M316D

Wheel Excavator

Engine	
Engine Model	Cat® C6.6 with ACERT™ Technology
Net power (ISO 9249) at 1,800 rpm	118 kW (160 hp)

Weights	
Operating Weight	17 000 to 19 200 kg

Bucket Specifications	
Bucket Capacities	0.38 to 1.26 m^3

Working Ranges	
Maximum Reach at Ground Level	9380 mm
Maximum Digging Depth	6070 mm

Drive	
Maximum Travel Speed	37 km/h

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.

Contents

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 EU Stage IIIA engine emission regulations. The Cat C6.6 engine in the M316D delivers a maximum gross power of 124 kW at a rated speed of 1,800 rpm. This is 20% more horsepower as compared to the 3056E in the M316C.

Low Fuel Consumption

The C6.6 is electronically controlled and uses the new 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.

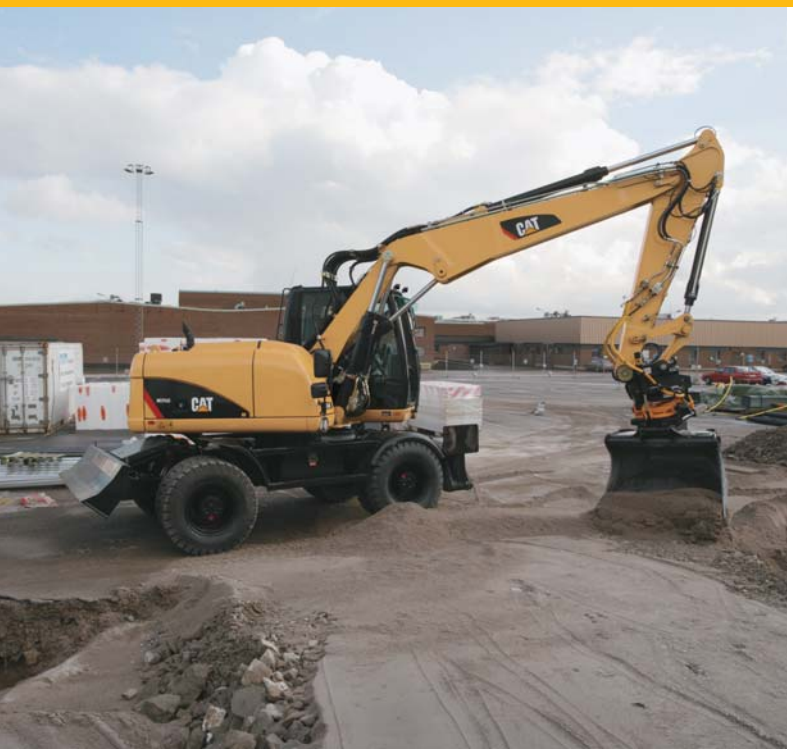
Waste Handling Package

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 mechanism. 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

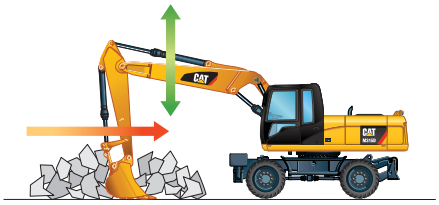
The machine can be optionally equipped with a dedicated hydraulic circuit to operate hydraulic quick couplers.

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.

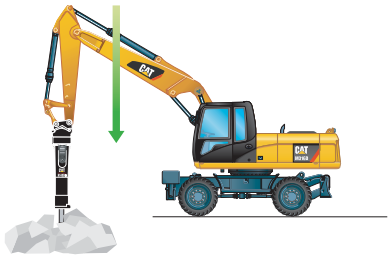
SmartBoom™

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



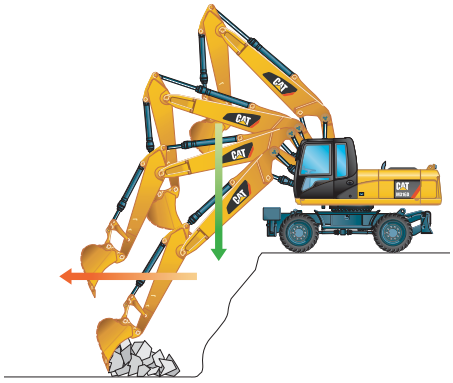
Rock Scraping

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 new EU Stage IIIA 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 comes with 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.

New Deluxe Seat

The new 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.

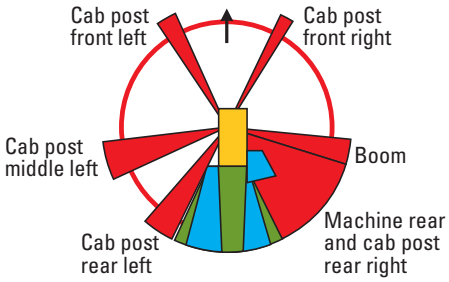
Foot Pedals

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 has been increased from 34 to 37 km/h, 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.

Adjustable Travel Alarm

An adjustable travel alarm is available to warn people when the machine is moving. Three settings can be selected through the monitor:

- Auto mode – alarm will stop sounding immediately when the machine is no longer traveling, or has been sounding for an uninterrupted 10-second interval.
- Standard mode – alarm operates constantly during moving, with only manual cancellation.
- Off mode – travel alarm is disabled.

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 flexibility.

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 2460/2760 mm) 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.

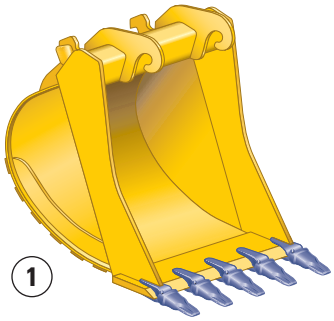
Sticks

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

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

Work Tools

A wide variety of Work Tools help optimize machine performance.



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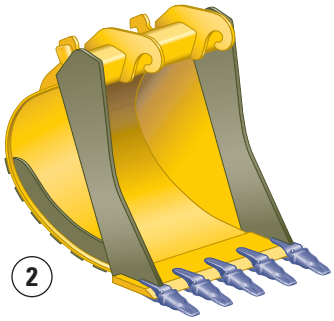

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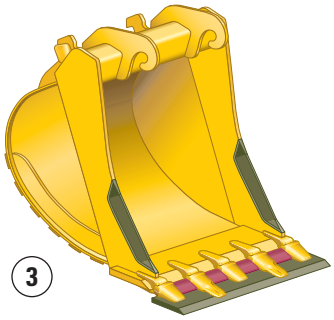

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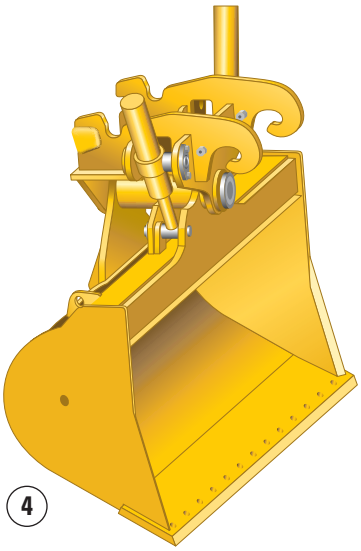

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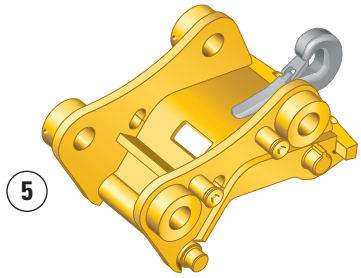

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Work Tools

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-Grapples

The Multi-Grapple with unlimited left and right rotation is the ideal tool for stripping, sorting, handling and loading. The powerful closing force of the grab shells combined with fast opening/closing time ensures rapid cycle time which translates to more tons per hour.

