

RM400

RECLAIMER / STABILIZER



Engine Power
Operating Weight
Cutting / Mixing Width

310 kW (415.7 hp)
24 953 kg (55,013 lb)
2438 mm (96 in)

See Technical Specifications for detailed engine emissions information.



THE CAT[®] RM400

RECLAIMER / STABILIZER

The versatile Cat[®] RM400 Reclaimer/Stabilizer delivers excellent material gradation, outstanding maneuverability, and simple operation with superb visibility for excellent overall job site performance. Your toughest road rehabilitation and soil stabilization jobs have met their match.



MORE POWER TO PULVERIZE

Take your productivity to new levels on tough road rehabilitation and soil stabilization jobs.

- + MODERN CONTROLS SIMPLIFY OPERATION
- + INCREASED POWER AND MOBILITY MAXIMIZE PRODUCTIVITY
- + OPTIONS PROVIDE THE ABILITY TO ADAPT TO A WIDE RANGE OF APPLICATIONS



19% INCREASE IN POWER

A smaller, simplified engine delivers 19% more power without demanding more fuel and efficient operation maximizes power to meet your productivity targets.

IMPROVED OPERATOR ENVIRONMENT

Easily operate with simple, ergonomic controls in a comfortable work environment.

INCREASED MANEUVERABILITY AND VISIBILITY

Optimized sight lines and reduced overall machine length for excellent overall jobsite performance.

DESIGNED FOR SIMPLE OPERATION

Push-button start. Touchscreen displays. Joystick and hand-wheel steering. A major upgrade to the controls means a major boost in your productivity. The sliding cab and rotating seat provide the operator with an unimpeded view of the cutting path on either side of the machine. Standard front and rear remote cameras increase visibility, and optional cameras provide views to the mixing chamber doors and sides of the machine for obstacle avoidance, monitoring mix quality and enhancing job site safety.



PUSH TO START

Keyless push-button engine start can add security and convenience using Operator ID codes to recall saved operator preferences and profiles upon login. Simply enter the ID code and push the button to start the engine. You can skip the ID codes using the optional Bluetooth® key fob or smartphone app.



EASY TO OPERATE

Simple controls are easy-to-learn, ergonomically located and grouped by function for quick and easy access. Hand-wheel steering delivers precise machine control and the rotor controls are conveniently located on the joystick.



DESIGNED FOR THE OPERATOR

A standard FOPS cab with heating and air conditioning provide a comfortable work environment and protect the operator from the elements. The heated, air-ride suspension seat adjusts for optimal operator comfort.



EXCEPTIONAL VISIBILITY

Sight lines are optimized with the full left-to-right sliding cab and angled glass panels provide exceptional views to the rotor chamber and wheel edges. The seat rotates 90 degrees in either direction allowing the operator to find the most comfortable spot for maximum visibility.



EXTRA EYES

Performance and safety can be augmented with standard and optional cameras that are viewed on large, in-cab displays. Fore and aft visibility is enhanced with standard High Definition cameras with guidance lines for backing up. Optional cameras provide visibility for obstacle avoidance, gradation results and to each side of the machine for enhanced safety.



TAKE CONTROL

Easily match machine functions with gradation specifications through the 25 cm (10 in) color touch screen displays and push button controls. Hand-wheel and joystick steering deliver precise maneuverability. Controls are ergonomically located and grouped by function for quick and easy access.





MORE POWER

TO GET THE WORK DONE

EFFICIENT POWER FOR THE TOUGHEST JOBS

The RM400 features a 19% increase in power over its predecessor, the RM300. A reliable Cat® C9.3B engine is optimized for performance providing 310 kW (416 hp) and meets regional emission standards. An updated rotor drive system eliminates the need for a transmission and an efficient fan circuit create less draw on the engine, leaving more power to meet production goals.

A robust cooling system provides cool air intake to maximize fuel efficiency and minimize emissions. An on-demand variable speed fan draws ambient air from a separate compartment in front of the engine through the cooling package. The exhaust air exits from the front of the machine, maintaining a cool engine compartment.

The reversible cooling fan automatically performs periodic cycles in reverse to clean the heat exchanger by expelling accumulated dust. This allows the system to cool more efficiently, ensuring that the engine is working optimally and extends cleaning and maintenance intervals for the cooling package.

