M322F

Wheeled Excavator

Engine		
Engine Model	Cat® C7.1 ACERT™	
Emissions	U.S. EPA Tier 4 Final	
Net Power (Maximum)		
ISO 9249/SAE J1349 at 1,700 rpm	126 kW	169 hp
ISO 9249/SAE J1349 at 1,700 rpm (metric)		171 hp (PS)
ISO 14396 at 1,700 rpm	128.9 kW	173 hp

Weights		
Operating Weight with Worktool	20 560-24 700 kg	45,330-54,450 lb
Bucket Specifications		
Bucket Capacities	0.6-1.43 m^3	0.78-1.87 yd^3
Working Ranges		
Maximum Reach at Ground Level	10 300 mm	33'10"
Maximum Digging Depth	6650 mm	21'10"
Drive		
Maximum Travel Speed	30 km/h	18.6 mph

M322F Features

Made to keep your costs down.
Not only does the machine give you all the versatility you need, but it does so while providing a great deal of precision and speed with an absolute minimum fuel consumption – and zero impact on your efficiency.

Made to make operation easy and pleasant.
Have a seat, you will be impressed by the quietness and comfort of the cab. Feel relaxed, we help you make sure you're safe.

Enjoy integrated technologies; they act transparently.

When you add the ground level grouped service points that make your maintenance quick and easy and multiple Cat work tools that help you do all kinds of jobs, you simply won't find a better machine.

Contents

The new F Series generation is here to help you take on the wide variety of challenges you face every day, more easily and with more pleasure.

F Series – Easier Than Ever.

Sustainability

Generations Ahead in Every Way

Fuel Efficiency and Reduced Exhaust Emissions

The engine meets Tier 4 Final emission standards, performs the same amount of work, while burning less fuel than the previous model, which means more efficiency, less resources consumption, and fewer CO_2 emissions.

Quiet Operation

Outstandingly low sound levels, you won't believe your machine is running.

Transparent Technologies and Longer Service Intervals

- The new Eco Modes, Auto Engine Speed Control and Engine Idle Shutdown help further reduce your overall fuel consumption.
- Product Link™ allows remote monitoring of the machine and helps improve overall efficiency.
- Your Cat dealer can help extend service intervals, meaning fewer fluids and disposals, all adding up to lower costs.

Biodiesel and Biodegradable Hydraulic Oil

- The M322F has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or up to B20 biodiesel fuel blended with ULSD.
- Cat BIO HYDO™ Advanced HEES™ reduces the impact on the environment.

Cat Certified Used

This program is a key element in the range of solutions offered by Caterpillar and Cat dealers to help customers achieve growth at the lowest cost while eliminating waste. Used equipment is inspected, guaranteed and ready for work and customers will benefit from a Caterpillar warranty.

Engine
Power, Reliability, and Fuel Economy

The Power and Performance You Need

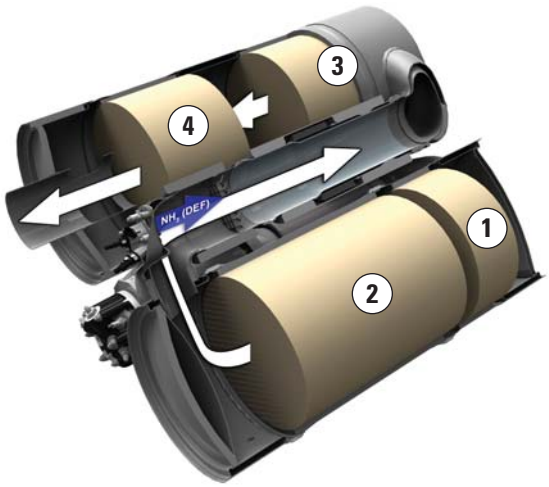
Constant Power Strategy
Provides a quick response to changing loads, while delivering the same amount of power regardless of operating conditions.

A Transparent Emission Solution That Works.
The Cat C7.1 ACERT engine meets today's Tier 4 Final emission standards, and it does so without interrupting your job process. It is designed to be:

- **Transparent:** no operator intervention
- **Durable:** fit for life Diesel Particulate Filter
- **Efficient:** no work interruption, even in case of extended idling time
- **Simple:** minimum maintenance. Longitudinal engine installation, which further simplifies maintenance.

Biodiesel Not a Problem
The engine can run on up to B20 biodiesel fuel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

Proven Technology
To assure that our technology will meet your expectations for reliable trouble-free service, we subjected these engines and technologies to extensive operating hours of test and validation.



1) Diesel Oxidation Catalyst
2) Diesel Particulate Filter
3) Selective Catalyst Reduction Catalyst
4) Ammonia Oxidation Catalyst

Built-in Fuel Savers That Add Up

- Automatic Engine Speed Control: lowers engine speed when it is not needed.
- NEW Engine Idle Shutdown (when activated): turns the engine off when it's been idling for more than a pre-set amount of time.
- NEW Cooling System: variable speed and on-demand fan optimizing consumption.
- NEW enhanced Eco Mode: reduces engine speed while delivering the same power.
- Automatic shift to Travel Mode when you start riding: optimizes driveline performance while preserving fuel.

Premium Comfort
Keeps Operators Productive All Shift Long

Legacy from the Renowned Cat Wheeled Excavators
Designed for the operator, our cabs are unique.

Ergonomic Layout
- Frequently used switches are centralized, kept to the minimum and ideally located close to the joysticks.
- Storage compartments are useful... when well designed. The lunch box provides sufficient room to store a hard hat. Several other areas include drink, phone, or key holders.

Comfortable Seat Options
Our seats provide all the comfort needed for a long day of work, including FULL adjustment. All seats are heated and air suspended. Automatic weight adjustment and air cooled seats are available.

Safety – Not an Option
ROPS/FOGS cabs, seat belt alarm, safety bar, sideview camera … among others.

Details That Make the Difference
Have a look at the cab; you will see it is through details that we improve pleasure of operating.

Smart Controls to Reduce Fatigue
- Features like ride control, SmartBoom or Joystick Steering will be precious to increase your productivity.
- New technologies that work transparently like the swing and auto travel lock or the automatic brake and axle lock, reduce the number of tasks you need to do.

Plug, Charge and Play Your Devices
- The 12V 10A power supply socket is conveniently located for charging your laptop, or a tablet.
- A CD/MP3 Radio with speakers and USB port is available.

Simplicity and Functionality
For Ease of Operation

A Cab Just for You – Fully Adjustable
- Seat armrests, in height and angle
- Steering column adjustment, not only tilting fore/aft but also in height
- Hydraulic sensitivity of the machine to make it more or less aggressive
- Joystick controls, buttons and thumb wheels
- Automatic air conditioning

Incredibly Low Sound Levels, Less Fatigue
Operator sound level has been reduced thanks to a new cab design and increased cab pressure, which also prevents from dust entry. Add in new hydro mounts to fix the cab on the frame and you have a cab that's as quiet as any of today's premium cars.

Outstanding Visibility: See the Difference!
- Standard LED working lights and halogen roading lights
- Standard LED dome light
- All glass areas have been drastically increased
- Choice of 70/30 front windshield or one-piece windshield
- New wide angle mirrors including a lower mirror for better visibility to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

Standard Rear and Side Wide Angle Cameras
Cameras let you see what's going on around. The image from the side camera is displayed on an additional wide color screen, offering the full view from the front to the rear of the machine. The rear camera is integrated into the counterweight for enhanced protection.

Large Color Monitor
Easy to read and in local language, the high resolution LCD monitor will keep you aware of any important information. "Quick Access" buttons allow a quick selection of favorite functions. The tool select function lets you preset up to ten different hydraulic attachments for quick tool changes.

The Next Generation
Easier Than Ever

Make the Move to the Next Generation
Refinements. From the whole design to the smallest details. Convenient features, new advanced and transparent technologies, not only to reduce emissions but to further improve your daily experience when working with our products.

Easier Than Ever
Work like no other with our wheeled excavators. The F Series generation is made to help you take on the wide variety of the challenges you face every day, more easily and with more pleasure, to keep you on the road to your success.

Cruise Control
Focus on the Road, Not on Your Foot

Cruise Control
No need to press the pedal all the time.
- Choose the very speed you wish
- Press the quick access button on the monitor
- Enjoy the ride

It's as Easy as That.

Smart Technologies
Press Go and Relax

Swing and Auto Travel Lock: As Fast, As Easy, As Safe

No need for the operator to bend to engage the swing lock pin.

- Just press a button,
- Align the upper to the lower frame,
- Enjoy the ride: a green indicator confirms the swing and the implements have been automatically locked.

It's As Easy As That.

Integrated Pin Code – Switch Off and Relax

No need to buy an optional security system to protect your equipment against theft.

- The pin code is integrated into the monitor (standard)
- Entering the right code allows the engine to start

The Machine Security System (MSS – optional) adds even more protection when needed.

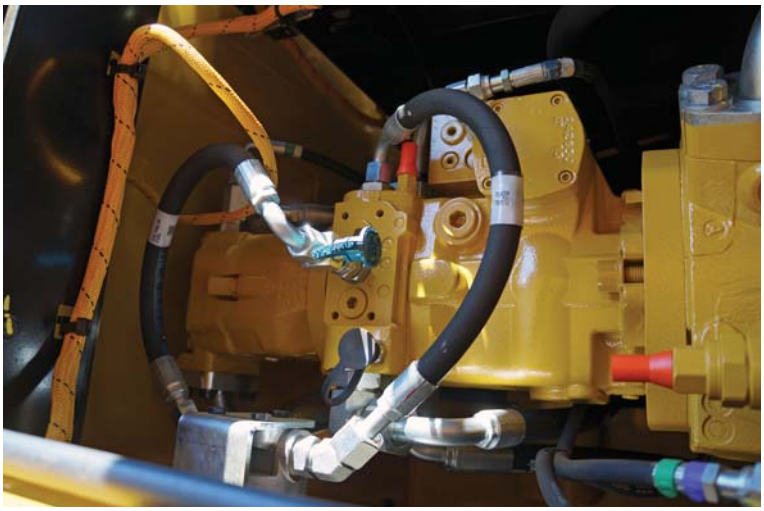
Dig and Go Auto Axle Lock

Presses the pedal for you, reducing the number of actions you need to do

The machine automatically detects when the service brake and axle need to be locked (like when digging), or unlocked (roading), hence removing the need for the operator to systematically press the pedal.

Brake and axle are released automatically by pressing the travel pedal again.

Hydraulics
Fast, Precise, Flexible



When it comes to moving material quickly, you need efficient hydraulics – the type the F Series can deliver.

Efficient Design, Smart and Fast

- **Simple Design:** The new hydraulic valve compartment and routings offer a simple and clean design to help ensure durability. Everything is reachable from ground level.
- **Smart Main Hydraulics:** The system allows reducing the load on the engine when not needed, which translates into lower fuel consumption.
- **Dedicated Swing Pump:** A closed hydraulic circuit is dedicated to the swing only. Having two separate pumps, one for the swing and the other for the other functions allows faster and smoother combined movements.

Control Like No Other

- **Electronic Pump Control** – Controllability is one of the main attributes of Cat excavators, and one of the key contributors to this is the Electronic Pump Control (EPC) that's designed to improve response time and precision. It puts flow exactly where you need it, when you need it, which means a much smoother operation and greater efficiency.
- **Adjustable Hydraulic Sensitivity** – Allows you to adjust the aggressiveness of the machine according to the application.
- **Stick Regeneration Circuit** – Increases efficiency and helps enhance controllability for higher productivity.

Proportional Auxiliary Hydraulics, Tremendous Versatility

Medium pressure function (for tilting buckets or rotating tools), high pressure lines and circuit, hydraulic quick coupler circuit: they all come standard, which allows you to switch from one work tool to another, without the need to add lines and hydraulic circuits.

Undercarriage

Strength and Versatility at 30 km/h (18.6 mph)

Heavy Duty Axles

Long life with effective heavy duty axles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance. The front axle offers wide oscillating and steering angles. The drive shaft offers longer service intervals (1,000 hours).