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℠ 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 air cleaner 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℠ 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

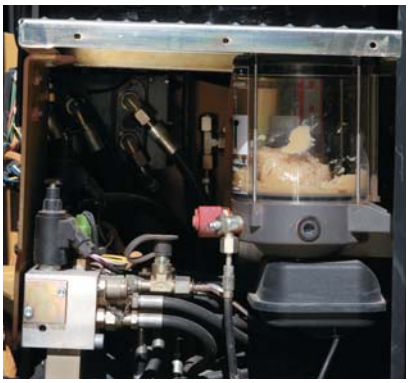
For those hard to reach locations, greasing blocks have been provided to reduce maintenance time.

Handrails and Steps

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

New LED Rear Lights

Standard Light Emitting Diode (LED) rear lights replace the standard lights, for 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.

Control Settings

There are 2 selectable control settings 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 can assist with Fleet Management to keep track of hours, location, security and product health. The machine is prewired to accept Product Link systems to be installed in the field. Product Link is also available as a factory installed attachment.

Machine Security

An optional Machine Security System is available from the factory. This system controls who can operate the machine when, and utilizes specific keys to prevent unauthorized machine use.

Ride Control

New for the D Series, 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.

Engine

Engine Model	Cat® C6.6 with ACERT™ Technology
Ratings	1,800 rpm
Gross Power	124 kW (169 hp)
Net Power	
ISO 9249	118 kW (160 hp)
80/1269/EEC	118 kW (160 hp)
Bore	105 mm
Stroke	127 mm
Displacement	6.6 L
Cylinders	6
Maximum Torque at 1,400 rpm	785 N·m

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

Hydraulic System

Tank Capacity	135 L
System	230 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	370 bar
Maximum Flow	
Implement/Travel Circuit	250 L/min
Auxiliary Circuit	
High Pressure	250 L/min
Medium Pressure	50 L/min
Swing Mechanism	80 L/min

Weights

VA Boom*	
Rear Dozer Only	16 650 kg
Rear Dozer, Front Outriggers	17 650 kg
Front and Rear Outriggers	17 850 kg
One-Piece Boom*	
Rear Dozer Only	16 150 kg
Rear Dozer, Front Outriggers	17 150 kg
Front and Rear Outriggers	17 350 kg
Offset Boom*	
Rear Dozer Only	17 150 kg
Rear Dozer, Front Outriggers	18 150 kg
Front and Rear Outriggers	18 350 kg
Sticks	
Short (2100 mm)	470 kg
Medium (2400 mm)	514 kg
Long (2600 mm)	530 kg
Industrial (3100 mm)	450 kg
Dozer Blade	740 kg
Outriggers	1030 kg
Counterweight	
Standard	3700 kg
Optional	4100 kg

- Machine weight with medium stick, 4100 kg counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

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	97 kN
Maximum Gradeability	63%

Swing Mechanism

Swing Speed	10.5 rpm
Swing Torque	40 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)

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	310 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

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).

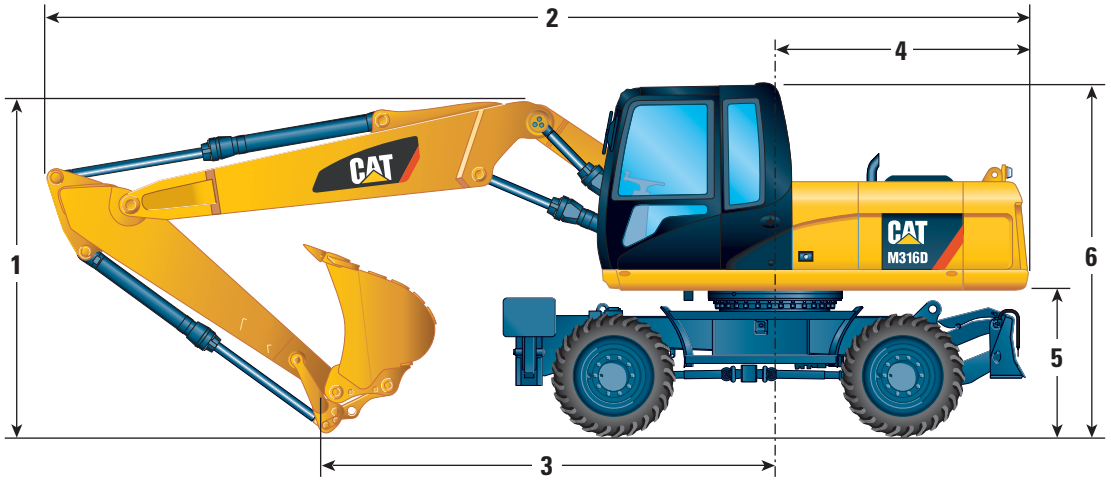
Cab/ROPS/FOGS

- 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

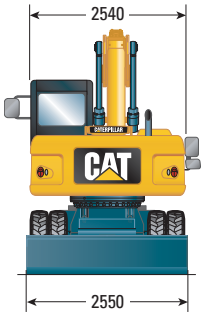
Dimensions

All dimensions are approximate.

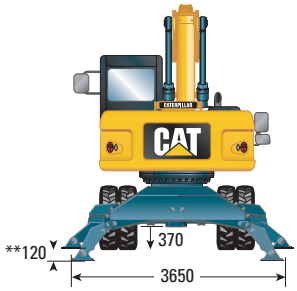


		VA Boom				One-Piece Boom				Offset Boom	
Stick Length	mm	**2100**	**2400**	**2600**	***3100**	**2100**	**2400**	**2600**	***3100**	**2100**	**2400**
1 Shipping Height	mm	3170	3170	3170	3330	3170	3170	3170	3330	3170	3170
2 Shipping Length	mm	8550	8550	8540	8510	8390	8400	8400	8405	8550	8540
3 Support Point	mm	3910	3650	3550	3630	3560	3270	3150	3230	4020	3780
4 Tail Swing Radius	mm	2280				2280				2280	
5 Counterweight Clearance	mm	1280				1280				1280	
6 Cab Height	mm	3170				3170				3170	
With 1200 mm Fixed Cab Riser	mm	4370				4370				4370	
Overall Machine Width	mm	2550				2550				2550	
Wide Gauge Axle	mm	2750				2750				2750	

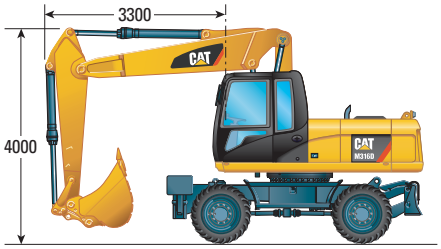
* Industrial stick



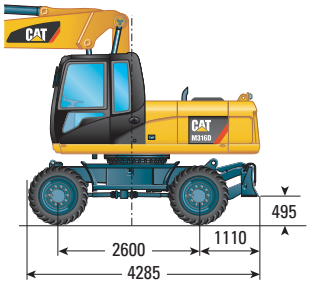
** Maximum tire clearance with outrigger fully down



