750	30	495	1,091	0.52	0.68	3													
	900	35	557	1,228	0.65	0.85	4													
	1000	39	591	1,303	0.75	0.98	4													
	1100	43	622	1,372	0.84	1.10	4													
	1200	47	668	1,473	0.94	1.23	5													
	1300	51	699	1,541	1.03	1.35	5													
	1400	55	731	1,612	1.13	1.48	5													
Extreme Excavation	1200	47	702	1,548	0.94	1.23	5													
	1300	51	735	1,621	1.03	1.35	5													
Excavation (leveling)	600	24	485	1,069	0.41	0.54	3													
	750	30	529	1,166	0.56	0.73	3													
	800	31	547	1,206	0.61	0.80	4													
	900	35	596	1,314	0.70	0.92	4													
	1000	39	636	1,402	0.82	1.07	4													
	1100	43	672	1,482	0.92	1.20	4													
	1200	47	725	1,599	1.04	1.36	5													
	1300	51	762	1,680	1.14	1.49	5													
	1400	55	798	1,760	1.26	1.65	5													
Extreme Excavation (leveling)	1200	47	757	1,669	1.04	1.36	5													
Ditch Cleaning	1800	71	545	1,202	0.90	1.18														
	2000	79	590	1,301	1.00	1.31														
Tiltable Ditch Cleaning	1800	71	875	1,929	0.75	0.98														
	2000	79	910	2,007	0.84	1.10														

\*Bucket weight includes Ground Engaging Tools





	Maximum material density 1800 kg/m <sup>3</sup> (3,000 lb/yd <sup>3</sup> )		Maximum material density 1200 kg/m <sup>3</sup> (2,000 lb/yd <sup>3</sup> )
	Maximum material density 1500 kg/m <sup>3</sup> (2,500 lb/yd <sup>3</sup> )		Not recommended

## Bucket Specifications

Contact your Cat dealer for special bucket requirements.

Pin-On Buckets								One-Piece Boom 5050 mm (16'7")												
Stick Length								2100 mm (6'11")				2400 mm (7'10")				2600 mm (8'6")				
	Width		Weight*		Capacity (ISO)		Adapters	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	
	mm	in	kg	lb	m <sup>3</sup>	yd <sup>3</sup>														
Excavation	600	24	459	1,012	0.38	0.50	3													
	750	30	495	1,091	0.52	0.68	3													
	900	35	557	1,228	0.65	0.85	4													
	1000	39	591	1,303	0.75	0.98	4													
	1100	43	622	1,372	0.84	1.10	4													
	1200	47	668	1,473	0.94	1.23	5													
	1300	51	699	1,541	1.03	1.35	5													
	1400	55	731	1,612	1.13	1.48	5													
Extreme Excavation	1200	47	702	1,548	0.94	1.23	5													
	1300	51	735	1,621	1.03	1.35	5													
Excavation (leveling)	600	24	485	1,069	0.41	0.54	3													
	750	30	529	1,166	0.56	0.73	3													
	800	31	547	1,206	0.61	0.80	4													
	900	35	596	1,314	0.70	0.92	4													
	1000	39	636	1,402	0.82	1.07	4													
	1100	43	672	1,482	0.92	1.20	4													
	1200	47	725	1,599	1.04	1.36	5													
	1300	51	762	1,680	1.14	1.49	5													
	1400	55	798	1,760	1.26	1.65	5													
Extreme Excavation (leveling)	1200	47	757	1,669	1.04	1.36	5													
Ditch Cleaning	1800	71	545	1,202	0.90	1.18														
	2000	79	590	1,301	1.00	1.31														
Tiltable Ditch Cleaning	1800	71	875	1,929	0.75	0.98														
	2000	79	910	2,007	0.84	1.10														

\*Bucket weight includes Ground Engaging Tools

	Maximum material density 1800 kg/m <sup>3</sup> (3,000 lb/yd <sup>3</sup> )		Maximum material density 1200 kg/m <sup>3</sup> (2,000 lb/yd <sup>3</sup> )
	Maximum material density 1500 kg/m <sup>3</sup> (2,500 lb/yd <sup>3</sup> )		Not recommended

# M316D Wheel Excavator Specifications

## Work Tools Matching Guide

When choosing between various work tool models that can be installed onto the same machine configuration, consider work tool application, productivity requirements, and durability. Refer to work tool specifications for application recommendations and productivity information.