Advanced Disc Brake System

Minimizes the rocking effect when working free on wheels. The disc brake system acts directly on the hub instead of the drive shaft to avoid planetary gear backlash.

Joystick Steering

Keep both hands on the joysticks even when simultaneously moving the implements and repositioning the machine, by the use of the slider switch on the right joystick.

New Blade Design

- Parallel kinematic to keep the blade parallel to the ground, in every height position
- A profile that allows material to roll better and minimizes material packing

Booms and Sticks

Options To Take on Your Far-reaching or Up-close Tasks

Rugged Performance

Booms and sticks are welded, box section structures with thick, multi-plate fabrications in high stress areas for the tough work you do.

Flexibility

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

Sticks

- **Medium stick – 2500 mm (8'2")** for greater crowd force and lift capacity
- **Long stick – 2900 mm (9'6")** for greater depth and reach

Booms

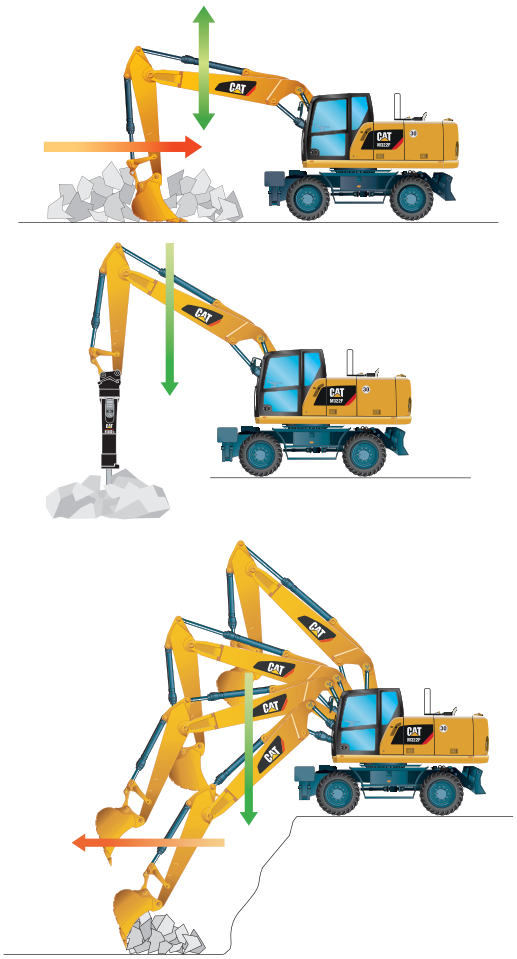
- **Variable Adjustable (VA)** – Improved right side visibility and roading balance. When working in tight quarters or lifting heavy loads, the VA boom offers the best flexibility.
- **One-Piece Boom** – Fits best for all standard applications such as truck loading and digging. A unique straight section in the curve of the side plate reduces stress flow and helps increase boom life.

SmartBoom
Reduces Stress and Vibration

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

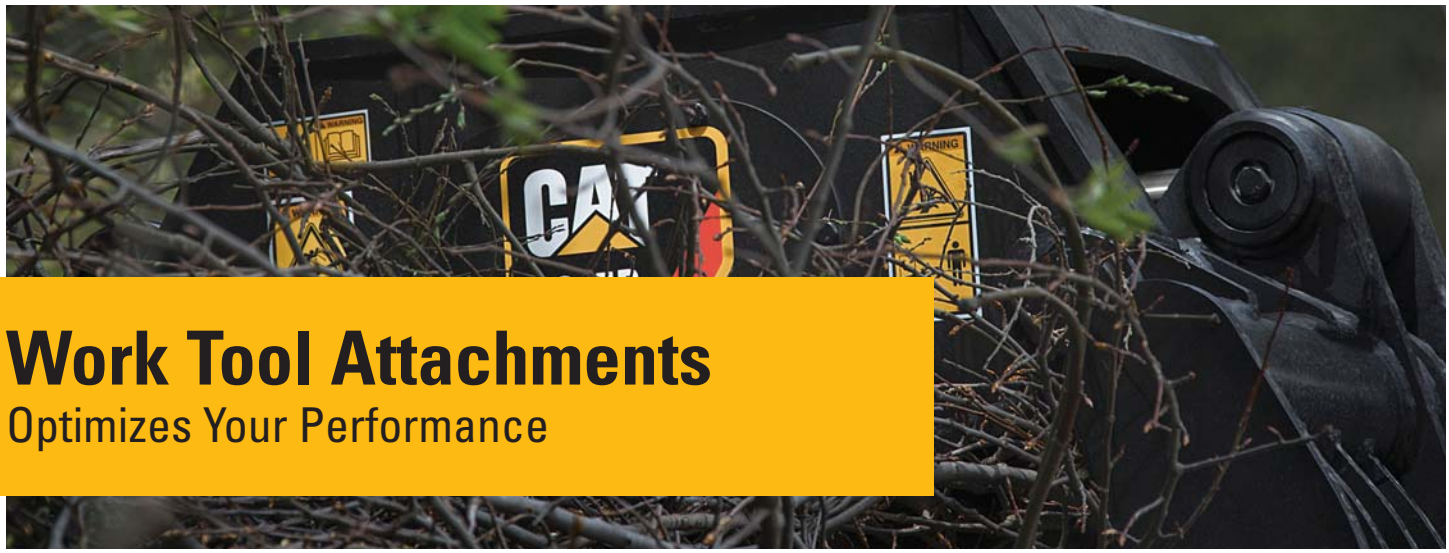
Hammer Work
The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plate compactors.

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.



Ride Control
Fast Travel Speed with More Comfort

The ride control system lets you travel faster over rough terrain with improved ride quality for the operator. Accumulators are acting as shock absorbers to dampen the front part motion. It can be activated through a button located on the soft switch panel in the cab.



Work Tool Attachments

Optimizes Your Performance

Job Site Confidence

From the operators seat, visual and audible indicators help assure that the attachment is coupled. Your Cat excavator hydraulics, mechanisms inside the coupler, and digging forces all work together to assure the attachment stays engaged. The Cat Pin Grabber coupler is the secure way to decrease downtime by allowing quick attachment change and increase job site flexibility.

Power Match

Match your Cat hydraulic attachments to your Cat machine, and get the most out of the standard, built-in software. Attachment changes have never been easier!

Get the Most from Your Machine

If you have multiple tasks to get done, the M322F can help. You can easily expand all the possibilities it offers by utilizing any of the variety of Cat attachments.

Change Jobs Quickly

A quick coupler brings the ability to quickly change attachments and increase your flexibility. The new quick coupler circuit and lines are compatible with the Pin Grabber Coupler and do not require any change or addition to the machine.

Dig, Load, Finish and Compact

A wide range of buckets offers solutions for digging, trenching, loading and finishing works. The addition of a Cat Compactor will introduce your machine to utility work, site prep, road repair and pipeline work.

Move and Handle Material

Choose from one of three different thumb styles to work with your bucket and you have the instant ability to move and handle brush, rocks and debris.

Hammering Works

Our hammers include a buffer to improve your comfort and protect your machine from vibration. Fully enclosed, it is ideal when working in noise regulated areas.

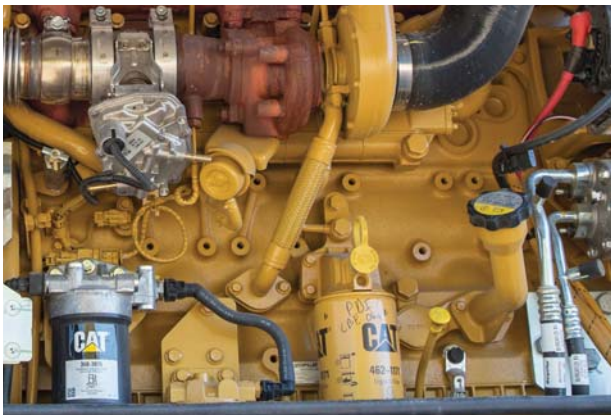
Sort and Load

Grapples bring your machine into waste handling opportunities. Jaws open wide to move volumes, yet are nimble enough to pull a single copper wire out of a pile. Their 360° rotation capability allows you to place the grapple where you want it without moving the machine.

Scrap and Recycle

Shears also have the ability to rotate 360°. A pulverizer allows you to crush and reduce concrete.

Serviceability
When Uptime Counts



Convenient Access Built In
You can reach routine maintenance items like fuel and engine oil filters and fluid taps at ground level while fuel and DEF tanks with engine air filter are accessible from the safety of the slip-resistant new service platform. Compartments feature wide composite service doors, designed to be more resistant to shocks, which all include gas struts to facilitate the opening. Components are now gathered in specific dedicated compartments, like the special electrical compartments.

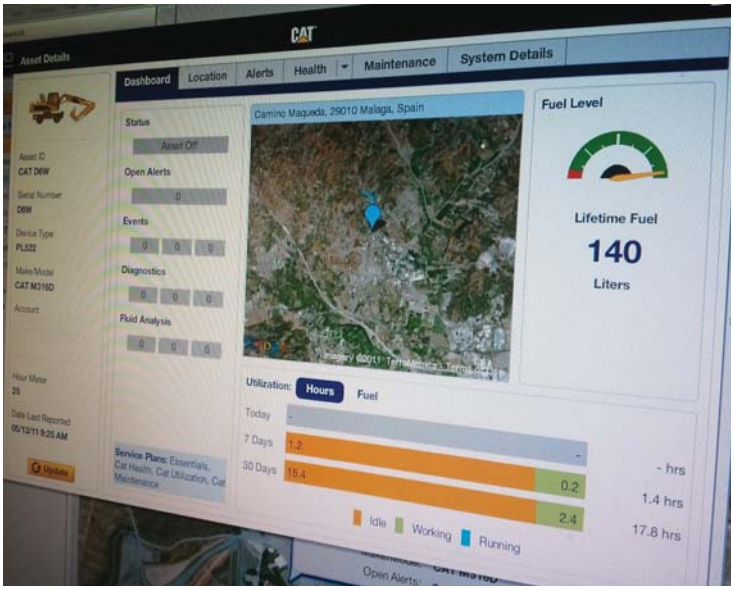
A Smart Design for Any Temperature
The side-by-side and axial fan design allows greater cooling performance. The system is completely separated from the engine compartment to reduce noise and heat and all radiators are gathered in the same compartment while featuring easy-to-clean cores with a tilting device that requires no tool to unlock.

A Fresh Idea
Ventilation inside the cab allows outside air to enter through a fresh air filter. The filter is located on the side of the cab to make it easy to reach, and it is protected by a lockable door that can be opened with the ignition key.

Lube and Fuel Standard Features
An electric lubricator system is an available time-saving standard feature for greasing the whole upper carriage. Greasing points for the undercarriage are kept to a minimum and grouped. An electric refueling pump is also standard. The hose is stored in a dedicated tray, for more cleanliness. Add in the new electric lift pump removing the need to prime the system manually, the standard fuel and water separator and you get a machine that does the fastidious works for you.

Keep it simple.

Integrated Technologies
It Pays to Know



CAT® CONNECT

EQUIPMENT MANAGEMENT | PRODUCTIVITY | SAFETY | SUSTAINABILITY

Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:

EQUIPMENT MANAGEMENT

Equipment Management – increase uptime and reduce operating costs.

PRODUCTIVITY

Productivity – monitor production and manage job site efficiency.

SAFETY

Safety – enhance job site awareness to keep your people and equipment safe.

Featured Cat Connect technologies include the following:

Link

Link technologies provide wireless capability to machines to enable two-way transfer of information collected by on-board sensors, control modules, and other Cat Connect technologies.

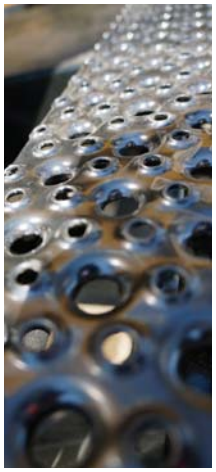
Manage Your Machine Remotely

Cat Product Link is a system that is deeply integrated into the machine monitoring system to take the guesswork out of managing your equipment. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes and shares it with you through VisionLink® to help you maximize efficiency, improve productivity, and lower operating costs.