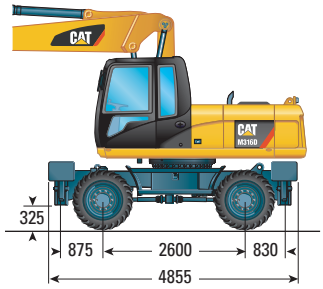
Roading position with 2400 mm stick



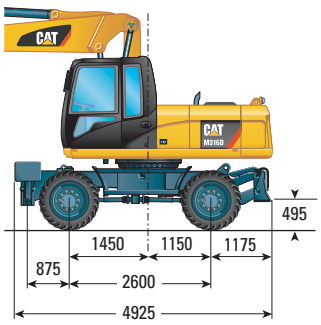
Undercarriage with dozer only



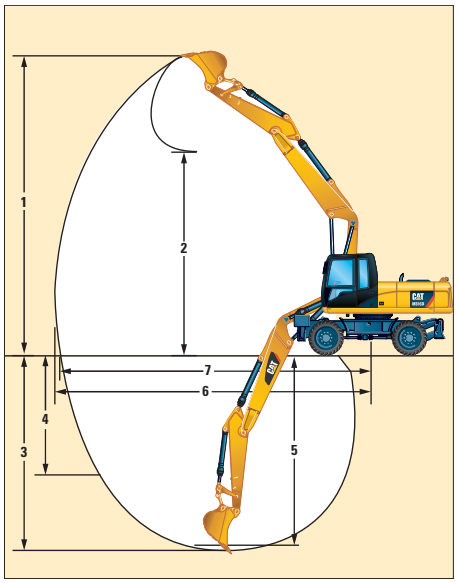
Undercarriage with 2 sets of outriggers

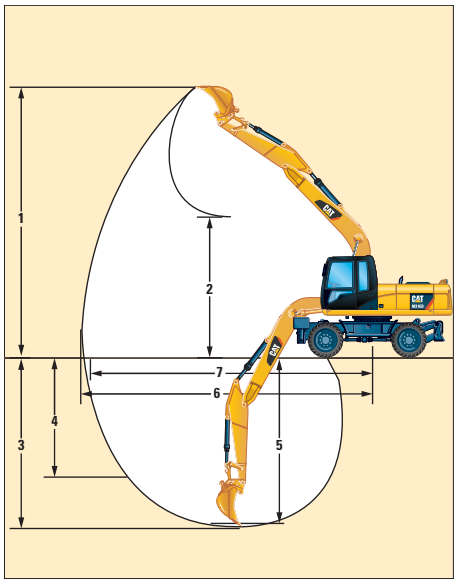


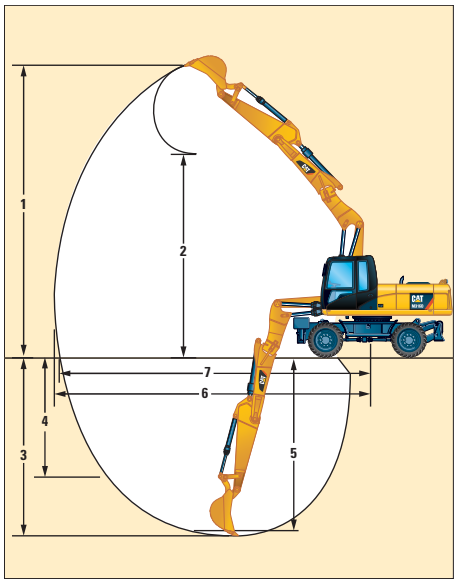
Undercarriage with 1 set of outriggers and dozer



Working Ranges







		VA Boom				One-Piece Boom				Offset Boom	
Stick Length	mm	**2100**	**2400**	**2600**	***3100**	**2100**	**2400**	**2600**	***3100**	**2100**	**2400**
1 Digging Height	mm	10 060	10 250	10 400	8970	9000	9090	9210	7720	9960	10 150
2 Dump Height	mm	6970	7160	7320	3980	6020	6130	6250	3200	7150	7340
3 Digging Depth	mm	5570	5870	6070	5030	5370	5670	5870	4820	5450	5750
4 Vertical Wall Digging Depth	mm	3700	3900	4070	–	3490	3630	3800	–	4100	4320
5 Depth 2.5 m Straight Clean-Up	mm	5350	5670	5880	–	5150	5470	5680	–	5200	5520
6 Reach	mm	9100	9360	9560	8370	8900	9160	9350	8130	8970	9240
7 Reach at Ground Level	mm	8910	9190	9380	8170	8710	8970	9170	7920	8780	9060
Bucket Forces (ISO 6015)	kN	101	101	101	–	101	101	101	–	101	101
Stick Forces (ISO 6015)	kN	81	74	71	–	81	74	71	–	81	74

* 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.

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

M316D Wheel Excavator Specifications

Bucket Specifications

Contact your Cat dealer for special bucket requirements.

Pin-On Buckets					Variable Adjustable Boom 5200 mm												One-Piece Boom 5050 mm											
Stick Length					2100 mm				2400 mm				2600 mm				2100 mm				2400 mm				2600 mm			
	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	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	kg	m³																									
Excavation	600	459	0.38	3																								
	750	495	0.52	3																								
	900	557	0.65	4																								
	1000	591	0.75	4																								
	1100	622	0.84	4																								
	1200	668	0.94	5																								
	1300	699	1.03	5																								
	1400	731	1.13	5																								
Extreme Excavation	1200	702	0.94	5																								
	1300	735	1.03	5																								
Excavation (leveling)	600	485	0.41	3																								
	750	529	0.56	3																								
	800	547	0.61	4																								
	900	596	0.70	4																								
	1000	636	0.82	4																								
	1100	672	0.92	4																								
	1200	725	1.04	5																								
	1300	762	1.14	5																								
	1400	798	1.26	5																								
Extreme Excavation (leveling)	1200	757	1.04	5																								
Ditch Cleaning	1800	545	0.90																									
	2000	590	1.00																									
Tiltable Ditch Cleaning	1800	875	0.75																									
	2000	910	0.84																									

* Bucket weight includes Ground Engaging Tools

Maximum material density 1800 kg/m³

Maximum material density 1500 kg/m³

Maximum material density 1200 kg/m³

Not recommended

Bucket Specifications

Contact your Cat dealer for special bucket requirements.

CW Quick Coupler Buckets					Variable Adjustable Boom 5200 mm												One-Piece Boom 5050 mm											
Stick Length					2100 mm				2400 mm				2600 mm				2100 mm				2400 mm				2600 mm			
	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	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	kg	m^3																									
Excavation	600	468	0.38	3																								
	750	504	0.52	3																								
	900	534	0.65	4																								
	1000	568	0.75	4																								
	1100	600	0.84	4																								
	1200	645	0.94	5																								
	1300	676	1.03	5																								
	1400	708	1.13	5																								
Extreme Excavation	1200	679	0.94	5																								
	1300	712	1.03	5																								
Excavation (leveling)	600	498	0.41	3																								
	750	547	0.56	3																								
	800	526	0.61	4																								
	900	575	0.70	4																								
	1000	614	0.82	4																								
	1100	651	0.92	4																								
	1200	704	1.04	5																								
	1300	741	1.14	5																								
	1400	777	1.26	5																								
Extreme Excavation (leveling)	600	523	0.41	3																								
	800	555	0.61	4																								
	1000	644	0.82	4																								
	1200	736	1.04	5																								
Ditch Cleaning	1800	510	0.90																									
	2000	555	1.00																									
Tiltable Ditch Cleaning	1800	835	0.75																									
	2000	870	0.84																									

* Bucket weight includes Ground Engaging Tools

Maximum material density 1800 kg/m^3

Maximum material density 1500 kg/m^3

Maximum material density 1200 kg/m^3

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.

Without Quick Coupler			Variable Adjustable Boom 5200 mm												One-Piece Boom 5050 mm												Offset Boom 5200 mm					
			(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	2600	3100	2100	2400	2100	2400	2100	2400
Hammers	H100, H100 S		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
	H115 S, H120C S		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
Multiprocessors	MP15	CC, CR					■	■	■		■	■	■		■				■	■	■		■	■	■				■	■	■	■
	MP15	PP					■	■			■	■							■	■			■	■					■		■	
	MP15	PS					■	■	■		■	■	■						■	■	■		■	■	■				■		■	
	MP15	S					■	■	■		■	■	■		■	■			■	■	■		■	■	■				■	■	■	■
Hydraulic Shears (* boom mounted)	S320B						■				■								■				■									
	S320B*		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
	S325B*						■	■	■		■	■	■						■	■	■		■	■	■				■	■	■	■
Multi-Grapples	G310B	D, R	■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
	G315B	D					■	■	■		■	■	■		■	■			■	■	■		■	■	■				■	■	■	■
		R					■	■	■		■	■	■		■				■	■	■		■	■	■				■	■	■	■
Compactor	CVP75		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
Orange Peel Grapples	GSH15B 5 tines	400	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
		500	■			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			■	■	■	■
		600					■	■	■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■			■	■	■	■
		800					■	■	■	■	■	■	■	■					■	■	■	■	■	■	■	■			■	■	■	■
	GSH15B 4 tines	400	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
		500	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
		600	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			■	■	■	■
		800					■	■	■	■	■	■	■	■					■	■	■	■	■	■	■	■			■	■	■	■
Crusher	P315						■	■	■		■	■	■		■				■	■	■		■	■	■				■	■	■	■
Pulverizer	P215		■				■	■	■		■	■	■		■	■	■		■	■	■		■	■	■				■	■	■	■