OPERATE WITH CONFIDENCE

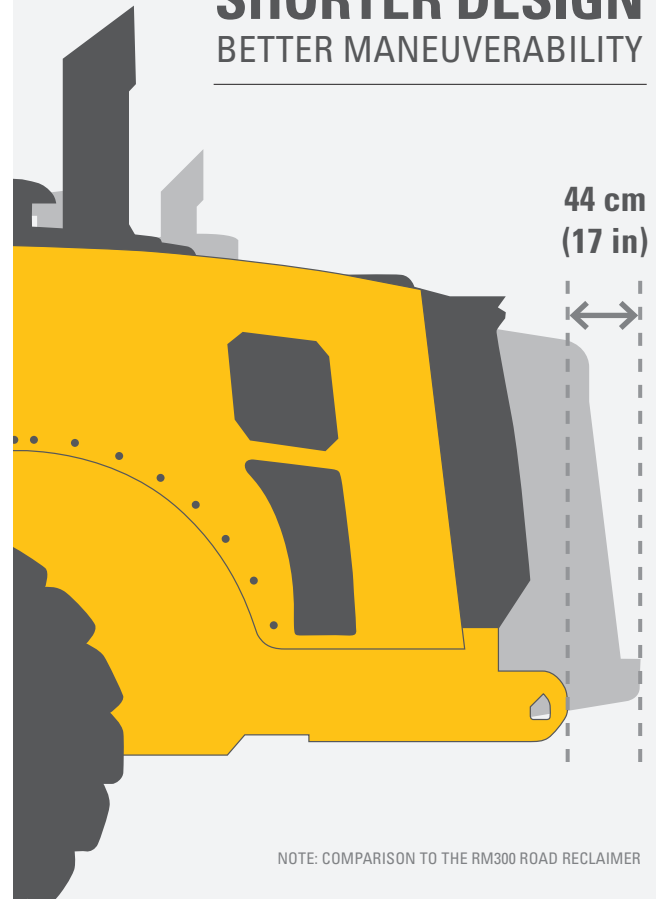
MAXIMUM TRACTION

The all-wheel drive system continually monitors and balances hydraulic pressure at each wheel for maximum traction. Four independent pumps deliver dedicated flow to each wheel motor, providing efficient power for traction ensuring the machine propels in the most extreme conditions.

GREATER AGILITY

With a 44 cm (17 in) shorter overall machine length than the RM300 and a propel system offering four steering modes, the RM400 is highly maneuverable, making the machine more versatile in various applications.

SHORTER DESIGN BETTER MANEUVERABILITY



ENHANCE CAPABILITIES WITH OPTIONAL SPRAY SYSTEMS



Water and emulsion additive systems ensure mix design specifications are met. A computerized metering system accurately monitors the application rate of additives for precise distribution. Easily set up the spray system to deliver liquid additives according to specifications:

- + Manual or automatic
- + Volume per minute
- + Volume per m² (yd²)
- + Percent of material density



WATER SPRAY SYSTEM

The Water Spray System automates the addition of metered water to the mixing chamber, allowing the machine to easily mix the proper measured amount to the materials. It provides an infinitely variable volume capacity of 30-1900 liters (8-500 gallons) per minute with nozzles that provide an optimal spray pattern at high, medium and low flow ranges. For water use only—not for use with emulsions.



EMULSION SPRAY SYSTEM

The Emulsion Spray System automates the addition of metered emulsion to the mixing chamber, allowing the machine to easily mix the proper measured amount to the materials. This pump unit provides an infinitely variable volume capacity of 30-946 liters (8-250 gallons) per minute. Three sets of nozzles for the spray bar ensure proper fan pattern.