Safety
Your Safety Is NOT An Option

Embedded Features
Smart devices are embedded to offer as much safety as possible for your operators and help enforce safe behavior:
- Safety seat belt and warning indicators (monitor)
- Automatic swing lock
- Automatic brake and axle lock
- Safety lever, preventing exit when the implements are not locked out
- Emergency shut off switch and battery switch disconnect
- Adjustable travel alarm
- Lowering check valves

Safe and Quiet Cab
The all-new cab provides you with a safe environment. It also contributes to your comfort with limited vibrations and drastically reduced sound levels.



Cab Ingress. We bring a solution to allow you to safely climb into the cab:
- Three longer access steps, aligned with the cab entry
- Anti-skid plates on all walkways and steps reducing slipping hazards
- Convenient door handrail
- Additional extended handrail, from the top to the bottom of the cab
- Tiltable console, not to obstruct entry into the cab
- Safety lever built into the tiltable console to make sure the way in and out is free of obstacle

1) *Laminated windshield and skylight window. One-piece 10 mm/0.4" windshield, fulfilling EN356 P5A standards.*
2) *Lowering check valves*
3) *Safety seat belt indicator*
4) *Safety lever*
5) *Emergency shut-off switch*
6) *Automatic brake and axle lock*
7) *Punched, anti-slippery walking surfaces*
8) *Battery switch disconnect*
9) *Swing and implement electronic lock*
10) *Adjustable travel alarm*
11) *All doors equipped with spring gas cylinders*
12) *Emergency hammer and exit*
13) *ROPS/FOGS compatible cab*
14) *Sound proofing*
15) *Beacon available*
16) *Falling Object Guard compatibility*

Smart Lighting

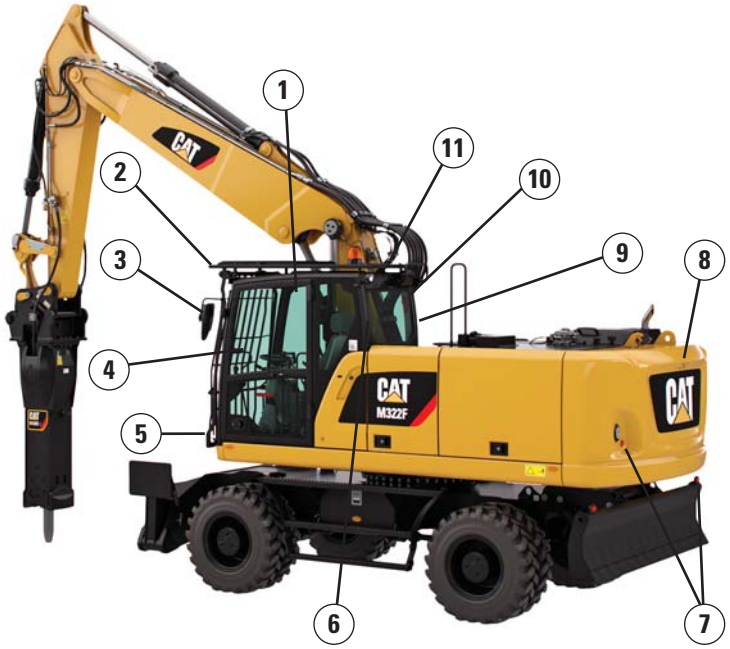
- LED lights for all working lights for enhanced night-time visibility
- Halogen lights for front roading lights
- LED dome light for better illumination inside the cab

Great Views

- Enlarged glass gives you excellent visibility to the front, top, rear, and sides, even to the right
- Standard rearview camera gives you a clear field of view behind the machine through the monitor. Camera is integrated into the counterweight.
- Standard sideview camera, to check nothing is hidden to you from the front right hand side to the rear of the machine
- Lenses of all the cameras are wide angle and heated
- All mirrors are wide angle and allow view not only around the machine but also to the ground

Unmatched Visibility

Make Sure Nothing Is Hidden to You



Visibility all around is critical, especially for machines which go on public roads.

1) Increased skylight and windshield glass area
2) Improved lighting with standard LED lights for all working lights
3) Optional heated mirrors
4) Great left hand side visibility with the new all glass door
5) Halogen roading lights
6) Wide rear window
7) Reflecting red lights on rear and blade/outriggers
8) Standard wide rearview camera
9) Standard side camera and dedicated wide monitor
10) Large right hand side window
11) Mirrors, wide angle, with additional lower mirror for ground visibility

Complete Customer Care

Your Cat Dealer Will Support You Like No Other

Support You Can Count On

From helping you to choose the right machine to knowledgeable on-going support, Cat dealers provide the best-in-sales and services.

- **Best long-term investment** with financing options and services
- **Productive operation** with training programs
- **Preventive maintenance** and guaranteed maintenance contracts
- **Uptime**, with best-in-class parts availability
- **Repair, rebuild, or replace?** Your dealer can help evaluate the best option.

Engine

Engine Model	Cat C7.1 ACERT[1]	
Ratings	1,700 rpm	
Engine Gross Power (maximum)		
ISO 14396	128.9 kW	173 hp
ISO 14396 (metric)		175 hp (PS)
Net Power (rated)[2]		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp (PS)
80/1269/EEC	126 kW	169 hp
Net Power (maximum)		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp (PS)
80/1269/EEC	126 kW	169 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in^3
Maximum Torque at 1,400 rpm	830 N·m	612 lbf-ft
Number of Cylinders	6	

[1] Meets Tier 4 Final emission standards.
[2] Rated speed 1,700 rpm. Constant power from 1,500-1,700 rpm.
- Net power advertised is the power available at the flywheel when engine is equipped with air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- No deratings required up to 3000 m (9,842 ft) altitude. Automatic derating occurs after 3000 m (9,842 ft).

Transmission

Forward/Reverse		
1st Gear	9 km/h	5.6 mph
2nd Gear	30 km/h	18.6 mph
Creeper Speed		
1st Gear	3 km/h	1.9 mph
2nd Gear	9 km/h	5.6 mph
Drawbar Pull	127 kN	28,550.7 lbf
Maximum Gradeability (at 25 000 kg/55,115 lb)	70%	

Swing Mechanism

Swing Speed	9 rpm	
Swing Torque	53 kN·m	39,220 lbf-ft

Undercarriage

Ground Clearance	360 mm	14.2 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	±8.5°	
Minimum Turning Radius		
Outside of Tire	6800 mm	22'4"
End of One-Piece Boom	9300 mm	30'6"
End of VA Boom	7800 mm	25'7"

Service Refill Capacities

Fuel Tank (total capacity)	420 L	111 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal
Cooling System	46.9 L	12.4 gal
Engine Crankcase	18.5 L	4.9 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	11 L	2.9 gal
Final Drive	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

Weights

Operating Weights*	20 800-22 330 kg	45,856-49,229 lb
Weights		
VA Boom		
Rear Dozer Only	20 800 kg	45,856 lb
Rear Dozer, Front Outriggers	22 100 kg	48,722 lb
Front and Rear Outriggers	22 330 kg	49,229 lb
One-Piece Boom		
Rear Dozer, Front Outriggers	21 490 kg	47,377 lb
Front and Rear Outriggers	21 720 kg	47,884 lb
Sticks**		
Medium (2500 mm/8'2")	1005 kg	2,216 lb
Long (2900 mm/9'6")	1085 kg	2,392 lb
Counterweight		
Standard	3500 kg	7,716 lb
Optional	4700 kg	10,362 lb

*Operating weight includes medium stick, 3500 kg (7,716.17 lb) counterweight, full fuel tank, operator, quick coupler (240 kg/529 lb) bucket (780 kg/1,720 lb) and dual pneumatic tires. Weight varies depending on configuration.
**Includes cylinder, bucket linkage, pins and standard hydraulic lines.

M322F Wheeled Excavator Specifications

Hydraulic System

Tank Capacity	200 L	52.8 gal
System	405 L	107 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	310 bar	4,496 psi
Maximum Flow		
Implement/Travel Circuit	357 L/min	94 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	66 gal/min
Medium Pressure (Eco Mode)	43 L/min	11.4 gal/min
Medium Pressure (Power Mode)	50 L/min	13.2 gal/min
Swing Mechanism	118 L/min	31.2 gal/min

Tires

Standard	11.00-20 (Dual Pneumatic)
Optional	10.00-20 (Dual Solid Rubber)

Blade

Blade Type	Parallel	
Blade Roll-Over Height	576 mm	1'11"
Width	2750 mm	9'0"

Sustainability

Engine Emissions	Tier 4 Final	
Fluids (Optional)		
Cat Bio HYDO Advanced	Readily biodegradable EU Flower eco-label certified	
Biodiesel Up to B20	Meets EN 14214 or ASTM D6751 with EN590 or ASTM D975 Standard Mineral diesel fuels	
Diesel Exhaust Fluid	Must meet ISO 22241	
Vibration Levels		
Maximum Hand/Arm		
ISO 5349:2001	<2.5 m/s²	<8.2 ft/s²
Maximum Whole Body		
ISO/TR 25398:2006	<0.5 m/s²	<1.6 ft/s²
Seat Transmissibility Factor		
ISO 7096:2000-spectral class EM5	<0.7	

Standards

ROPS	ROPS (Rollover Protective Structure) offered by Caterpillar meets ROPS criteria ISO 12117-2:2008
Operator Protective Structure: top/front guards	FOPS (Falling Object Protective Structure) meets FOPS criteria ISO 10262:1998 and SAE J1356:2008
Cab/Sound Levels	Meets appropriate standards as listed below

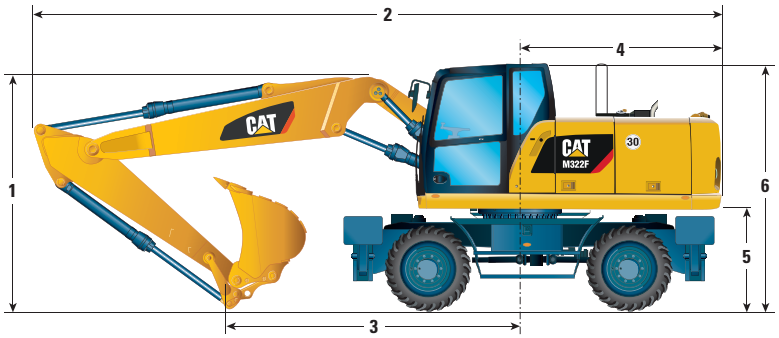
Sound Performance

Operator Sound	
2000/14/EC	71 dB(A)
Spectator Sound	
2000/14/EC	100 dB(A)

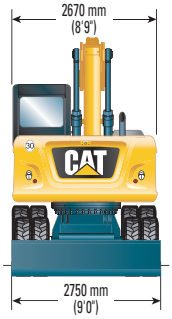
- Operator Sound – The operator sound level is measured according to the procedures specified in 2000/14/EC, for a cab offered by Caterpillar, when properly installed and maintained and tested with the door and windows closed.
- Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/EC.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in noisy environment(s).

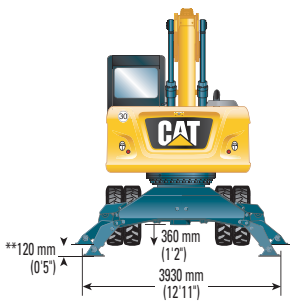
Dimensions

Standard undercarriage with 2 sets of outriggers and dual 11.00-20 pneumatic tires. All dimensions are approximate.