(1) Dozer lowered

(2) 2 sets of stabilizers lowered

(3) Dozer and stabilizer lowered

With Quick Coupler (CW-20, CW-20S)			Variable Adjustable Boom 5200 mm												One-Piece Boom 5050 mm												Offset Boom 5200 mm					
			(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	2600	3100	2100	2400	2100	2400	2100	2400
Hammers	H100, H100 S		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
	H115 S, H120C S		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
Multiprocessors	MP15	CC, CR, PS					■				■								■				■									
	MP15	S					■	■			■	■							■	■			■	■					■		■	
Multi-Grapples	G310B	D, R	■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■		■	■	■	■
	G315B	D, R					■	■			■	■							■	■			■	■					■		■	
Compactor	CVP75		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■		■	■	■	■	■	■
Crusher	P315						■				■								■				■									
Pulverizer	P215						■	■			■	■							■	■			■	■					■		■	

■ 360° Working Range
■ Over the front only
■ Maximum material density 3000 kg/m³
■ Maximum material density 1800 kg/m³
■ Maximum material density 1200 kg/m³

Lift Capacities – Variable Adjustable Boom (5200 mm)

All values are in kg, without bucket and without QC, with counterweight (4100 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)  Load over front  Load over rear  Load over side  Load point height

Short Stick 2100 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up				*6250	5300	4600	4700	3300	2900				*3900	3100	2750	6.18
	Rear dozer down					*6250	5250		*5050	3300					*3900	3100	
	Dozer and stabilizer down					*6250	*6250		*5050	4900					*3900	*3900	
	2 sets of stabilizers down				*6250	*6250	*6250	*5050	*5050	*5050				*3900	*3900	*3900	
	Wide axle rear dozer up					5300	5050		3300	3150					3150	3000	
4.5 m	Rear dozer up				*6650	5100	4400	4650	3250	2850				3600	2500	2200	7.01
	Rear dozer down					*6650	5050		*5100	3250					*3650	2500	
	Dozer and stabilizer down					*6650	*6650		*5100	4850					*3650	*3650	
	2 sets of stabilizers down				*6650	*6650	*6650	*5100	*5100	*5100				*3650	*3650	*3650	
	Wide axle rear dozer up					5100	4850		3250	3150					2500	2400	
3.0 m	Rear dozer up				6900	4700	4050	4500	3100	2700				3250	2250	1950	7.44
	Rear dozer down					*7650	4700		*5450	3150					*3600	2250	
	Dozer and stabilizer down					*7650	7300		*5450	4700					*3600	*3600	
	2 sets of stabilizers down				*7650	*7650	*7650	*5450	*5450	*5450				*3600	*3600	*3600	
	Wide axle rear dozer up					4750	4500		3150	3000					2250	2150	
1.5 m	Rear dozer up				6600	4400	3800	4350	3000	2600	3150	2200	1900	3150	2150	1900	7.54
	Rear dozer down					*8800	4400		*5950	3000		*4300	2200		*3750	2150	
	Dozer and stabilizer down					*8800	6950		*5950	4550		*4300	3300		*3750	3300	
	2 sets of stabilizers down				*8800	*8800	8250	*5950	*5950	5350	*4300	*4300	3850		*3750	*3750	
	Wide axle rear dozer up					4450	4200		3000	2850		2200	2100		2150	2050	
0.0 m	Rear dozer up				6450	4300	3650	4250	2900	2500				3250	2200	1950	7.32
	Rear dozer down					*8550	4250		*6300	2900					*4100	2250	
	Dozer and stabilizer down					*8550	6800		*6300	4450					*4100	3400	
	2 sets of stabilizers down				*8550	*8550	8100	*6300	*6300	5250				*4100	*4100	3950	
	Wide axle rear dozer up					4300	4050		2900	2750					2250	2150	
–1.5 m	Rear dozer up	*7200	*7200	6650	6450	4300	3650	4250	2900	2500				3650	2500	2150	6.76
	Rear dozer down		*7200	*7200		*7450	4250		*5500	2900					*4300	2500	
	Dozer and stabilizer down		*7200	*7200		*7450	6800		*5500	4450					*4300	3800	
	2 sets of stabilizers down	*7200	*7200	*7200	*7450	*7450	*7450	*5500	*5500	5200				*4300	*4300	*4300	
	Wide axle rear dozer up		*7200	*7200		4300	4050		2900	2750					2500	2400	
–3.0 m	Rear dozer up				*5300	4400	3750										
	Rear dozer down					*5300	4350										
	Dozer and stabilizer down					*5300	*5300										
	2 sets of stabilizers down				*5300	*5300	*5300										
	Wide axle rear dozer up					4400	4150										

Medium Stick 2400 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up				*5450	5350	4650	4750	3350	2950				*3300	2900	2550	6.51
	Rear dozer down					*5450	5350		*4900	3350					*3300	2900	
	Dozer and stabilizer down					*5450	*5450		*4900	4900					*3300	*3300	
	2 sets of stabilizers down				*5450	*5450	*5450	*4900	*4900	*4900				*3300	*3300	*3300	
	Wide axle rear dozer up					5350	5100		3350	3200					2900	2750	
4.5 m	Rear dozer up				*6450	5150	4450	4650	3300	2850				*3100	2350	2050	7.30
	Rear dozer down					*6450	5100		*5000	3300					*3100	2350	
	Dozer and stabilizer down					*6450	*6450		*5000	4900					*3100	*3100	
	2 sets of stabilizers down				*6450	*6450	*6450	*5000	*5000	*5000				*3100	*3100	*3100	
	Wide axle rear dozer up					5150	4900		3300	3150					2350	2250	
3.0 m	Rear dozer up				6950	4750	4100	4500	3150	2750	3200	2200	1950	3050	2100	1850	7.71
	Rear dozer down					*7350	4750		*5300	3150		*4300	2250		*3100	2150	
	Dozer and stabilizer down					*7350	*7350		*5300	4700		*4300	3350		*3100	*3100	
	2 sets of stabilizers down				*7350	*7350	*7350	*5300	*5300	*5300	*4300	*4300	3900		*3100	*3100	
	Wide axle rear dozer up					4800	4550		3150	3000		2250	2150		2150	2050	
1.5 m	Rear dozer up				6600	4450	3800	4350	3000	2600	3150	2150	1900	2950	2050	1750	7.81
	Rear dozer down					*8700	4400		*5800	3000		*4500	2150		*3250	2050	
	Dozer and stabilizer down					*8700	6950		*5800	4550		*4500	3300		*3250	3100	
	2 sets of stabilizers down				*8700	*8700	8300	*5800	*5800	5300	*4500	*4500	3850		*3250	*3250	
	Wide axle rear dozer up					4450	4200		3000	2850		2150	2100		2050	1950	
0.0 m	Rear dozer up				6400	4250	3650	4250	2900	2500	3100	2150	1850	3050	2100	1800	7.60
	Rear dozer down					*8650	4250		*6350	2900		*4650	2150		*3550	2100	
	Dozer and stabilizer down					*8650	6800		*6350	4450		*4650	3250		*3550	3200	
	2 sets of stabilizers down				*8650	*8650	8100	*6350	*6350	5200	*4650	*4650	3800		*3550	*3550	
	Wide axle rear dozer up					4250	4050		2900	2750		2150	2050		2100	2000	
–1.5 m	Rear dozer up	*7150	*7150	6550	6400	4250	3600	4200	2850	2450				3400	2300	2000	7.05
	Rear dozer down		*7150	*7150		*7750	4200		*5700	2850					*4150	2300	
	Dozer and stabilizer down		*7150	*7150		*7750	6750		*5700	4400					*4150	3550	
	2 sets of stabilizers down	*7150	*7150	*7150	*7750	*7750	*7750	*5700	*5700	5200				*4150	*4150	4150	
	Wide axle rear dozer up		*7150	*7150		4250	4000		2850	2700					2300	2200	
–3.0 m	Rear dozer up				*5850	4300	3700										
	Rear dozer down					*5850	4300										
	Dozer and stabilizer down					*5850	*5850										
	2 sets of stabilizers down				*5850	*5850	*5850										
	Wide axle rear dozer up					4300	4100										

*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.