RELIABLE ROTOR DRIVE SYSTEM

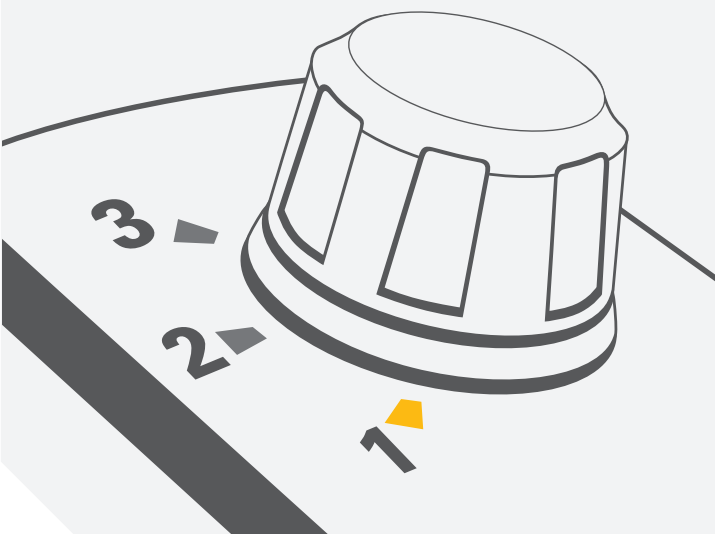
MAXIMIZES PRODUCTION

TURN UP THE DIAL CHANGE ROTOR SPEEDS ON THE GO

A simplified rotor drive system allows you to change rotor speeds without interrupting production.

ZERO STOPS. MORE PRODUCTION.

NOTE: COMPARISON TO THE RM300 ROAD RECLAIMER



A simplified rotor drive system uses proven components from the RM500B to provide a durable machine that can perform in many applications. Adjustment-free clutch and chains reduce maintenance time, getting your machine in the ground faster and in the cut longer.

ADVANCED FEATURES

By removing the rotor drive transmission, you can switch between rotor speeds without having to stop the machine, increasing productivity and uptime. Electronic controls deliver ideal mix quality by keeping the rotor at the proper depth and the machine at an optimized speed. The rear door downpressure is managed using the LCD touchscreen display and rotor functions such as exit/return-to-cut and rear door float are adjusted with the multi-function joystick.

ROTOR OPTIONS

DESIGNED FOR EFFICIENT PRODUCTION

Work efficiently on a variety of reclamation and stabilization projects with three rotor options: Universal, Combination and Spade.



UNIVERSAL

The Universal Rotor is designed to produce maximum breakout force in deep asphalt cuts and on existing soil cement. It also performs well in soil stabilization applications. The kicker paddle design provides material movement and suspension in the mixing chamber and includes a breaker bar for excellent gradation in full-depth reclamation and soil stabilization applications. Triple-tree tool placement on the rotor edges improves side cutting when maneuvering.

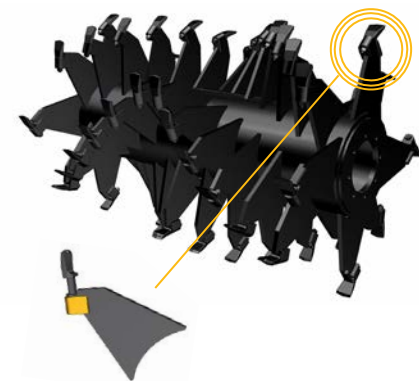
NUMBER OF TOOLS: 200 carbide tipped bullet tools with bolt-in breakaway tool holders



COMBINATION

Designed primarily for stabilization applications in cohesive soils, the Combination Rotor excels in deep-cut soil mixing applications where pulverization and gradation is of lesser importance than higher working speeds. It can also handle light reclamation applications where the asphalt layer is thin and deteriorated. Replaceable end rings protect the mandrel, extending component life.

NUMBER OF TOOLS: 114 carbide tipped bullet tools with bolt-in breakaway tool holders



SPADE

The spade rotor is designed specifically for soil stabilization and mixing applications. Fewer tools will produce less gradation compared to the universal or combination rotors, but fewer tools reduce rotor maintenance time and costs. The Spade rotor is not available in all regions, so please consult your local Cat dealer for availability.

NUMBER OF TOOLS: 58 bolt-on spade tools

ROTOR APPLICATIONS

Cat rotors are capable of producing good results in many applications, but each is designed to provide maximum efficiency and productivity in specific applications. This chart provides general guidance for choosing a rotor.