		Variable Adjustable Boom 5200 mm (17'1")												One-Piece Boom 5050 mm (16'7")												Offset Boom 5200 mm (17'1")												
		(1)				(2)				(3)				(1)				(2)				(3)				(1)		(2)		(3)								
		Stick Length (mm)		2100	2400	2600	3100	2100		2400	2600	3100	2100		2400	2600	3100	2100		2400	2600	3100	2100		2400	2600	3100	2100		2400	2100		2400	2100		2400		
Stick Length (ft/in)		6'11"	7'10"	8'6"	10'2"	6'11"		7'10"	8'6"	10'2"	6'11"		7'10"	8'6"	10'2"	6'11"		7'10"	8'6"	10'2"	6'11"		7'10"	8'6"	10'2"	6'11"		7'10"	6'11"		7'10"	6'11"		7'10"				
Hammers	H100, H100 S	Green																																				
	H115 S, H120C S	Green																																				
Multiprocessors	MP15	CC, CR	Green												Red												Green											
	MP15	PP	Green																																			
	MP15	PS	Green																																			
	MP15	S	Green												Red												Green											
Hydraulic Shears (* boom mounted)	S320B	Green																																				
	S320B*	Green																																				
	S325B*	Green																																				
Compactor	CVP75	Green																																				
Orange Peel Grapples	GSH15B 4 tines	400 L (0.52 yd <sup>3</sup> )	Blue												Blue												Blue											
		500 L (0.65 yd <sup>3</sup> )	Blue												Blue												Blue											
		600 L (0.78 yd <sup>3</sup> )	Blue												Blue												Blue											
		800 L (1.05 yd <sup>3</sup> )	Blue												Blue												Blue											

(1) Dozer lowered

(2) 2 sets of stabilizers lowered

(3) Dozer and stabilizer lowered

Green 360° Working Range

Red Over the front only

Dark Blue Maximum material density 3000 kg/m<sup>3</sup> (5,000 lb/yd<sup>3</sup>)

Light Blue Maximum material density 1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)

Yellow Maximum material density 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)





## Lift Capacities – Variable Adjustable Boom (5200 mm [17 ft 1 in])

All values are without bucket and without QC, with counterweight (4100 kg [9,039 lb]), heavy lift on.

Long Stick 2600 mm (8'6")	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			Load point height			m
		Load at maximum reach (sticknose/bucket pin)			Load over front			Load over rear			Load over side			Load point height			
		kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	
6.0 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				*4950	*4950	4700	4750	3400	2950				*3000	2750	2400	6.74
4.5 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				*5850	5200	4500	4700	3300	2900	*2900	2250	2000	*2850	2250	2000	7.51
3.0 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				7000	4800	4150	4500	3150	2750	3200	2250	1950	*2850	2050	1800	7.91
1.5 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				6650	4450	3850	4350	3000	2600	3150	2150	1900	2850	1950	1700	8.00
0.0 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				6450	4250	3650	4250	2900	2500	3100	2100	1850	2950	2000	1750	7.80
-1.5 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up	*6900	*6900	6550	6400	4250	3600	4200	2850	2450				3250	2200	1900	7.27
-3.0 m	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				*6150	4300	3650	*4250	2900	2500				*3600	2700	2350	6.33