M316D Wheel Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5200 mm)

All values are in kg, without bucket and without QC, with counterweight (4100 kg), heavy lift on.

Load at maximum reach (sticknose/bucket pin) | Load over front | Load over rear | Load over side | Load point height

Long Stick 2600 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up				*4950	*4950	4700	4750	3400	2950				*3000	2750	2400	6.74
	Rear dozer down					*4950	*4950		*4800	3400					*3000	2750	
	Dozer and stabilizer down					*4950	*4950		*4800	4800					*3000	*3000	
	2 sets of stabilizers down				*4950	*4950	*4950	*4800	*4800	*4800				*3000	*3000	*3000	
	Wide axle rear dozer up					*4950	*4950		3400	3250					2750	2650	
4.5 m	Rear dozer up				*5850	5200	4500	4700	3300	2900	*2900	2250	2000	*2850	2250	2000	7.51
	Rear dozer down					*5850	5150		*4900	3300		*2900	2300		*2850	2250	
	Dozer and stabilizer down					*5850	*5850		*4900	4900		*2900	*2900		*2850	*2850	
	2 sets of stabilizers down				*5850	*5850	*5850	*4900	*4900	*4900	*2900	*2900	*2900	*2850	*2850	*2850	
	Wide axle rear dozer up					5200	4950		3300	3150		2300	2200		2250	2200	
3.0 m	Rear dozer up				7000	4800	4150	4500	3150	2750	3200	2250	1950	*2850	2050	1800	7.91
	Rear dozer down					*7150	4800		*5200	3150		*4200	2250		*2850	2050	
	Dozer and stabilizer down					*7150	*7150		*5200	4750		*4200	3400		*2850	*2850	
	2 sets of stabilizers down				*7150	*7150	*7150	*5200	*5200	*5200	*4200	*4200	3900	*2850	*2850	*2850	
	Wide axle rear dozer up					4800	4600		3150	3000		2250	2150		2050	1950	
1.5 m	Rear dozer up				6650	4450	3850	4350	3000	2600	3150	2150	1900	2850	1950	1700	8.00
	Rear dozer down					*8600	4450		*5700	3000		*4400	2200		*2950	2000	
	Dozer and stabilizer down					*8600	7000		*5700	4550		*4400	3300		*2950	*2950	
	2 sets of stabilizers down				*8600	*8600	8300	*5700	*5700	5350	*4400	*4400	3850	*2950	*2950	*2950	
	Wide axle rear dozer up					4500	4250		3000	2850		2150	2100		1950	1900	
0.0 m	Rear dozer up				6450	4250	3650	4250	2900	2500	3100	2100	1850	2950	2000	1750	7.80
	Rear dozer down					*8700	4250		*6250	2900		4650	2150		*3200	2000	
	Dozer and stabilizer down					*8700	6800		*6250	4450		*4650	3250		*3200	3100	
	2 sets of stabilizers down				*8700	*8700	8100	*6250	*6250	5200	*4650	*4650	3800	*3200	*3200	*3200	
	Wide axle rear dozer up					4300	4050		2900	2750		2150	2050		2000	1950	
–1.5 m	Rear dozer up	*6900	*6900	6550	6400	4250	3600	4200	2850	2450				3250	2200	1900	7.27
	Rear dozer down		*6900	*6900		*7900	4200		*5800	2850					*3750	2200	
	Dozer and stabilizer down		*6900	*6900		*7900	6750		*5800	4400					*3750	3400	
	2 sets of stabilizers down	*6900	*6900	*6900	*7900	*7900	*7900	*5800	*5800	5150				*3750	*3750	*3750	
	Wide axle rear dozer up		*6900	*6900		4250	4000		2850	2700					2200	2150	
–3.0 m	Rear dozer up				*6150	4300	3650	*4250	2900	2500				*3600	2700	2350	6.33
	Rear dozer down					*6150	4300		*4250	2900					*3600	2700	
	Dozer and stabilizer down					*6150	*6150		*4250	*4250					*3600	*3600	
	2 sets of stabilizers down				*6150	*6150	*6150	*4250	*4250	*4250				*3600	*3600	*3600	
	Wide axle rear dozer up					4300	4050		2900	2750					2750	2600	

Industrial Stick 3100 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up							*4650	3650	3250				*3250	2750	2450	7.17
	Rear dozer down								*4650	3650					*3250	2750	
	Dozer and stabilizer down								*4650	*4650					*3250	*3250	
	2 sets of stabilizers down							*4650	*4650	*4650				*3250	*3250	*3250	
	Wide axle rear dozer up								3700	3550					2750	2650	
4.5 m	Rear dozer up				*5050	*5050	4850	5000	3600	3200	3550	2550	2300	*3150	2350	2100	7.89
	Rear dozer down					*5050	*5050		*5000	3600		*4200	2550		*3150	2350	
	Dozer and stabilizer down					*5050	*5050		*5000	*5000		*4200	*4200		*3150	*3150	
	2 sets of stabilizers down				*5050	*5050	*5050	*5000	*5000	*5000	*4200	*4200	*4200	*3150	*3150	*3150	
	Wide axle rear dozer up					*5050	*5050		3600	3450		2550	2500		2350	2300	
3.0 m	Rear dozer up				*7050	5200	4550	4800	3450	3050	3500	2500	2200	3000	2150	1900	8.27
	Rear dozer down					*7050	5150		*5300	3450		*4350	2500		*3200	2150	
	Dozer and stabilizer down					*7050	*7050		*5300	5050		*4350	3650		*3200	3150	
	2 sets of stabilizers down				*7050	*7050	*7050	*5300	*5300	*5300	*4350	*4350	4200	*3200	*3200	*3200	
	Wide axle rear dozer up					5200	4950		3450	3300		2500	2400		2150	2100	
1.5 m	Rear dozer up				7050	4850	4200	4650	3300	2900	3400	2450	2150	2950	2100	1850	8.36
	Rear dozer down					*8400	4850		*5800	3300		*4550	2450		*3350	2100	
	Dozer and stabilizer down					*8400	7400		*5800	4850		*4550	3550		*3350	3050	
	2 sets of stabilizers down				*8400	*8400	*8400	*5800	*5800	5650	*4550	*4550	4100	*3350	*3350	*3350	
	Wide axle rear dozer up					4850	4600		3300	3150		2450	2350		2100	2000	
0.0 m	Rear dozer up				6800	4600	4000	4500	3150	2750	3350	2350	2100	3000	2100	1900	8.17
	Rear dozer down					*9150	4600		*6350	3150		*4800	2400		*3700	2150	
	Dozer and stabilizer down					*9150	7150		*6350	4750		*4800	3500		*3700	3150	
	2 sets of stabilizers down				*9150	*9150	8450	*6350	*6350	5500	*4800	*4800	4050	*3700	*3700	3600	
	Wide axle rear dozer up					4650	4400		3150	3050		2400	2300		2150	2050	
–1.5 m	Rear dozer up	*7350	*7350	6850	6700	4550	3900	4450	3100	2700	3350	2350	2050	3250	2300	2000	7.66
	Rear dozer down		*7350	*7350		*8650	4500		*6400	3100		*4700	2350		*4350	2300	
	Dozer and stabilizer down		*7350	*7350		*8650	7050		*6400	4650		*4700	3500		*4350	3400	
	2 sets of stabilizers down	*7350	*7350	*7350	*8650	*8650	8350	*6400	*6400	5450	*4700	*4700	4000	*4350	*4350	3900	
	Wide axle rear dozer up		*7350	*7350		4550	4300		3100	3000		2350	2250		2300	2200	
–3.0 m	Rear dozer up	*9800	8400	6950	6700	4550	3900	4450	3100	2700				3800	2700	2350	6.79
	Rear dozer down		*9800	8300		*7250	4550		*5300	3100					*4150	2700	
	Dozer and stabilizer down		*9800	*9800		*7250	7050		*5300	4700					*4150	4000	
	2 sets of stabilizers down	*9800	*9800	*9800	*7250	*7250	*7250	*5300	*5300	*5300				*4150	*4150	*4150	
	Wide axle rear dozer up		8400	7800		4550	4350		3100	3000					2700	2600	