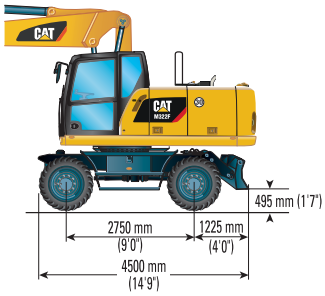
		Variable Adjustable Boom		One-Piece Boom	
Stick Length	mm (ft/in)	**2500 (8'2")**	**2900 (9'6")**	**2500 (8'2")**	**2900 (9'6")**
1 Shipping Height with Falling Object Guard and Handrails Lowered (highest point between boom and cab)	mm (ft/in)	3320 (10'11")	3320 (10'11")	3320 (10'11")	3320 (10'11")
2 Shipping Length	mm (ft/in)	9555 (31'4")	9540 (31'4")	9710 (31'10")	9720 (31'11")
3 Support Point	mm (ft/in)	3755 (12'4")	3525 (11'7")	3720 (12'2")	3445 (11'4")
4 Tail Swing Radius	mm (ft/in)	2825 (9'3")			
5 Counterweight Clearance	mm (ft/in)	1310 (4'4")			
6 Cab Height – No Falling Object Guard, Handrails Lowered	mm (ft/in)	3215 (10'7")			
No Falling Object Guard, Handrails not Lowered	mm (ft/in)	3290 (10'10")			
With Falling Object Guard	mm (ft/in)	3320 (10'11")			
7 Overall Machine Width					
Width with Outriggers on Ground	mm (ft/in)	3930 (12'11")		3930 (12'11")	
Width with Outriggers Up	mm (ft/in)	2750 (9'0")		2750 (9'0")	
Width with Blade	mm (ft/in)	2750 (9'0")		2750 (9'0")	



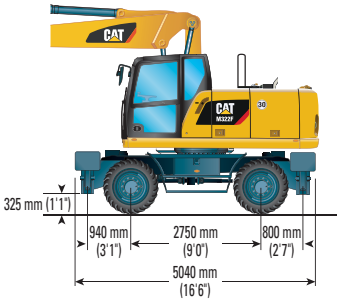


** Maximum tire clearance with outrigger fully down

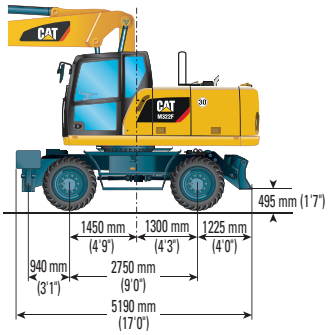
Undercarriage with dozer only



Undercarriage with 2 sets of outriggers

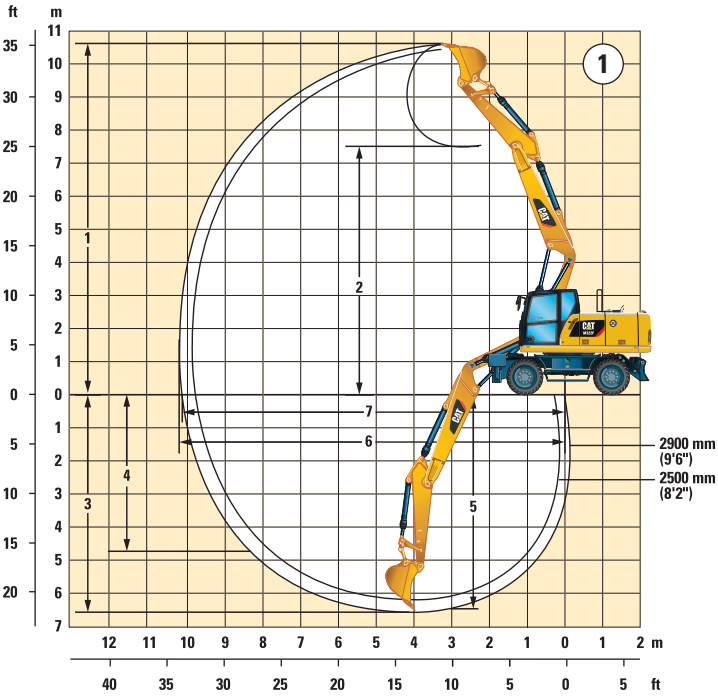


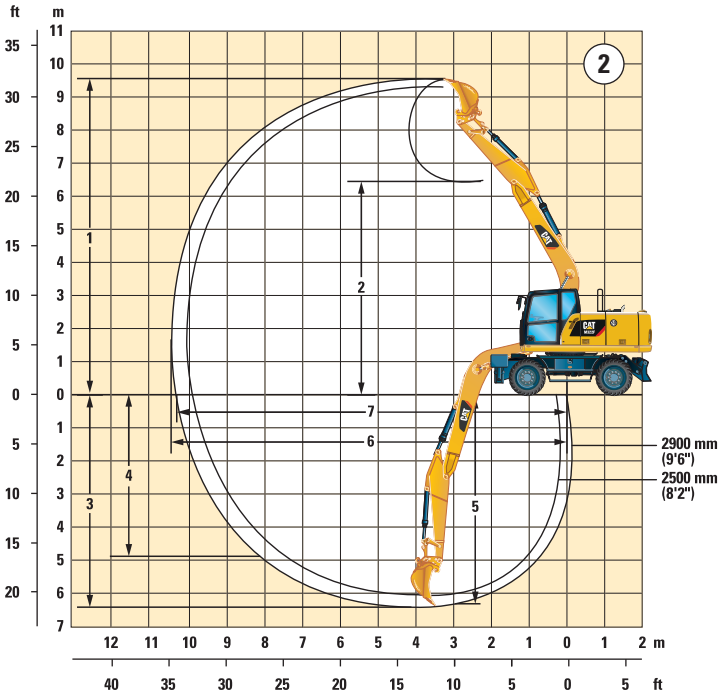
Undercarriage with 1 set of outriggers and dozer



M322F Wheeled Excavator Specifications

Working Ranges





		1		2	
		Variable Adjustable Boom		One-Piece Boom	
Stick Length	mm (ft/in)	**2500 (8'2")**	**2900 (9'6")**	**2500 (8'2")**	**2900 (9'6")**
1 Digging Height	mm (ft/in)	10 540 (34'7")	10 850 (35'7")	9370 (30'9")	9590 (31'6")
2 Dump Height	mm (ft/in)	7220 (23'8")	7530 (24'8")	6250 (20'6")	6470 (21'3")
3 Digging Depth	mm (ft/in)	6250 (20'6")	6650 (21'10")	6050 (19'10")	6450 (21'2")
4 Vertical Wall Digging Depth	mm (ft/in)	4430 (14'6")	4790 (15'9")	4600 (15'1")	4970 (16'4")
5 Depth 2.5 m (8'2") in Straight Clean-Up	mm (ft/in)	6150 (20'2")	6560 (21'6")	5850 (19'2")	6270 (20'7")
6 Reach	mm (ft/in)	9970 (32'9")	10 360 (34'0")	10 080 (33'1")	10 460 (34'4")
7 Reach at Ground Level	mm (ft/in)	9800 (32'2")	10 190 (33'5")	9910 (32'6")	10 300 (33'10")
Bucket Forces (ISO 6015)	kN (lbf)	152 (34,171)	152 (34,171)	152 (34,171)	152 (34,171)
Stick Forces (ISO 6015)	kN (lbf)	117 (26,303)	106 (23,830)	117 (26,303)	106 (23,830)

Working range dimensions with pneumatic tires.

Range values are calculated with GD Bucket 1200 mm (48 in) , 1.19 m^3 (1.55 yd^3) with tips K80 and CW-40 quick coupler with a tip radius of 1688 mm (5'6").

Breakout force values are calculated with heavy lift on (no quick coupler) and at cutting edge radius of 1386 mm (4'6.6").

Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

								Variable Adjustable Boom								One-Piece Boom							
Stick Length								2500 mm (8'2")				2900 mm (9'6")				2500 mm (8'2")				2900 mm (9'6")			
	Width		Weight*		Capacity (ISO)		Adapters: K80	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized
Pin-On Buckets	mm	in	kg	lb	m^3	yd^3		**With 3.5 mt/7,720 lb Counterweight**															
General Duty	750	30	604	1,332	0.64	0.84																	
General Duty	1200	48	768	1,693	1.19	1.56																	
General Duty	1300	51	774	1,706	1.30	1.71																	
General Duty	1400	55	808	1,781	1.43	1.87																	
Heavy Duty	900	36	626	1,378	0.70	0.92																	
Ditch Cleaning	1300	52	928	2,046	1.30	1.71																	
	mm	in	kg	lb	m^3	yd^3		**With 4.7 mt/10,370 lb Counterweight**															
General Duty	750	30	604	1,332	0.06	0.84																	
General Duty	1200	48	768	1,693	1.19	1.56																	
General Duty	1300	51	774	1,706	1.30	1.71																	
General Duty	1400	55	808	1,781	1.43	1.87																	
Heavy Duty	900	36	626	1,378	0.70	0.92																	
Ditch Cleaning	1300	52	928	2,046	1.30	1.71																	
Pin Grabber Coupler	mm	in	kg	lb	m^3	yd^3		**With 3.5 mt/7,720 lb Counterweight**															
General Duty	750	30	604	1,332	0.64	0.84																	
General Duty	1200	48	768	1,693	1.19	1.56																	
General Duty	1300	51	774	1,706	1.30	1.71																	
General Duty	1400	55	808	1,781	1.43	1.87																	
Heavy Duty	900	36	626	1,378	0.70	0.92																	
Ditch Cleaning	1300	52	928	2,046	1.30	1.71																	
	mm	in	kg	lb	m^3	yd^3		**With 4.7 mt/10,370 lb Counterweight**															
General Duty	750	30	604	1,332	0.64	0.84																	
General Duty	1200	48	768	1,693	1.19	1.56																	
General Duty	1300	51	774	1,706	1.30	1.71																	
General Duty	1400	55	808	1,781	1.43	1.87																	
Heavy Duty	900	36	626	1,378	0.70	0.92																	
Ditch Cleaning	1300	52	928	2,046	1.30	1.71																	

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with General Duty tips.

- Maximum material density 2100 kg/m^3 (3,500 lb/yd^3)
- Maximum material density 1800 kg/m^3 (3,000 lb/yd^3)
- Maximum material density 1500 kg/m^3 (2,500 lb/yd^3)
- Maximum material density 1200 kg/m^3 (2,000 lb/yd^3)
- Not recommended

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

M322F Wheeled 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.

		One-Piece Boom											
Counterweight		3.5 mt/7,720 lb						4.7 mt/10,370 lb					
		(1)		(2)		(3)		(1)		(2)		(3)	
Stick Length		2500 mm (8'2")	2900 mm (9'6")	2500 mm (8'2")	2900 mm (9'6")	2500 mm (8'2")	2900 mm (9'6")	2500 mm (8'2")	2900 mm (9'6")	2500 mm (8'2")	2900 mm (9'6")	2500 mm (8'2")	2900 mm (9'6")
Hydraulic Hammer	H115Es												
	H120Es												
	H130Es												
Multi-Processor	MP318 CC Jaw												
	MP318 D Jaw												
	MP318 P Jaw												
	MP318 U Jaw												
	MP318 S Jaw												
Crusher	P315												
Pulverizer	P215												
Demolition and Sorting Grapple	G315B-D/R												
	G315B WH												
Scrap and Demolition Shear	S320B												
	S325B												
	S340B												
Compactor Plate	CVP110												
		Variable Adjustable Boom											
Hydraulic Hammer	H115Es												
	H120Es												
	H130Es												
Multi-Processor	MP318 CC Jaw												
	MP318 D Jaw												
	MP318 P Jaw												
	MP318 U Jaw												
	MP318 S Jaw												
Crusher	P315												
Pulverizer	P215												
Demolition and Sorting Grapple (D-Demolition shells, R-Recycling shells)	G315B-D/R												
	G315B WH												
Scrap and Demolition Shear	S320B												
	S325B												
	S340B												
Compactor Plate	CVP110												
Orange Peel Grapple (4 or 5 Tines)	GSH15B 400 L (½ yd³)	These attachments are available for the M322F. Consult your Cat dealer for proper match.											
	GSH15B 500 L (⅝ yd³)												
	GSH15B 600 L (¾ yd³)												
	GSH15B 800 L (1 yd³)												
Pin Grabber Coupler	Cat-PG												
Dedicated Coupler													

(1) Dozer lowered
(2) 2 sets outriggers lowered
(3) Dozer and outrigger lowered

- Pin-on, Cat-PG and dedicated coupler
- Pin-on only
- Pin-on or dedicated coupler
- Over the front only
- Over the front only with dedicated coupler (match pin-on and CW)
- Over the front only with Cat-PG (match pin-on, dedicated coupler and Cat-PG)
- Boom mount
- Not recommended

Offerings not available in all areas. Matches are dependent on Wheeled Excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (4700 kg), heavy lift on.