KEY

- ✓ Ideal choice for specific application
- Acceptable, but not ideal
- ✗ Not recommended for this application

JOB TYPE	APPLICATION	UNIVERSAL 16	UNIVERSAL 18*	COMBINATION	SPADE*
FULL-DEPTH ASPHALT					
RECLAMATION	Thin Asphalt Layer 25-75 mm (1-3 in)	✓	✓	○	✗
	Medium Asphalt Layer 75-175 mm (3-7 in)	✓	✓	○	✗
	Thick Asphalt Layer 175-250 mm (7-10 in)	✓	○	✗	✗
	Soil and Cement (fully cured)	✓	✓	○	✗
MIXING / STABILIZATION					
SOIL	Granular Soils	✓	✓	○	✓
	Granular with Rocks < 130 mm (5 in), Debris	✓	✓	○	✓
	Light Clay	○	○	✓	✓
	Heavy Clay / Gumbo	✓	○	✓	✓

* Not available in all regions. Please consult your local Cat dealer for availability.

CUTTING BITS

Choosing the right cutting bit for your application can optimize the efficiency of the machine, resulting in more production with ideal material sizing and mixing quality. These charts identify which cutting bits are recommended for common applications.

For additional cutting bit offerings and alternatives, consult your local Cat dealer.

ROTOR TYPE		PART NUMBER
UNIVERSAL 20 mm Shank	COMBINATION 22 mm Shank	
	●	533-5760
●		561-8135
●		564-1260
●		578-4416