*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)

All values are in kg, without bucket and without QC, with counterweight (4100 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)  Load over front  Load over rear  Load over side  Load point height

Short Stick 2100 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up													*3850	3350	2950	5.93
	Rear dozer down														*3850	3350	
	Dozer and stabilizer down														*3850	*3850	
	2 sets of stabilizers down													*3850	*3850	*3850	
	Wide axle rear dozer up														3350	3200	
4.5 m	Rear dozer up				*6650	5100	4450	4650	3300	2900				*3600	2650	2350	6.80
	Rear dozer down					*6650	5050		*5650	3300					*3600	2700	
	Dozer and stabilizer down					*6650	*6650		*5650	4850					*3600	*3600	
	2 sets of stabilizers down				*6650	*6650	*6650	*5650	*5650	5600				*3600	*3600	*3600	
	Wide axle rear dozer up					5100	4850		3300	3150					2700	2600	
3.0 m	Rear dozer up				6950	4800	4150	4500	3150	2750				3400	2400	2100	7.24
	Rear dozer down					*7900	4750		*6050	3150					*3600	2400	
	Dozer and stabilizer down					*7900	7300		*6050	4700					*3600	3550	
	2 sets of stabilizers down				*7900	*7900	*7900	*6050	*6050	5500				*3600	*3600	*3600	
	Wide axle rear dozer up					4800	4550		3150	3050					2400	2300	
1.5 m	Rear dozer up				6650	4500	3900	4350	3050	2650				3300	2300	2000	7.34
	Rear dozer down					*8850	4500		*6450	3050					*3800	2300	
	Dozer and stabilizer down					*8850	7000		*6450	4600					*3800	3450	
	2 sets of stabilizers down				*8850	*8850	8300	*6450	*6450	5350				*3800	*3800	*3800	
	Wide axle rear dozer up					4500	4300		3050	2900					2300	2200	
0.0 m	Rear dozer up				6500	4350	3750	4300	2950	2600				3400	2350	2050	7.11
	Rear dozer down					*8850	4350		*6450	2950					*4250	2350	
	Dozer and stabilizer down					*8850	6850		*6450	4500					*4250	3550	
	2 sets of stabilizers down				*8850	*8850	8150	*6450	*6450	5250				*4250	*4250	4100	
	Wide axle rear dozer up					4400	4150		2950	2850					2350	2250	
–1.5 m	Rear dozer up	*8850	8200	6800	6500	4350	3750	4250	2950	2550				3800	2650	2300	6.53
	Rear dozer down		*8850	8100		*8000	4350		*5800	2950					*4950	2650	
	Dozer and stabilizer down		*8850	*8850		*8000	6850		*5800	4500					*4950	4000	
	2 sets of stabilizers down	*8850	*8850	*8850	*8000	*8000	*8000	*5800	*5800	5250				*4950	*4950	4650	
	Wide axle rear dozer up		8200	7650		4350	4150		2950	2800					2650	2550	
–3.0 m	Rear dozer up	*7850	*7850	6950	*5950	4450	3850							*4300	3450	3000	5.46
	Rear dozer down		*7850	*7850		*5950	4450								*4300	3450	
	Dozer and stabilizer down		*7850	*7850		*5950	*5950								*4300	*4300	
	2 sets of stabilizers down	*7850	*7850	*7850	*5950	*5950	*5950							*4300	*4300	*4300	
	Wide axle rear dozer up		*7850	7800		4450	4250								3450	3300	

Medium Stick 2400 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up							*4300	3350	2950				*3250	3100	2750	6.25
	Rear dozer down								*4300	3350					*3250	3100	
	Dozer and stabilizer down								*4300	*4300					*3250	*3250	
	2 sets of stabilizers down							*4300	*4300	*4300				*3250	*3250	*3250	
	Wide axle rear dozer up								3350	3200					3100	3000	
4.5 m	Rear dozer up				*6300	5150	4500	4650	3300	2900				*3100	2500	2200	7.08
	Rear dozer down					*6300	5100		*5400	3300					*3100	2500	
	Dozer and stabilizer down					*6300	*6300		*5400	4850					*3100	*3100	
	2 sets of stabilizers down				*6300	*6300	*6300	*5400	*5400	*5400				*3100	*3100	*3100	
	Wide axle rear dozer up					5150	4900		3300	3150					2500	2400	
3.0 m	Rear dozer up				7000	4800	4200	4500	3150	2800				*3100	2250	2000	7.50
	Rear dozer down					*7600	4800		*5900	3150					*3100	2250	
	Dozer and stabilizer down					*7600	7350		*5900	4750					*3100	*3100	
	2 sets of stabilizers down				*7600	*7600	*7600	*5900	*5900	5500				*3100	*3100	*3100	
	Wide axle rear dozer up					4850	4600		3150	3050					2250	2150	
1.5 m	Rear dozer up				6650	4500	3900	4350	3050	2650	3150	2200	1950	3100	2150	1900	7.60
	Rear dozer down					*8650	4500		*6350	3050		*4150	2200		*3300	2150	
	Dozer and stabilizer down					*8650	7000		*6350	4600		*4150	3300		*3300	3250	
	2 sets of stabilizers down				*8650	*8650	8300	*6350	*6350	5350	*4150	*4150	3850	*3300	*3300	*3300	
	Wide axle rear dozer up					4550	4300		3050	2900		2200	2100		2150	2100	
0.0 m	Rear dozer up				6500	4350	3750	4250	2950	2550				3200	2200	1950	7.38
	Rear dozer down					*8900	4350		*6500	2950					*3650	2250	
	Dozer and stabilizer down					*8900	6850		*6500	4500					*3650	3350	
	2 sets of stabilizers down				*8900	*8900	8100	*6500	*6500	5250				*3650	*3650	*3650	
	Wide axle rear dozer up					4350	4150		2950	2800					2200	2150	
–1.5 m	Rear dozer up	*8550	8100	6700	6450	4300	3700	4250	2900	2550				3550	2450	2150	6.82
	Rear dozer down		*8550	8000		*8200	4300		*6000	2900					*4450	2500	
	Dozer and stabilizer down		*8550	*8550		*8200	6800		*6000	4450					*4450	3750	
	2 sets of stabilizers down	*8550	*8550	*8550	*8200	*8200	8050	*6000	*6000	5200				*4450	*4450	4350	
	Wide axle rear dozer up		8100	7550		4350	4100		2900	2800					2450	2350	
–3.0 m	Rear dozer up	*8750	8250	6850	*6500	4400	3750							*4400	3100	2700	5.81
	Rear dozer down		*8750	8150		*6500	4400								*4400	3100	
	Dozer and stabilizer down		*8750	*8750		*6500	*6500								*4400	*4400	
	2 sets of stabilizers down	*8750	*8750	*8750	*6500	*6500	*6500							*4400	*4400	*4400	
	Wide axle rear dozer up		8250	7700		4400	4150								3100	3000	

*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)

All values are in kg, without bucket and without QC, with counterweight (4100 kg), heavy lift on.