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

Long Stick 2900 mm

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
9000 mm	Lower (std. UC) rear dozer up				*4200	*4200	*4200							*4150	*4150	*4150	
	Lower (std. UC) rear dozer down				*4200	*4200	*4200							*4150	*4150	*4150	
	Lower (std. UC) f. stabilizer & r. dozer down				*4200	*4200	*4200							*4150	*4150	*4150	4510
	Lower (std. UC) 2 sets of stabilizers down				*4200	*4200	*4200							*4150	*4150	*4150	
	Lower (std. UC) f. dozer & r. stabilizer down				*4200	*4200	*4200							*4150	*4150	*4150	
7500 mm	Lower (std. UC) rear dozer up							*5100	*5100	4400				*3100	*3100	*3100	
	Lower (std. UC) rear dozer down							*5100	*5100	4800				*3100	*3100	*3100	
	Lower (std. UC) f. stabilizer & r. dozer down							*5100	*5100	*5100				*3100	*3100	*3100	6410
	Lower (std. UC) 2 sets of stabilizers down							*5100	*5100	*5100				*3100	*3100	*3100	
	Lower (std. UC) f. dozer & r. stabilizer down							*5100	*5100	*5100				*3100	*3100	*3100	
6000 mm	Lower (std. UC) rear dozer up							*6300	5200	4400	*3150	*3150	2900	*2750	*2750	*2750	
	Lower (std. UC) rear dozer down							*6300	*6300	4850	*3150	*3150	*3150	*2750	*2750	*2750	
	Lower (std. UC) f. stabilizer & r. dozer down							*6300	*6300	*6300	*3150	*3150	*3150	*2750	*2750	*2750	7540
	Lower (std. UC) 2 sets of stabilizers down							*6300	*6300	*6300	*3150	*3150	*3150	*2750	*2750	*2750	
	Lower (std. UC) f. dozer & r. stabilizer down							*6300	*6300	*6300	*3150	*3150	*3150	*2750	*2750	*2750	
4500 mm	Lower (std. UC) rear dozer up				*7850	*7850	6650	6200	5000	4200	4350	3450	2900	*2600	*2600	2450	
	Lower (std. UC) rear dozer down				*7850	*7850	7350	6200	*6800	4650	4300	*5600	3200	*2600	*2600	*2600	
	Lower (std. UC) f. stabilizer & r. dozer down				*7850	*7850	*7850	*6800	*6800	6750	*5600	*5600	4700	*2600	*2600	*2600	8230
	Lower (std. UC) 2 sets of stabilizers down				*7850	*7850	*7850	*6800	*6800	*6800	*5600	*5600	*5600	*2600	*2600	*2600	
	Lower (std. UC) f. dozer & r. stabilizer down				*7850	*7850	*7850	*6800	*6800	*6800	*5600	*5600	4850	*2600	*2600	*2600	
3000 mm	Lower (std. UC) rear dozer up				9250	7300	6050	5950	4750	3950	4200	3350	2800	*2600	*2600	2200	
	Lower (std. UC) rear dozer down				9200	*10 000	6700	5900	*7300	4400	4200	*5800	3100	*2600	*2600	2450	
	Lower (std. UC) f. stabilizer & r. dozer down				*10 000	*10 000	*10 000	*7300	*7300	6450	*5800	*5800	4600	*2600	*2600	*2600	8590
	Lower (std. UC) 2 sets of stabilizers down				*10 000	*10 000	*10 000	*7300	*7300	*7300	*5800	*5800	5600	*2600	*2600	*2600	
	Lower (std. UC) f. dozer & r. stabilizer down				*10 000	*10 000	*10 000	*7300	*7300	6650	*5800	*5800	4700	*2600	*2600	*2600	
1500 mm	Lower (std. UC) rear dozer up				8600	6700	5450	5650	4450	3700	4050	3200	2650	*2650	2550	2100	
	Lower (std. UC) rear dozer down				8550	*11 400	6150	5600	*7950	4100	4050	*6100	2950	*2650	*2650	2350	
	Lower (std. UC) f. stabilizer & r. dozer down				*11 400	*11 400	9450	*7950	*7950	6150	*6100	*6100	4450	*2650	*2650	*2650	8670
	Lower (std. UC) 2 sets of stabilizers down				*11 400	*11 400	*11 400	*7950	*7950	7650	*6100	*6100	5450	*2650	*2650	*2650	
	Lower (std. UC) f. dozer & r. stabilizer down				*11 400	*11 400	9850	*7950	*7950	6350	*6100	*6100	4550	*2650	*2650	*2650	
0 mm	Lower (std. UC) rear dozer up				8250	6400	5150	5450	4250	3500	3950	3100	2550	*2850	2600	2150	
	Lower (std. UC) rear dozer down				8250	*11 750	5800	5400	*8500	3900	3950	*6450	2850	*2850	*2850	2400	
	Lower (std. UC) f. stabilizer & r. dozer down				*11 750	*11 750	9100	*8500	*8500	5950	*6450	*6450	4300	*2850	*2850	*2850	8470
	Lower (std. UC) 2 sets of stabilizers down				*11 750	*11 750	11 700	*8500	*8500	7400	*6450	*6450	5300	*2850	*2850	*2850	
	Lower (std. UC) f. dozer & r. stabilizer down				*11 750	*11 750	9500	*8500	*8500	6150	*6450	*6450	4450	*2850	*2850	*2850	
–1500 mm	Lower (std. UC) rear dozer up	*9450	*9450	9400	8150	6300	5050	5350	4150	3400	3900	3050	2550	*3250	2800	2350	
	Lower (std. UC) rear dozer down	*9450	*9450	*9450	8150	*10 950	5750	5300	*8100	3850	3900	*6000	2850	*3250	*3250	2600	
	Lower (std. UC) f. stabilizer & r. dozer down	*9450	*9450	*9450	*10 950	*10 950	9000	*8100	*8100	5850	*6000	*6000	4300	*3250	*3250	*3250	7980
	Lower (std. UC) 2 sets of stabilizers down	*9450	*9450	*9450	*10 950	*10 950	*10 950	*8100	*8100	7300	*6000	*6000	5300	*3250	*3250	*3250	
	Lower (std. UC) f. dozer & r. stabilizer down	*9450	*9450	*9450	*10 950	*10 950	9400	*8100	*8100	6050	*6000	*6000	4400	*3250	*3250	*3250	
–3000 mm	Lower (std. UC) rear dozer up				8250	6350	5150	5400	4200	3450							
	Lower (std. UC) rear dozer down				8200	*9150	5800	5350	*6750	3850							
	Lower (std. UC) f. stabilizer & r. dozer down				*9150	*9150	9100	*6750	*6750	5900							
	Lower (std. UC) 2 sets of stabilizers down				*9150	*9150	*9150	*6750	*6750	*6750							
	Lower (std. UC) f. dozer & r. stabilizer down				*9150	*9150	*9150	*6750	*6750	6100							

*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.

M322F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (10,370 lb), heavy lift on.

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

Long Stick 9'6"

	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
																	
30.0 ft	Lower (std. UC) rear dozer up													*9,500	*9,500	*9,500	
	Lower (std. UC) rear dozer down													*9,500	*9,500	*9,500	
	Lower (std. UC) f. stabilizer & r. dozer down													*9,500	*9,500	*9,500	13.94
	Lower (std. UC) 2 sets of stabilizers down													*9,500	*9,500	*9,500	
	Lower (std. UC) f. dozer & r. stabilizer down													*9,500	*9,500	*9,500	
25.0 ft	Lower (std. UC) rear dozer up							*9,800	*9,800	9,300				*7,000	*7,000	*7,000	
	Lower (std. UC) rear dozer down							*9,800	*9,800	*9,800				*7,000	*7,000	*7,000	
	Lower (std. UC) f. stabilizer & r. dozer down							*9,800	*9,800	*9,800				*7,000	*7,000	*7,000	20.67
	Lower (std. UC) 2 sets of stabilizers down							*9,800	*9,800	*9,800				*7,000	*7,000	*7,000	
	Lower (std. UC) f. dozer & r. stabilizer down							*9,800	*9,800	*9,800				*7,000	*7,000	*7,000	
20.0 ft	Lower (std. UC) rear dozer up							13,800	11,100	9,400				*6,100	*6,100	*6,100	
	Lower (std. UC) rear dozer down							13,700	*13,800	10,400				*6,100	*6,100	*6,100	
	Lower (std. UC) f. stabilizer & r. dozer down							*13,800	*13,800	*13,800				*6,100	*6,100	*6,100	24.54
	Lower (std. UC) 2 sets of stabilizers down							*13,800	*13,800	*13,800				*6,100	*6,100	*6,100	
	Lower (std. UC) f. dozer & r. stabilizer down							*13,800	*13,800	*13,800				*6,100	*6,100	*6,100	
15.0 ft	Lower (std. UC) rear dozer up				*17,000	*17,000	14,300	13,400	10,800	9,100	9,300	7,400	6,200	*5,800	*5,800	5,400	
	Lower (std. UC) rear dozer down				*17,000	*17,000	15,800	13,300	*14,800	10,000	9,300	*12,200	6,900	*5,800	*5,800	*5,800	
	Lower (std. UC) f. stabilizer & r. dozer down				*17,000	*17,000	*17,000	*14,800	*14,800	14,500	*12,200	*12,200	10,100	*5,800	*5,800	*5,800	26.90
	Lower (std. UC) 2 sets of stabilizers down				*17,000	*17,000	*17,000	*14,800	*14,800	*14,800	*12,200	*12,200	*12,200	*5,800	*5,800	*5,800	
	Lower (std. UC) f. dozer & r. stabilizer down				*17,000	*17,000	*17,000	*14,800	*14,800	*14,800	*12,200	*12,200	10,400	*5,800	*5,800	*5,800	
10.0 ft	Lower (std. UC) rear dozer up				19,900	15,800	13,000	12,800	10,200	8,500	9,100	7,200	6,000	*5,700	*5,700	4,900	
	Lower (std. UC) rear dozer down				19,800	*21,500	14,500	12,700	*15,800	9,500	9,000	*12,600	6,700	*5,700	*5,700	5,400	
	Lower (std. UC) f. stabilizer & r. dozer down				*21,500	*21,500	*21,500	*15,800	*15,800	13,900	*12,600	*12,600	9,900	*5,700	*5,700	*5,700	28.15
	Lower (std. UC) 2 sets of stabilizers down				*21,500	*21,500	*21,500	*15,800	*15,800	*15,800	*12,600	*12,600	12,000	*5,700	*5,700	*5,700	
	Lower (std. UC) f. dozer & r. stabilizer down				*21,500	*21,500	*21,500	*15,800	*15,800	14,400	*12,600	*12,600	10,100	*5,700	*5,700	*5,700	
5.0 ft	Lower (std. UC) rear dozer up				18,600	14,500	11,800	12,200	9,600	8,000	8,800	6,900	5,700	*5,900	5,600	4,700	
	Lower (std. UC) rear dozer down				18,500	*24,700	13,300	12,100	*17,200	8,900	8,700	*13,200	6,400	*5,900	*5,900	5,200	
	Lower (std. UC) f. stabilizer & r. dozer down				*24,700	*24,700	20,400	*17,200	*17,200	13,300	*13,200	*13,200	9,600	*5,900	*5,900	*5,900	28.44
	Lower (std. UC) 2 sets of stabilizers down				*24,700	*24,700	*24,700	*17,200	*17,200	16,400	*13,200	*13,200	11,700	*5,900	*5,900	*5,900	
	Lower (std. UC) f. dozer & r. stabilizer down				*24,700	*24,700	21,200	*17,200	*17,200	13,700	*13,200	*13,200	9,800	*5,900	*5,900	*5,900	
0.0 ft	Lower (std. UC) rear dozer up				17,800	13,700	11,100	11,700	9,100	7,500	8,500	6,700	5,500	*6,300	5,700	4,700	
	Lower (std. UC) rear dozer down				17,700	*25,400	12,600	11,700	*18,400	8,400	8,500	*14,000	6,200	*6,300	*6,300	5,300	
	Lower (std. UC) f. stabilizer & r. dozer down				*25,400	*25,400	19,600	*18,400	*18,400	12,800	*14,000	*14,000	9,300	*6,300	*6,300	*6,300	27.79
	Lower (std. UC) 2 sets of stabilizers down				*25,400	*25,400	25,100	*18,400	*18,400	15,900	*14,000	*14,000	11,500	*6,300	*6,300	*6,300	
	Lower (std. UC) f. dozer & r. stabilizer down				*25,400	*25,400	20,400	*18,400	*18,400	13,300	*14,000	13,900	9,600	*6,300	*6,300	*6,300	
–5.0 ft	Lower (std. UC) rear dozer up	*21,500	*21,500	20,200	17,600	13,500	10,900	11,500	8,900	7,400	8,500	6,600	5,500	*7,200	6,200	5,200	
	Lower (std. UC) rear dozer down	*21,500	*21,500	*21,500	17,500	*23,700	12,400	11,500	*17,500	8,300	8,400	*12,800	6,100	*7,200	*7,200	5,800	
	Lower (std. UC) f. stabilizer & r. dozer down	*21,500	*21,500	*21,500	*23,700	*23,700	19,400	*17,500	*17,500	12,600	*12,800	*12,800	9,300	*7,200	*7,200	*7,200	26.15
	Lower (std. UC) 2 sets of stabilizers down	*21,500	*21,500	*21,500	*23,700	*23,700	*23,700	*17,500	*17,500	15,700	*12,800	*12,800	11,400	*7,200	*7,200	*7,200	
	Lower (std. UC) f. dozer & r. stabilizer down	*21,500	*21,500	*21,500	*23,700	*23,700	20,200	*17,500	*17,500	13,100	*12,800	*12,800	9,500	*7,200	*7,200	*7,200	
–10.0 ft	Lower (std. UC) rear dozer up				17,700	13,700	11,100	11,600	9,000	7,400							
	Lower (std. UC) rear dozer down				17,600	*19,700	12,500	11,500	*14,400	8,300							
	Lower (std. UC) f. stabilizer & r. dozer down				*19,700	*19,700	19,500	*14,400	*14,400	12,700							
	Lower (std. UC) 2 sets of stabilizers down				*19,700	*19,700	*19,700	*14,400	*14,400	*14,400							
	Lower (std. UC) f. dozer & r. stabilizer down				*19,700	*19,700	*19,700	*14,400	*14,400	13,100							