Long Stick 2600 mm (8'6")	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft			Load point height			ft
		Load at maximum reach (sticknose/bucket pin)			Load over front			Load over rear			Load over side			Load point height			
		lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	
20.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				*10,900	*10,900	10,100	*10,200	7,200	6,400				*6,700	6,100	5,400	21.92
15.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				*12,600	11,200	9,700	10,100	7,100	6,200				*6,300	5,000	4,400	24.54
10.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				15,100	10,400	9,000	9,700	6,800	5,900	6,900	4,800	4,200	*6,200	4,500	3,900	25.92
5.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				14,300	9,600	8,300	9,400	6,500	5,600	6,800	4,700	4,100	6,300	4,300	3,800	26.25
0.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				13,800	9,200	7,900	9,100	6,200	5,400	6,700	4,600	4,000	6,500	4,400	3,900	25.59
-5.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up	*15,700	*15,700	14,000	13,700	9,100	7,800	9,000	6,100	5,300				7,200	4,900	4,200	23.82
-10.0 ft	Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up				*13,200	9,300	7,900	*8,800	6,300	5,400							

\*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.





## Lift Capacities – One-Piece Boom (5050 mm [16 ft 7 in])

All values are without bucket and without QC, with counterweight (4100 kg [9,039 lb]), heavy lift on.

Short Stick 2100 mm (6'11")	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	3.0 m			4.5 m			6.0 m			7.5 m			m				
						kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg		kg			
6.0 m	Rear dozer up	kg																*3850	3350	2950	5.93	
	Rear dozer down	kg																	*3850	*3850		3350
4.5 m	Dozer and stabilizer down	kg																	*3850	*3850	*3850	6.80
	2 sets of stabilizers down	kg																	*3850	*3850	*3850	
3.0 m	Wide axle rear dozer up	kg																				7.24
	Rear dozer up	kg																				
1.5 m	Rear dozer down	kg																				7.34
	Dozer and stabilizer down	kg																				
0.0 m	2 sets of stabilizers down	kg																				7.11
	Wide axle rear dozer up	kg																				
-1.5 m	Rear dozer up	kg	*8850	8200	6800	6500	4350	3750	4250	2950	2550											6.53
	Rear dozer down	kg		*8850	8100		*8000	4350		*5800	2950											
-3.0 m	Dozer and stabilizer down	kg		*8850	*8850		*8000	6850		*5800	4500											5.46
	2 sets of stabilizers down	kg		*8850	*8850		*8000	8300		*5800	5250											
	Wide axle rear dozer up	kg		8200	7650		4250	4150		2950	2800											
	Rear dozer up	kg	*7850	*7850	6950	*5950	4450	3850														
	Rear dozer down	kg		*7850	*7850		*5950	4450														
	Dozer and stabilizer down	kg		*7850	*7850		*5950	5950														
	2 sets of stabilizers down	kg		*7850	*7850		*5950	5950														
	Wide axle rear dozer up	kg		*7850	*7850		4450	4250														

Short Stick 2100 mm (6'11")	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	10.0 ft			15.0 ft			20.0 ft			25.0 ft			ft				
						lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb					
20.0 ft	Rear dozer up	lb																				19.23
	Rear dozer down	lb																				
15.0 ft	Dozer and stabilizer down	lb																				22.21
	2 sets of stabilizers down	lb																				
10.0 ft	Wide axle rear dozer up	lb																				23.72
	Rear dozer up	lb																				
5.0 ft	Rear dozer down	lb																				24.08
	Dozer and stabilizer down	lb																				
0.0 ft	2 sets of stabilizers down	lb																				23.33
	Wide axle rear dozer up	lb																				
-5.0 ft	Rear dozer up	lb	*20,300	17,600	14,600	13,900	9,400	8,100	9,200	6,400	5,500											21.39
	Rear dozer down	lb		*20,300	17,400		*17,300	9,400		*12,400	6,400											
-10.0 ft	Dozer and stabilizer down	lb		*20,300	*20,300		*17,300	14,700		*12,400	9,700											17.78
	2 sets of stabilizers down	lb		*20,300	*20,300		*17,300	17,300		*12,400	11,300											
	Wide axle rear dozer up	lb		17,600	16,400		9,400	8,900		6,400	6,100											
	Rear dozer up	lb	*16,900	*16,900	14,900	*12,700	9,600	8,300														
	Rear dozer down	lb		*16,900	*16,900		*12,700	9,600														17.78
	Dozer and stabilizer down	lb		*16,900	*16,900		*12,700	12,700														
	2 sets of stabilizers down	lb		*16,900	*16,900		*12,700	12,700														
	Wide axle rear dozer up	lb		*16,900	*16,900		9,600	9,100														