Load at maximum reach (sticknose/bucket pin) | Load over front | Load over rear | Load over side | Load point height

Long Stick 2600 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up							*4400	3350	2950				*2950	2950	2600	6.49
	Rear dozer down								*4400	3350					*2950	2950	
	Dozer and stabilizer down								*4400	*4400					*2950	*2950	
	2 sets of stabilizers down							*4400	*4400	*4400				*2950	*2950	*2950	
	Wide axle rear dozer up								3400	3250					2950	2850	
4.5 m	Rear dozer up							4650	3300	2900				*2800	2400	2100	7.28
	Rear dozer down								*5300	3300					*2800	2400	
	Dozer and stabilizer down								*5300	4900					*2800	*2800	
	2 sets of stabilizers down							*5300	*5300	*5300				*2800	*2800	*2800	
	Wide axle rear dozer up								3300	3200					2400	2300	
3.0 m	Rear dozer up				7050	4850	4200	4550	3200	2800	3250	2250	2000	*2850	2150	1900	7.69
	Rear dozer down					*7400	4850		*5800	3200		*3950	2250		*2850	2200	
	Dozer and stabilizer down					*7400	*7400		*5800	4750		*3950	3400		*2850	*2850	
	2 sets of stabilizers down				*7400	*7400	*7400	*5800	*5800	5500	*3950	*3950	3900	*2850	*2850	*2850	
	Wide axle rear dozer up					4850	4650		3200	3050		2250	2200		2150	2100	
1.5 m	Rear dozer up				6700	4550	3900	4400	3050	2650	3150	2200	1950	*3000	2100	1850	7.79
	Rear dozer down					*8550	4550		*6300	3050		4700	2200		*3000	2100	
	Dozer and stabilizer down					*8550	7050		*6300	4600		*4800	3300		*3000	*3000	
	2 sets of stabilizers down				*8550	*8550	8350	*6300	*6300	5350	*4800	*4800	3850	*3000	*3000	*3000	
	Wide axle rear dozer up					4550	4350		3050	2900		2200	2100		2100	2000	
0.0 m	Rear dozer up	*4450	*4450	*4450	6500	4350	3750	4250	2950	2550	3150	2150	1900	3100	2150	1850	7.58
	Rear dozer down		*4450	*4450		*8900	4350		*6500	2950		*4050	2200		*3300	2150	
	Dozer and stabilizer down		*4450	*4450		*8900	6850		*6500	4500		*4050	3300		*3300	3250	
	2 sets of stabilizers down	*4450	*4450	*4450	*8900	*8900	8150	*6500	*6500	5250	*4050	*4050	3800	*3300	*3300	*3300	
	Wide axle rear dozer up		*4450	*4450		4400	4150		2950	2800		2150	2100		2150	2050	
–1.5 m	Rear dozer up	*8200	8050	6700	6450	4300	3700	4250	2900	2500				3400	2350	2050	7.03
	Rear dozer down		*8200	7950		*8350	4300		*6100	2900					*3950	2350	
	Dozer and stabilizer down		*8200	*8200		*8350	6800		*6100	4450					*3950	3600	
	2 sets of stabilizers down	*8200	*8200	*8200	*8350	*8350	8050	*6100	*6100	5200				*3950	*3950	*3950	
	Wide axle rear dozer up		8100	7500		4300	4100		2900	2800					2350	2250	
–3.0 m	Rear dozer up	*9300	8200	6800	6500	4350	3750	4300	2950	2600				4250	2900	2550	6.06
	Rear dozer down		*9300	8100		*6800	4350		*4500	2950					*4350	2950	
	Dozer and stabilizer down		*9300	*9300		*6800	*6800		*4500	*4500					*4350	*4350	
	2 sets of stabilizers down	*9300	*9300	*9300	*6800	*6800	*6800	*4500	*4500	*4500				*4350	*4350	*4350	
	Wide axle rear dozer up		8250	7650		4350	4150		2950	2850					2950	2800	

Industrial Stick 3100 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up							*4500	3650	3250				*3200	2950	2650	6.89
	Rear dozer down								*4500	3650					*3200	2950	
	Dozer and stabilizer down								*4500	*4500					*3200	*3200	
	2 sets of stabilizers down							*4500	*4500	*4500				*3200	*3200	*3200	
	Wide axle rear dozer up								3650	3550					2950	2850	
4.5 m	Rear dozer up							4950	3600	3200	3550	2600	2300	*3150	2500	2250	7.64
	Rear dozer down								*5150	3600		*3600	2600		*3150	2500	
	Dozer and stabilizer down								*5150	*5150		*3600	*3600		*3150	*3150	
	2 sets of stabilizers down							*5150	*5150	*5150	*3600	*3600	*3600	*3150	*3150	*3150	
	Wide axle rear dozer up								3600	3450		2600	2500		2500	2400	
3.0 m	Rear dozer up				*7150	5200	4550	4800	3450	3100	3500	2550	2250	3150	2300	2050	8.03
	Rear dozer down					*7150	5200		*5800	3500		*4750	2550		*3200	2300	
	Dozer and stabilizer down					*7150	*7150		*5800	5050		*4750	3650		*3200	*3200	
	2 sets of stabilizers down				*7150	*7150	*7150	*5800	*5800	*5800	*4750	*4750	4200	*3200	*3200	*3200	
	Wide axle rear dozer up					5250	5000		3500	3350		2550	2450		2300	2200	
1.5 m	Rear dozer up				7050	4900	4300	4650	3350	2950	3450	2450	2200	3050	2200	1950	8.12
	Rear dozer down					*8550	4900		*6400	3350		4950	2500		*3450	2200	
	Dozer and stabilizer down					*8550	7450		*6400	4900		5100	3600		*3450	3200	
	2 sets of stabilizers down				*8550	*8550	*8550	*6400	*6400	5650	*5300	5200	4100	*3450	*3450	*3450	
	Wide axle rear dozer up					4900	4700		3350	3200		2450	2400		2200	2150	
0.0 m	Rear dozer up	*5850	*5850	*5850	6850	4700	4100	4550	3200	2850	3350	2400	2150	3150	2250	2000	7.92
	Rear dozer down		*5850	*5850		*9250	4700		*6750	3250		4900	2400		*3850	2250	
	Dozer and stabilizer down		*5850	*5850		*9250	7200		*6750	4750		5050	3550		*3850	3300	
	2 sets of stabilizers down	*5850	*5850	*5850	*9250	*9250	8500	*6750	*6750	5500	*5350	5150	4050	*3850	*3850	3750	
	Wide axle rear dozer up		*5850	*5850		4700	4500		3250	3100		2400	2350		2250	2150	
–1.5 m	Rear dozer up	*8600	8450	7000	6750	4600	4000	4500	3150	2800				3400	2450	2150	7.40
	Rear dozer down		*8600	8300		*9000	4600		*6600	3150					*4600	2450	
	Dozer and stabilizer down		*8600	*8600		*9000	7100		*6600	4700					*4600	3550	
	2 sets of stabilizers down	*8600	*8600	*8600	*9000	*9000	8400	*6600	*6600	5450				*4600	*4600	4100	
	Wide axle rear dozer up		8450	7850		4600	4400		3150	3050					2450	2350	
–3.0 m	Rear dozer up	*11 000	8500	7100	6750	4600	4000	4500	3150	2800				4050	2900	2550	6.49
	Rear dozer down		*11 000	8400		*7800	4600		*5600	3150					*4900	2900	
	Dozer and stabilizer down		*11 000	*11 000		*7800	7100		*5600	4700					*4900	4250	
	2 sets of stabilizers down	*11 000	*11 000	*11 000	*7800	*7800	*7800	*5600	*5600	5450				*4900	*4900	*4900	
	Wide axle rear dozer up		8500	7950		4650	4400		3150	3050					2900	2800	
–4.5 m	Rear dozer up	*7100	*7100	*7100	*5000	4750	4100							*4300	4200	3650	4.95
	Rear dozer down		*7100	*7100		*5000	4750								*4300	4200	
	Dozer and stabilizer down		*7100	*7100		*5000	*5000								*4300	*4300	
	2 sets of stabilizers down	*7100	*7100	*7100	*5000	*5000	*5000							*4300	*4300	*4300	
	Wide axle rear dozer up		*7100	*7100		4750	4550								4200	4000	

*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.