*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 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

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (4700 kg), heavy lift on.

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

Medium Stick
2500 mm

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
7500 mm	Lower (std. UC) rear dozer up							*3950	*3950	*3950				*3750	*3750	*3750	
	Lower (std. UC) rear dozer down							*3950	*3950	*3950				*3750	*3750	*3750	
	Lower (std. UC) f. stabilizer & r. dozer down							*3950	*3950	*3950				*3750	*3750	*3750	6020
	Lower (std. UC) 2 sets of stabilizers down							*3950	*3950	*3950				*3750	*3750	*3750	
	Lower (std. UC) f. dozer & r. stabilizer down							*3950	*3950	*3950				*3750	*3750	*3750	
6000 mm	Lower (std. UC) rear dozer up							6300	5100	4350				*3350	*3350	3150	
	Lower (std. UC) rear dozer down							6250	*6400	4750				*3350	*3350	*3350	
	Lower (std. UC) f. stabilizer & r. dozer down							*6400	*6400	*6400				*3350	*3350	*3350	7210
	Lower (std. UC) 2 sets of stabilizers down							*6400	*6400	*6400				*3350	*3350	*3350	
	Lower (std. UC) f. dozer & r. stabilizer down							*6400	*6400	*6400				*3350	*3350	*3350	
4500 mm	Lower (std. UC) rear dozer up							6100	4950	4150	4300	3450	2900	*3200	3100	2650	
	Lower (std. UC) rear dozer down							6100	*6950	4600	4300	*6150	3200	*3200	*3200	2900	
	Lower (std. UC) f. stabilizer & r. dozer down							*6950	*6950	6650	*6150	*6150	4650	*3200	*3200	*3200	7930
	Lower (std. UC) 2 sets of stabilizers down							*6950	*6950	*6950	*6150	*6150	5650	*3200	*3200	*3200	
	Lower (std. UC) f. dozer & r. stabilizer down							*6950	*6950	6850	*6150	*6150	4800	*3200	*3200	*3200	
3000 mm	Lower (std. UC) rear dozer up				9000	7100	5900	5850	4650	3950	4200	3350	2800	*3200	2800	2400	
	Lower (std. UC) rear dozer down				9000	*10 400	6550	5850	*7750	4350	4200	*6400	3100	*3200	*3200	2650	
	Lower (std. UC) f. stabilizer & r. dozer down				*10 400	*10 400	9900	*7750	*7750	6400	*6400	*6400	4550	*3200	*3200	*3200	8300
	Lower (std. UC) 2 sets of stabilizers down				*10 400	*10 400	*10 400	*7750	*7750	*7750	*6400	*6400	5550	*3200	*3200	*3200	
	Lower (std. UC) f. dozer & r. stabilizer down				*10 400	*10 400	10 250	*7750	*7750	6600	*6400	*6400	4700	*3200	*3200	*3200	
1500 mm	Lower (std. UC) rear dozer up				8500	6600	5400	5600	4450	3700	4100	3200	2700	*3350	2700	2300	
	Lower (std. UC) rear dozer down				8450	*11 750	6100	5600	*8400	4100	4050	6650	3000	*3350	*3350	2550	
	Lower (std. UC) f. stabilizer & r. dozer down				*11 750	*11 750	9350	*8400	*8400	6100	*6700	*6700	4450	*3350	*3350	*3350	8390
	Lower (std. UC) 2 sets of stabilizers down				*11 750	*11 750	*11 750	*8400	*8400	7550	*6700	*6700	5400	*3350	*3350	*3350	
	Lower (std. UC) f. dozer & r. stabilizer down				*11 750	*11 750	9700	*8400	*8400	6300	*6700	6550	4550	*3350	*3350	*3350	
0 mm	Lower (std. UC) rear dozer up				8250	6400	5200	5450	4250	3550	4000	3150	2600	3550	2800	2350	
	Lower (std. UC) rear dozer down				8250	*11 850	5850	5400	*8600	3950	3950	6550	2900	3500	*3700	2600	
	Lower (std. UC) f. stabilizer & r. dozer down				*11 850	*11 850	9100	*8600	*8600	5950	*6650	*6650	4350	*3700	*3700	*3700	8180
	Lower (std. UC) 2 sets of stabilizers down				*11 850	*11 850	11 650	*8600	*8600	7400	*6650	6650	5300	*3700	*3700	*3700	
	Lower (std. UC) f. dozer & r. stabilizer down				*11 850	*11 850	9450	*8600	*8600	6150	*6650	6450	4500	*3700	*3700	*3700	
–1500 mm	Lower (std. UC) rear dozer up	*9750	*9750	9700	8250	6400	5200	5400	4200	3500	4000	3100	2600	3850	3050	2550	
	Lower (std. UC) rear dozer down	*9750	*9750	*9750	8200	*11 000	5850	5350	*8200	3900	3950	*6050	2900	3850	*4300	2850	
	Lower (std. UC) f. stabilizer & r. dozer down	*9750	*9750	*9750	*11 000	*11 000	9050	*8200	*8200	5900	*6050	*6050	4350	*4300	*4300	4200	7670
	Lower (std. UC) 2 sets of stabilizers down	*9750	*9750	*9750	*11 000	*11 000	*11 000	*8200	*8200	7300	*6050	*6050	5300	*4300	*4300	*4300	
	Lower (std. UC) f. dozer & r. stabilizer down	*9750	*9750	*9750	*11 000	*11 000	9450	*8200	*8200	6100	*6050	*6050	4450	*4300	*4300	*4300	
–3000 mm	Lower (std. UC) rear dozer up	*11 850	*11 850	9900	8350	6450	5300	5450	4250	3550				4650	3650	3050	
	Lower (std. UC) rear dozer down	*11 850	*11 850	11 350	8300	*9200	5950	5400	*6800	3950				4600	*5350	3400	
	Lower (std. UC) f. stabilizer & r. dozer down	*11 850	*11 850	*11 850	*9200	*9200	9150	*6800	*6800	5950				*5350	*5350	5050	6780
	Lower (std. UC) 2 sets of stabilizers down	*11 850	*11 850	*11 850	*9200	*9200	*9200	*6800	*6800	*6800				*5350	*5350	*5350	
	Lower (std. UC) f. dozer & r. stabilizer down	*11 850	*11 850	*11 850	*9200	*9200	*9200	*6800	*6800	6150				*5350	*5350	5200	

*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.

M322F Wheeled Excavator Specifications

Lift Capacities – One-Piece Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (10,370 lb), heavy lift on.

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

Medium Stick
8'2"