\*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

# M316D Wheel Excavator Specifications

## Lift Capacities – One-Piece Boom (5050 mm [16 ft 7 in])

All values are without bucket and without QC, with counterweight (4100 kg [9,039 lb]), heavy lift on.



Load at maximum reach (sticknose/bucket pin)



Load over front



Load over rear



Load over side



Load point height

**Medium Stick**  
2400 mm  
(7'10")

Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			Load point height			m
	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	
6.0 m Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up	kg						*4300	3350	2950				*3250	3100	2750	6.25
kg							*4300	3350					*3250	3100	2750	
kg							*4300	*4300	*4300				*3250	*3250	*3250	7.08
kg							*4300	*4300	*4300				*3250	*3250	*3250	
kg																7.50
kg																
kg																7.60
kg																
kg																7.38
kg																
kg																6.82
kg																
kg																5.81
kg																

**Medium Stick**  
2400 mm  
(7'10")

Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft			Load point height			ft
	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	Sticknose	Bucket pin	Wide axle	
20.0 ft Rear dozer up Rear dozer down Dozer and stabilizer down 2 sets of stabilizers down Wide axle rear dozer up	lb						*8,300	7,100	6,300				*7,200	7,000	6,100	20.31
lb							*8,300	*8,300	7,200				*7,200	*7,200	7,000	
lb							*8,300	*8,300	*8,300				*7,200	*7,200	*7,200	23.13
lb							*8,300	*8,300	*8,300				*7,200	*7,200	*7,200	
lb																24.57
lb																
lb																24.93
lb																
lb																24.21
lb																
lb																22.34
lb																
lb																18.93
lb																

\*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.









# M316D Wheel Excavator Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

## 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  
EPA Tier 3 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 mechanical 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

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 box in undercarriage

Two-piece drive shaft

## Other Equipment

Automatic swing brake

Counterweight, 3700 kg (8,157 lb)

Mirrors, frame and cab

Product Link ready

# M316D Wheel Excavator Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

## 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  
Lowering control devices for boom and stick  
SmartBoom™

## Front Linkage

Booms  
One-piece boom, 5050 mm (16 ft 7 in)  
VA boom (two piece), 5200 mm (17 ft 1 in)  
Offset boom, 5200 mm (17 ft 1 in)  
Bucket linkage with diverter valve  
Sticks  
2100 mm (6'11"), 2400 mm (7'10"),  
2600 mm (8'6")  
3100 mm (10'2") industrial with drop nose

## Electrical

Back-up alarm  
Heavy-duty maintenance free batteries  
Refueling pump

## Operator Station

Adjustable hydraulic sensitivity  
Falling objects guard  
Joystick steering  
CD/MP3 Radio (12V) at rear location including speakers and 12V converter  
Seat, adjustable high-back  
– 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, front or rear mounted  
Outriggers, front and/or rear mounted  
Second tool box for undercarriage  
Spacer rings for tires  
Wide axles

## Other Equipment

Auto-lube system (implements and swing gear)  
Cat Machine Security System  
Cat Product Link  
Counterweight, 4100 kg (9,039 lb)  
Mirrors heated, frame and cab  
Ride Control  
Tires (see pg. 15)  
Tool box in upperframe, lockable  
Waste Handling Package









# M316D Wheel Excavator

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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