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Lift Capacities – Offset Boom (5200 mm)

All values are in kg, without bucket and without QC, with counterweight (4100 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)  Load over front  Load over rear  Load over side  Load point height

Short Stick 2100 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up				*6100	5300	4600	4600	3200	2800				*3550	3000	2600	6.20
	Rear dozer down					*6100	5250		*4950	3200					*3550	3000	
	Dozer and stabilizer down					*6100	*6100		*4950	4850					*3550	*3550	
	2 sets of stabilizers down				*6100	*6100	*6100	*4950	*4950	*4950				*3550	*3550	*3550	
	Wide axle rear dozer up					5300	5050		3200	3050					3000	2850	
4.5 m	Rear dozer up				*6500	5000	4350	4550	3150	2750				*3250	2400	2050	7.03
	Rear dozer down					*6500	5000		*5000	3150					*3250	2400	
	Dozer and stabilizer down					*6500	*6500		*5000	4800					*3250	*3250	
	2 sets of stabilizers down				*6500	*6500	*6500	*5000	*5000	*5000				*3250	*3250	*3250	
	Wide axle rear dozer up					5000	4750		3150	3050					2400	2300	
3.0 m	Rear dozer up				6800	4550	3900	4400	3000	2600				3100	2100	1800	7.46
	Rear dozer down					*7450	4550		*5300	3000					*3200	2100	
	Dozer and stabilizer down					*7450	7150		*5300	4600					*3200	*3200	
	2 sets of stabilizers down				*7450	*7450	*7450	*5300	*5300	*5300				*3200	*3200	*3200	
	Wide axle rear dozer up					4550	4300		3000	2850					2100	2000	
1.5 m	Rear dozer up				6350	4200	3550	4200	2800	2400	3000	2050	1750	3000	2000	1700	7.55
	Rear dozer down					*8500	4150		*5750	2800		*4150	2050		*3350	2000	
	Dozer and stabilizer down					*8500	6750		*5750	4400		*4150	3200		*3350	3150	
	2 sets of stabilizers down				*8500	*8500	8050	*5750	*5750	5200	*4150	*4150	3700	*3350	*3350	*3350	
	Wide axle rear dozer up					4200	3950		2850	2700		2050	1950		2000	1900	
0.0 m	Rear dozer up				6150	4000	3400	4050	2700	2300				3100	2050	1750	7.34
	Rear dozer down					*8200	4000		*6050	2700					*3600	2050	
	Dozer and stabilizer down					*8200	6550		*6050	4300					*3600	3250	
	2 sets of stabilizers down				*8200	*8200	7850	*6050	*6050	5050				*3600	*3600	*3600	
	Wide axle rear dozer up					4000	3800		2700	2600					2050	1950	
–1.5 m	Rear dozer up	*7400	*7400	6200	6150	4000	3350	4050	2700	2300				3450	2300	2000	6.77
	Rear dozer down		*7400	*7400		*7100	4000		*5250	2700					*4050	2350	
	Dozer and stabilizer down		*7400	*7400		*7100	6550		*5250	4300					*4050	3650	
	2 sets of stabilizers down	*7400	*7400	*7400	*7100	*7100	*7100	*5250	*5250	5050				*4050	*4050	*4050	
	Wide axle rear dozer up		*7400	7050		4000	3800		2700	2550					2350	2200	
–3.0 m	Rear dozer up				*5000	4150	3500										
	Rear dozer down					*5000	4100										
	Dozer and stabilizer down					*5000	*5000										
	2 sets of stabilizers down				*5000	*5000	*5000										
	Wide axle rear dozer up					4150	3900										

Medium Stick 2400 mm

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up				*5450	5350	4650	4700	3300	2850				*2950	2750	2400	6.53
	Rear dozer down					*5450	5350		*4800	3250					*2950	2750	
	Dozer and stabilizer down					*5450	*5450		*4800	4800					*2950	*2950	
	2 sets of stabilizers down				*5450	*5450	*5450	*4800	*4800	*4800				*2950	*2950	*2950	
	Wide axle rear dozer up					5350	5100		3300	3150					2800	2650	
4.5 m	Rear dozer up				*6300	5100	4400	4600	3200	2800				*2800	2250	1950	7.32
	Rear dozer down					*6300	5050		*4850	3200					*2800	2250	
	Dozer and stabilizer down					*6300	*6300		*4850	4800					*2800	*2800	
	2 sets of stabilizers down				*6300	*6300	*6300	*4850	*4850	*4850				*2800	*2800	*2800	
	Wide axle rear dozer up					5100	4850		3200	3050					2250	2150	
3.0 m	Rear dozer up				6850	4600	3950	4400	3000	2600	3100	2100	1800	*2750	2000	1700	7.73
	Rear dozer down					*7150	4600		*5150	3000		*4150	2100		*2750	2000	
	Dozer and stabilizer down					*7150	*7150		*5150	4600		*4150	3250		*2750	*2750	
	2 sets of stabilizers down				*7150	*7150	*7150	*5150	*5150	*5150	*4150	*4150	3800	*2750	*2750	*2750	
	Wide axle rear dozer up					4650	4400		3000	2900		2100	2000		2000	1900	
1.5 m	Rear dozer up				6400	4200	3550	4200	2800	2400	3000	2050	1750	2850	1900	1600	7.82
	Rear dozer down					*8400	4200		*5600	2800		*4350	2050		*2850	1900	
	Dozer and stabilizer down					*8400	6750		*5600	4400		*4350	3200		*2850	*2850	
	2 sets of stabilizers down				*8400	*8400	8100	*5600	*5600	5200	*4350	*4350	3700	*2850	*2850	*2850	
	Wide axle rear dozer up					4200	4000		2850	2700		2050	1950		1900	1800	
0.0 m	Rear dozer up				6150	4000	3350	4050	2700	2300	2950	2000	1700	2900	1950	1650	7.61
	Rear dozer down					*8300	4000		*6100	2700		*4500	2000		*3100	1950	
	Dozer and stabilizer down					*8300	6500		*6100	4300		*4500	3150		*3100	3050	
	2 sets of stabilizers down				*8300	*8300	7800	*6100	*6100	5050	*4500	*4500	3650	*3100	*3100	*3100	
	Wide axle rear dozer up					4000	3750		2700	2550		2000	1900		1950	1850	
–1.5 m	Rear dozer up	*7300	*7300	6100	6100	3950	3300	4000	2650	2250				3250	2150	1850	7.07
	Rear dozer down		*7300	*7300		*7400	3950		*5450	2650					*3650	2150	
	Dozer and stabilizer down		*7300	*7300		*7400	6500		*5450	4250					*3650	3400	
	2 sets of stabilizers down	*7300	*7300	*7300	*7400	*7400	*7400	*5450	*5450	5000				*3650	*3650	*3650	
	Wide axle rear dozer up		7300	6950		3950	3750		2650	2550					2150	2050	
–3.0 m	Rear dozer up				*5500	4050	3400										
	Rear dozer down					*5500	4050										
	Dozer and stabilizer down					*5500	5500										
	2 sets of stabilizers down				*5500	*5500	*5500										
	Wide axle rear dozer up					4050	3850										

*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.

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 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

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
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 HEES™ biodegradable hydraulic oil
Lowering control devices for boom and stick
SmartBoom™

Front Linkage

Booms
- One-piece boom, 5050 mm
- VA boom (two piece), 5200 mm
- Offset boom, 5200 mm

Bucket linkage with diverter valve
Sticks
- 2100, 2400, 2600 mm
- 3100 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
Falling objects guard
Joystick steering
CD/MP3 Radio (12V) at rear location including speakers and 12V converter
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, 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
Mirrors heated, frame and cab
Ride Control
Tires (see pg.15)
Tool box in upperframe, lockable
Waste Handling Package

M316D Wheel Excavator

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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