	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
25.0 ft	Lower (std. UC) rear dozer up													*8,400	*8,400	*8,400	
	Lower (std. UC) rear dozer down													*8,400	*8,400	*8,400	
	Lower (std. UC) f. stabilizer & r. dozer down													*8,400	*8,400	*8,400	19.36
	Lower (std. UC) 2 sets of stabilizers down													*8,400	*8,400	*8,400	
	Lower (std. UC) f. dozer & r. stabilizer down													*8,400	*8,400	*8,400	
20.0 ft	Lower (std. UC) rear dozer up							13,500	11,000	9,300				*7,400	*7,400	7,000	
	Lower (std. UC) rear dozer down							13,500	*14,100	10,200				*7,400	*7,400	*7,400	
	Lower (std. UC) f. stabilizer & r. dozer down							*14,100	*14,100	*14,100				*7,400	*7,400	*7,400	23.46
	Lower (std. UC) 2 sets of stabilizers down							*14,100	*14,100	*14,100				*7,400	*7,400	*7,400	
	Lower (std. UC) f. dozer & r. stabilizer down							*14,100	*14,100	*14,100				*7,400	*7,400	*7,400	
15.0 ft	Lower (std. UC) rear dozer up							13,200	10,600	9,000	9,200	7,400	6,300	*7,100	6,900	5,800	
	Lower (std. UC) rear dozer down							13,100	*15,100	9,900	9,200	*12,100	6,900	*7,100	*7,100	6,500	
	Lower (std. UC) f. stabilizer & r. dozer down							*15,100	*15,100	14,300	*12,100	*12,100	10,000	*7,100	*7,100	*7,100	25.92
	Lower (std. UC) 2 sets of stabilizers down							*15,100	*15,100	*15,100	*12,100	*12,100	*12,100	*7,100	*7,100	*7,100	
	Lower (std. UC) f. dozer & r. stabilizer down							*15,100	*15,100	14,800	*12,100	*12,100	10,300	*7,100	*7,100	*7,100	
10.0 ft	Lower (std. UC) rear dozer up				19,400	15,400	12,700	12,600	10,100	8,500	9,000	7,200	6,100	*7,100	6,200	5,300	
	Lower (std. UC) rear dozer down				19,400	*22,400	14,200	12,600	*16,700	9,400	9,000	*14,000	6,700	*7,100	*7,100	5,800	
	Lower (std. UC) f. stabilizer & r. dozer down				*22,400	*22,400	21,300	*16,700	*16,700	13,700	*14,000	*14,000	9,800	*7,100	*7,100	*7,100	27.23
	Lower (std. UC) 2 sets of stabilizers down				*22,400	*22,400	*22,400	*16,700	*16,700	*16,700	*14,000	*14,000	11,900	*7,100	*7,100	*7,100	
	Lower (std. UC) f. dozer & r. stabilizer down				*22,400	*22,400	22,100	*16,700	*16,700	14,200	*14,000	*14,000	10,100	*7,100	*7,100	*7,100	
5.0 ft	Lower (std. UC) rear dozer up				18,300	14,300	11,700	12,100	9,600	8,000	8,800	6,900	5,800	*7,400	6,000	5,000	
	Lower (std. UC) rear dozer down				18,200	*25,400	13,100	12,000	*18,200	8,900	8,700	14,300	6,500	*7,400	*7,400	5,600	
	Lower (std. UC) f. stabilizer & r. dozer down				*25,400	*25,400	20,100	*18,200	*18,200	13,200	*14,500	*14,500	9,600	*7,400	*7,400	*7,400	27.53
	Lower (std. UC) 2 sets of stabilizers down				*25,400	*25,400	*25,400	*18,200	*18,200	16,300	*14,500	14,500	11,700	*7,400	*7,400	*7,400	
	Lower (std. UC) f. dozer & r. stabilizer down				*25,400	*25,400	20,900	*18,200	*18,200	13,600	*14,500	14,100	9,800	*7,400	*7,400	*7,400	
0.0 ft	Lower (std. UC) rear dozer up				17,800	13,800	11,300	11,700	9,200	7,700	8,600	6,800	5,700	7,800	6,100	5,100	
	Lower (std. UC) rear dozer down				17,700	*25,700	12,700	11,700	*18,700	8,500	8,600	14,100	6,300	7,800	*8,100	5,700	
	Lower (std. UC) f. stabilizer & r. dozer down				*25,700	*25,700	19,600	*18,700	*18,700	12,800	*14,400	*14,400	9,400	*8,100	*8,100	*8,100	26.84
	Lower (std. UC) 2 sets of stabilizers down				*25,700	*25,700	25,000	*18,700	*18,700	15,900	*14,400	14,300	11,500	*8,100	*8,100	*8,100	
	Lower (std. UC) f. dozer & r. stabilizer down				*25,700	*25,700	20,400	*18,700	*18,700	13,300	*14,400	13,900	9,700	*8,100	*8,100	*8,100	
–5.0 ft	Lower (std. UC) rear dozer up	*22,200	*22,200	20,900	17,700	13,700	11,200	11,600	9,100	7,500	8,600	6,700	5,700	8,500	6,700	5,600	
	Lower (std. UC) rear dozer down	*22,200	*22,200	*22,200	17,600	*23,800	12,600	11,600	*17,700	8,400	8,600	*11,300	6,300	8,500	*9,500	6,300	
	Lower (std. UC) f. stabilizer & r. dozer down	*22,200	*22,200	*22,200	*23,800	*23,800	19,500	*17,700	*17,700	12,700	*11,300	*11,300	9,400	*9,500	*9,500	9,300	25.13
	Lower (std. UC) 2 sets of stabilizers down	*22,200	*22,200	*22,200	*23,800	*23,800	*23,800	*17,700	*17,700	15,700	*11,300	*11,300	*11,300	*9,500	*9,500	*9,500	
	Lower (std. UC) f. dozer & r. stabilizer down	*22,200	*22,200	*22,200	*23,800	*23,800	20,300	*17,700	*17,700	13,100	*11,300	*11,300	9,700	*9,500	*9,500	*9,500	
–10.0 ft	Lower (std. UC) rear dozer up	*25,700	*25,700	21,200	17,900	13,900	11,400	11,800	9,200	7,700				10,300	8,100	6,800	
	Lower (std. UC) rear dozer down	*25,700	*25,700	24,300	17,800	*19,800	12,800	11,700	*14,500	8,600				10,300	*11,800	7,600	
	Lower (std. UC) f. stabilizer & r. dozer down	*25,700	*25,700	*25,700	*19,800	*19,800	19,700	*14,500	*14,500	12,900				*11,800	*11,800	11,200	22.15
	Lower (std. UC) 2 sets of stabilizers down	*25,700	*25,700	*25,700	*19,800	*19,800	*19,800	*14,500	*14,500	*14,500				*11,800	*11,800	*11,800	
	Lower (std. UC) f. dozer & r. stabilizer down	*25,700	*25,700	*25,700	*19,800	*19,800	*19,800	*14,500	*14,500	13,300				*11,800	*11,800	11,600	

*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.

Lift Capacities – One-Piece Boom

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (4700 kg), heavy lift on.

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

Long Stick 2900 mm

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
7500 mm	Lower (std. UC) rear dozer up													*3050	*3050	*3050	
	Lower (std. UC) rear dozer down													*3050	*3050	*3050	
	Lower (std. UC) f. stabilizer & r. dozer down													*3050	*3050	*3050	6560
	Lower (std. UC) 2 sets of stabilizers down													*3050	*3050	*3050	
	Lower (std. UC) f. dozer & r. stabilizer down													*3050	*3050	*3050	
6000 mm	Lower (std. UC) rear dozer up										*3850	3500	2950	*2750	*2750	*2750	
	Lower (std. UC) rear dozer down										*3850	*3850	3250	*2750	*2750	*2750	
	Lower (std. UC) f. stabilizer & r. dozer down										*3850	*3850	*3850	*2750	*2750	*2750	7660
	Lower (std. UC) 2 sets of stabilizers down										*3850	*3850	*3850	*2750	*2750	*2750	
	Lower (std. UC) f. dozer & r. stabilizer down										*3850	*3850	*3850	*2750	*2750	*2750	
4500 mm	Lower (std. UC) rear dozer up							6150	4950	4200	4300	3450	2950	*2650	*2650	2400	
	Lower (std. UC) rear dozer down							6150	*6550	4650	4300	*5850	3250	*2650	*2650	*2650	
	Lower (std. UC) f. stabilizer & r. dozer down							*6550	*6550	*6550	*5850	*5850	4700	*2650	*2650	*2650	8340
	Lower (std. UC) 2 sets of stabilizers down							*6550	*6550	*6550	*5850	*5850	5700	*2650	*2650	*2650	
	Lower (std. UC) f. dozer & r. stabilizer down							*6550	*6550	*6550	*5850	*5850	4800	*2650	*2650	*2650	
3000 mm	Lower (std. UC) rear dozer up				9150	7250	6000	5900	4700	3950	4200	3350	2800	*2650	2600	2200	
	Lower (std. UC) rear dozer down				9100	*9850	6650	5850	*7400	4400	4200	*6200	3100	*2650	*2650	2450	
	Lower (std. UC) f. stabilizer & r. dozer down				*9850	*9850	*9850	*7400	*7400	6400	*6200	*6200	4550	*2650	*2650	*2650	8690
	Lower (std. UC) 2 sets of stabilizers down				*9850	*9850	*9850	*7400	*7400	*7400	*6200	*6200	5550	*2650	*2650	*2650	
	Lower (std. UC) f. dozer & r. stabilizer down				*9850	*9850	*9850	*7400	*7400	6600	*6200	*6200	4700	*2650	*2650	*2650	
1500 mm	Lower (std. UC) rear dozer up				8550	6650	5450	5600	4450	3700	4050	3200	2700	*2800	2500	2100	
	Lower (std. UC) rear dozer down				8500	*11 400	6100	5600	*8200	4100	4050	*6550	3000	*2800	*2800	2350	
	Lower (std. UC) f. stabilizer & r. dozer down				*11 400	*11 400	9400	*8200	*8200	6150	*6550	*6550	4400	*2800	*2800	*2800	8770
	Lower (std. UC) 2 sets of stabilizers down				*11 400	*11 400	*11 400	*8200	*8200	7550	*6550	*6550	5400	*2800	*2800	*2800	
	Lower (std. UC) f. dozer & r. stabilizer down				*11 400	*11 400	9750	*8200	*8200	6350	*6550	*6550	4550	*2800	*2800	*2800	
0 mm	Lower (std. UC) rear dozer up				8250	6400	5200	5400	4250	3500	3950	3100	2600	*3050	2550	2150	
	Lower (std. UC) rear dozer down				8200	*11 850	5850	5400	*8550	3950	3950	6500	2900	*3050	*3050	2400	
	Lower (std. UC) f. stabilizer & r. dozer down				*11 850	*11 850	9100	*8550	*8550	5950	*6650	*6650	4300	*3050	*3050	*3050	8580
	Lower (std. UC) 2 sets of stabilizers down				*11 850	*11 850	11 600	*8550	*8550	7350	*6650	6600	5300	*3050	*3050	*3050	
	Lower (std. UC) f. dozer & r. stabilizer down				*11 850	*11 850	9450	*8550	*8550	6150	*6650	6400	4450	*3050	*3050	*3050	
–1500 mm	Lower (std. UC) rear dozer up	*9250	*9250	*9250	8150	6300	5100	5350	4150	3450	3900	3050	2550	*3500	2750	2300	
	Lower (std. UC) rear dozer down	*9250	*9250	*9250	8100	*11 250	5750	5300	*8300	3850	3900	*6300	2850	*3500	*3500	2600	
	Lower (std. UC) f. stabilizer & r. dozer down	*9250	*9250	*9250	*11 250	*11 250	9000	*8300	*8300	5850	*6300	*6300	4250	*3500	*3500	*3500	8100
	Lower (std. UC) 2 sets of stabilizers down	*9250	*9250	*9250	*11 250	*11 250	*11 250	*8300	*8300	7250	*6300	*6300	5250	*3500	*3500	*3500	
	Lower (std. UC) f. dozer & r. stabilizer down	*9250	*9250	*9250	*11 250	*11 250	9350	*8300	*8300	6050	*6300	*6300	4400	*3500	*3500	*3500	
–3000 mm	Lower (std. UC) rear dozer up	*13 200	12 550	9700	8200	6350	5150	5350	4200	3450				4150	3250	2700	
	Lower (std. UC) rear dozer down	*13 200	*13 200	11 100	8200	*9750	5800	5350	*7250	3900				4150	*4350	3050	
	Lower (std. UC) f. stabilizer & r. dozer down	*13 200	*13 200	*13 200	*9750	*9750	9050	*7250	*7250	5850				*4350	*4350	*4350	7260
	Lower (std. UC) 2 sets of stabilizers down	*13 200	*13 200	*13 200	*9750	*9750	*9750	*7250	*7250	*7250				*4350	*4350	*4350	
	Lower (std. UC) f. dozer & r. stabilizer down	*13 200	*13 200	*13 200	*9750	*9750	9400	*7250	*7250	6050				*4350	*4350	*4350	
–4500 mm	Lower (std. UC) rear dozer up				*6850	6550	5350										
	Lower (std. UC) rear dozer down				*6850	*6850	6000										
	Lower (std. UC) f. stabilizer & r. dozer down				*6850	*6850	*6850										
	Lower (std. UC) 2 sets of stabilizers down				*6850	*6850	*6850										
	Lower (std. UC) f. dozer & r. stabilizer down				*6850	*6850	*6850										

*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.

M322F Wheeled Excavator Specifications

Lift Capacities – One-Piece Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (10,370 lb), heavy lift on.

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

Long Stick 9'6"

	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
25.0 ft	Lower (std. UC) rear dozer up													*6,900	*6,900	*6,900	
	Lower (std. UC) rear dozer down													*6,900	*6,900	*6,900	
	Lower (std. UC) f. stabilizer & r. dozer down													*6,900	*6,900	*6,900	21.13
	Lower (std. UC) 2 sets of stabilizers down													*6,900	*6,900	*6,900	
	Lower (std. UC) f. dozer & r. stabilizer down													*6,900	*6,900	*6,900	
20.0 ft	Lower (std. UC) rear dozer up													*6,100	*6,100	*6,100	
	Lower (std. UC) rear dozer down													*6,100	*6,100	*6,100	
	Lower (std. UC) f. stabilizer & r. dozer down													*6,100	*6,100	*6,100	24.93
	Lower (std. UC) 2 sets of stabilizers down													*6,100	*6,100	*6,100	
	Lower (std. UC) f. dozer & r. stabilizer down													*6,100	*6,100	*6,100	
15.0 ft	Lower (std. UC) rear dozer up							13,300	10,700	9,100	9,300	7,400	6,300	*5,900	*5,900	5,400	
	Lower (std. UC) rear dozer down							13,200	*14,300	10,000	9,200	*12,800	6,900	*5,900	*5,900	*5,900	
	Lower (std. UC) f. stabilizer & r. dozer down							*14,300	*14,300	*14,300	*12,800	*12,800	10,100	*5,900	*5,900	*5,900	27.26
	Lower (std. UC) 2 sets of stabilizers down							*14,300	*14,300	*14,300	*12,800	*12,800	12,200	*5,900	*5,900	*5,900	
	Lower (std. UC) f. dozer & r. stabilizer down							*14,300	*14,300	*14,300	*12,800	*12,800	10,400	*5,900	*5,900	*5,900	
10.0 ft	Lower (std. UC) rear dozer up				19,700	15,600	12,900	12,700	10,100	8,500	9,000	7,200	6,100	*5,900	5,800	4,800	
	Lower (std. UC) rear dozer down				19,600	*21,200	14,400	12,600	*16,000	9,400	9,000	*13,500	6,700	*5,900	*5,900	5,400	
	Lower (std. UC) f. stabilizer & r. dozer down				*21,200	*21,200	*21,200	*16,000	*16,000	13,800	*13,500	*13,500	9,800	*5,900	*5,900	*5,900	28.51
	Lower (std. UC) 2 sets of stabilizers down				*21,200	*21,200	*21,200	*16,000	*16,000	*16,000	*13,500	*13,500	11,900	*5,900	*5,900	*5,900	
	Lower (std. UC) f. dozer & r. stabilizer down				*21,200	*21,200	*21,200	*16,000	*16,000	14,200	*13,500	*13,500	10,100	*5,900	*5,900	*5,900	
5.0 ft	Lower (std. UC) rear dozer up				18,400	14,400	11,800	12,100	9,600	8,000	8,700	6,900	5,800	*6,100	5,500	4,600	
	Lower (std. UC) rear dozer down				18,300	*24,600	13,200	12,100	*17,700	8,900	8,700	*14,200	6,400	*6,100	*6,100	5,200	
	Lower (std. UC) f. stabilizer & r. dozer down				*24,600	*24,600	20,200	*17,700	*17,700	13,200	*14,200	*14,200	9,500	*6,100	*6,100	*6,100	28.77
	Lower (std. UC) 2 sets of stabilizers down				*24,600	*24,600	*24,600	*17,700	*17,700	16,300	*14,200	*14,200	11,600	*6,100	*6,100	*6,100	
	Lower (std. UC) f. dozer & r. stabilizer down				*24,600	*24,600	21,000	*17,700	*17,700	13,600	*14,200	14,100	9,800	*6,100	*6,100	*6,100	
0.0 ft	Lower (std. UC) rear dozer up				17,700	13,700	11,200	11,700	9,100	7,600	8,500	6,700	5,600	*6,700	5,600	4,700	
	Lower (std. UC) rear dozer down				17,700	*25,700	12,600	11,600	*18,500	8,500	8,500	14,000	6,200	*6,700	*6,700	5,300	
	Lower (std. UC) f. stabilizer & r. dozer down				*25,700	*25,700	19,500	*18,500	*18,500	12,800	*14,400	*14,400	9,300	*6,700	*6,700	*6,700	28.15
	Lower (std. UC) 2 sets of stabilizers down				*25,700	*25,700	24,900	*18,500	*18,500	15,800	*14,400	14,200	11,400	*6,700	*6,700	*6,700	
	Lower (std. UC) f. dozer & r. stabilizer down				*25,700	*25,700	20,300	*18,500	*18,500	13,200	*14,400	13,800	9,600	*6,700	*6,700	*6,700	
–5.0 ft	Lower (std. UC) rear dozer up	*21,000	*21,000	20,400	17,500	13,600	11,000	11,500	9,000	7,400	8,400	6,600	5,500	*7,700	6,100	5,100	
	Lower (std. UC) rear dozer down	*21,000	*21,000	*21,000	17,500	*24,400	12,400	11,400	*18,000	8,300	8,400	*13,500	6,100	*7,700	*7,700	5,700	
	Lower (std. UC) f. stabilizer & r. dozer down	*21,000	*21,000	*21,000	*24,400	*24,400	19,300	*18,000	*18,000	12,600	*13,500	*13,500	9,200	*7,700	*7,700	*7,700	26.51
	Lower (std. UC) 2 sets of stabilizers down	*21,000	*21,000	*21,000	*24,400	*24,400	*24,400	*18,000	*18,000	15,600	*13,500	*13,500	11,300	*7,700	*7,700	*7,700	
	Lower (std. UC) f. dozer & r. stabilizer down	*21,000	*21,000	*21,000	*24,400	*24,400	20,100	*18,000	*18,000	13,000	*13,500	*13,500	9,500	*7,700	*7,700	*7,700	
–10.0 ft	Lower (std. UC) rear dozer up	*28,600	26,900	20,800	17,700	13,700	11,200	11,600	9,000	7,500				9,200	7,200	6,000	
	Lower (std. UC) rear dozer down	*28,600	*28,600	23,900	17,600	*21,100	12,500	11,500	*15,600	8,400				9,200	*9,700	6,700	
	Lower (std. UC) f. stabilizer & r. dozer down	*28,600	*28,600	*28,600	*21,100	*21,100	19,500	*15,600	*15,600	12,700				*9,700	*9,700	*9,700	23.69
	Lower (std. UC) 2 sets of stabilizers down	*28,600	*28,600	*28,600	*21,100	*21,100	*21,100	*15,600	*15,600	*15,600				*9,700	*9,700	*9,700	
	Lower (std. UC) f. dozer & r. stabilizer down	*28,600	*28,600	*28,600	*21,100	*21,100	20,200	*15,600	*15,600	13,100				*9,700	*9,700	*9,700	
–15.0 ft	Lower (std. UC) rear dozer up				*14,500	14,200	11,600										
	Lower (std. UC) rear dozer down				*14,500	*14,500	13,000										
	Lower (std. UC) f. stabilizer & r. dozer down				*14,500	*14,500	*14,500										
	Lower (std. UC) 2 sets of stabilizers down				*14,500	*14,500	*14,500										
	Lower (std. UC) f. dozer & r. stabilizer down				*14,500	*14,500	*14,500										

*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.

Standard Equipment

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

ELECTRICAL

- Alternator, 115A
- Lighting
  - LED light package, including all working lights (compatible with falling object guard). Working lights include cab mounted lights (two front, one rear and one on the counterweight for the rear camera)
  - Boom working light
  - Cab interior LED light
  - Roading lights two front, halogen
  - Roading lights two LED modules rear
- Main shut-off switch
- Maintenance free batteries, heavy duty
- Signal/warning horn
- Electrical refueling pump

ENGINE

- Cat C7.1 engine with ACERT Technology Tier 4 Final compliant
- Aftertreatment technologies including the Cat Emission Module (Cat EM) package
- Automatic Engine Speed Control (AESC), including one touch low idle
- Engine Idle Shutdown (EIS)
- Power mode selector
- Altitude 3000 m (9,842 ft)
- Automatic starting aid
- Fuel/water separator with water in fuel switch
- Electric fuel priming pump

HYDRAULICS

- Adjustable hydraulic sensitivity
- Auxiliary boom and stick lines
- All Cat XT™-6 ES hoses
- Anti-drift valves for bucket and tool control/multi-function circuits
- Basic control circuits:
  - 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
  - Quick coupler circuit and lines for hydraulic quick coupler – compatible with the Cat Pin Grabber Quick Coupler
- Boom Lowering Check Valve (BLCV), including overload warning device
- Heavy lift mode
- Load-sensing hydraulic system
- Electric Pump Control (EPC)
- Separate swing pump
- Stick Lowering Check Device (SLCV)
- 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
- Cigarette lighter (24 volt)
- Beverage cup/can holder
- Bolt-on Falling Object Guards (FOGS) capability
- Bottle holder
- Bottom mounted intermittent (four speeds) wiping system that covers the upper and lower windshield glass
- Cameras
  - Rear mounted wide angle camera (integrated into the counterweight) display through the cab monitor
  - Right side wide angle camera, mounted on the cooling hood, displayed on a dedicated large color monitor
- Coat hook
- Cruise Control System
- Fastened seat belt warning signal
- Floor mat, washable, with storage compartment
- FM Radio with CD player, speakers and USB port
- Fully adjustable suspension seat
- Instrument panel and gauges
  - Information and warning messages in local language
  - Gauges for fuel level, engine coolant, Diesel Exhaust Fluid (DEF) and hydraulic oil temperature
  - Filters/fluids change intervals
  - Indicators for headlights, turning signal, low fuel, engine dial setting
  - Clock with 10-day backup battery
- Interior LED lighting with door switch
- Joystick pilot operated
- Laminated upper front windshield
- Left side console, tiltable, with lock out for all controls
- Literature holder in right hand side panel
- Mobile phone holder
- Parking brake
- Pin-code, engine start prevention
- Power supply, 12V-10A
- Rain protector*
- Rear window, emergency, tempered glass, with hammer
- Retractable seat belt, integrated into the seat
- Safety lever, integrated into the left console
- Sealed cab with positive filtered ventilation
- Skylight, laminated glass
- Sliding door windows
- Steering column, adjustable height and angle
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight

*Not compatible with the falling objects guards

Continued on next page

M322F Wheeled Excavator Standard Equipment

Standard Equipment

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

UNDERCARRIAGE

- All wheel drive
- Automatic axle/brake lock
- Creeper speed
- Electronic swing and travel lock
- Heavy-duty axles, advanced disc brake system and travel motor, adjustable braking force
- Oscillating front axle, lockable, with remote greasing point
- Tires, 11.00-20 16 PR, dual
- Spacer rings for tires
- Steps with toolbox in undercarriage (left and right)
- Two-piece drive shaft, extended maintenance intervals (1,000 hours)
- Two speed hydrostatic transmission

OTHER EQUIPMENT

- Auto-lube, centralized greasing (implement and swing gear)
- Automatic swing brake
- Bucket linkage with diverter valve
- Counterweight, 3500 kg (7,716 lb)
- Engine emergency shutoff switch
- Mirrors, wide angle, frame and cab
- Product Link
- S·O·S℠ sampling valves for engine oil, hydraulic oil and coolant

Optional Equipment

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

AUXILIARY CONTROLS AND LINES

- Basic control circuits:
  - Second high pressure
    - Additional two-way, high pressure circuit, for tools requiring a second high or medium pressure function
- SmartBoom

HYDRAULICS

- Cat BIO HYDO Advanced HEES biodegradable hydraulic oil

FRONT LINKAGE

- Booms
  - One-piece boom, 5650 mm (18.6 ft)
  - VA boom (two piece), 5490 mm (18 ft)
- Sticks
  - 2500 mm (8'2")
  - 2900 mm (9'6")

ELECTRICAL

- Back-up alarm with three selectable modes
- Rotating beacon on cab

OPERATOR STATION

- Joystick steering
- Seat, adjustable high-back, with vertical and horizontal air-suspension and head rest
  - comfort, automatic weight adjustment, mechanical lumbar support, heated
  - the deluxe seat adds automatic height and weight adjustment, pneumatic lumbar support, premium fabric, heated and cooled
- Windshield
  - One-piece high impact resistant (EN 356 P5A standard)
  - 70/30 split, openable
- Mirrors heated, frame and cab
- High pressure pedal
- Joystick pattern, changeable
- Falling Object Guards (top and front)

UNDERCARRIAGE

- Rear blade* only
- Front blade*/rear outriggers
- Front outriggers/rear blade*
- Front and rear outriggers
- Travel restraint, for roading with a clamshell

OTHER EQUIPMENT

- Cat Machine Security System (MSS)
- Cooling protection package for dusty applications (includes fine mesh for enhanced radiator protection and engine air precleaner)
- Counterweight, 4700 kg (10,362 lb)
- Ride Control
- Tires (see pg. 22)
- Attachments (see pg. 25-26)
- Cooling package (kit) with reversible fan and vibrating grill

*Parallel blade 2.75 m (9 ft)

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

AEHQ7681 (10-2015)
(North America)

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