533-5760



561-8135

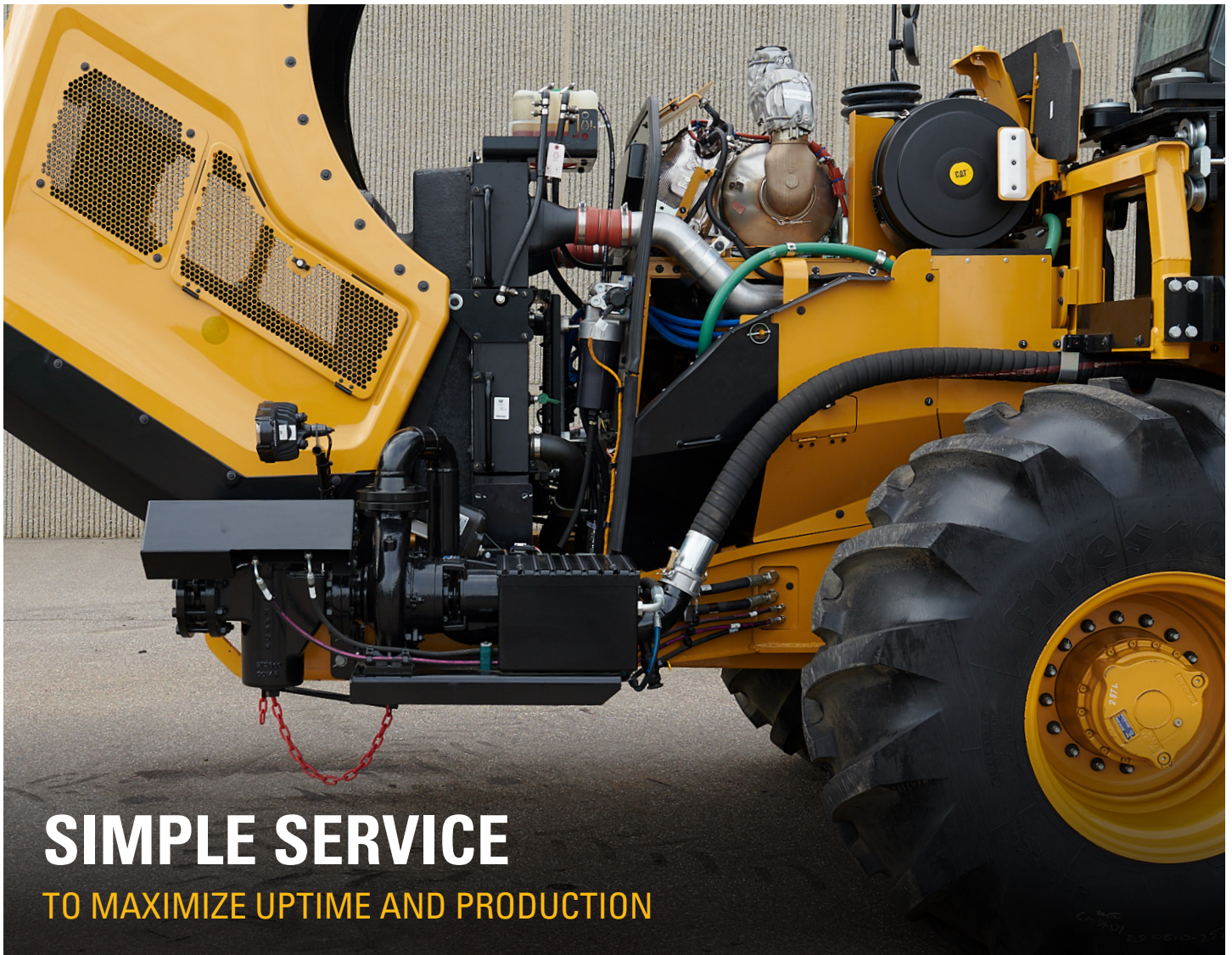


564-1260



578-4416

APPLICATION		DEPTH			PART NUMBER
SOIL	ASPHALT RECLAMATION	SHALLOW 25-50 mm (1-2 in)	MODERATE 75-125 mm (3-5 in)	DEEP +150 mm (+6 in)	
●			●	●	533-5760
	●	●	●		561-8135
	●		●	●	564-1260
●		●	●		578-4416



SIMPLE SERVICE

TO MAXIMIZE UPTIME AND PRODUCTION

The RM400 is designed to make maintenance easier with extended service intervals and ground level access to routine maintenance items to simplify service and improve safety. Built-in diagnostics monitor machine systems and alert the operator of performance issues and provide troubleshooting information. Your Cat dealer is ready to help with service options and convenient parts availability for both the engine and your machine.

ROTOR SERVICE MADE EASY

An optional air compressor and variety of removal tools help you replace bits and toolholders quickly, and work lights illuminate the rotor during maintenance. Easily change out triple-tree components using the access door on the side of the rotor chamber.

MAINTENANCE-FREE COMPONENTS

A self-lubricating rotor chain drive and hydraulically-actuated rotor drive clutch are adjustment-free and the rotor drive system features automated bearing lubrication, eliminating routine maintenance.

CAT LINK TECHNOLOGY

TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

CAT LINK telematics helps take the complexity out of managing your equipment and job sites by gathering data generated from your machines, materials, and people – delivering it to you in customizable formats.

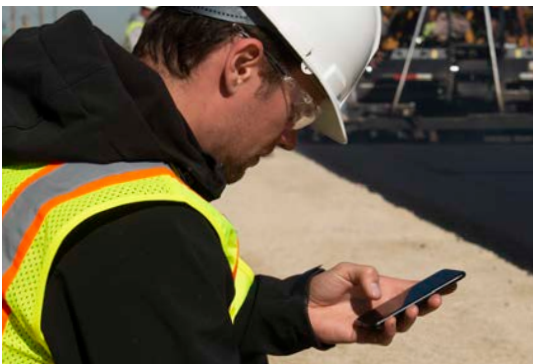


CAT PRODUCT LINK™

Product Link™ collects data automatically from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

VISIONLINK®

Access product data anytime, anywhere with VisionLink® and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your job site. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business, without paying for extras you don't want. Subscriptions are available for cellular and/or satellite-based reporting.



REMOTE SERVICES

Remote Troubleshoot allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote Troubleshoot ensures the technician arrives with the correct parts and tools the first time, eliminating the need for additional trips, saving you time and money.

Remote Flash updates on-board software without a technician being present, reducing time taken for updating by as much as 50%. Minimize downtime by initiating updates when convenient to keep your assets running with maximum efficiency.

The **Cat App** helps you manage your assets right from your smart phone. Track information such as fleet location or hours, receive critical alerts for required maintenance, and request service from your local Cat dealer.

TECHNICAL SPECIFICATIONS

ENGINE	
Engine Model	Cat® C9.3B
Gross Power – ISO 9249	310 kW 415.7 hp
Gross Power – ISO 14396	310 kW 415.7 hp
Emissions	<ul style="list-style-type: none"> – U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final – Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA
Speed – Operating	0-4.8 km/h 0-2.97 mph
Speed – Travel	11 km/h 6.8 mph

MACHINE WEIGHT	
Operating Weight (maximum)	26 700 kg 58,863 lb
Operating Weight (standard)	24 953 kg 55,013 lb
Transport Weight	23 500 kg 51,096 lb

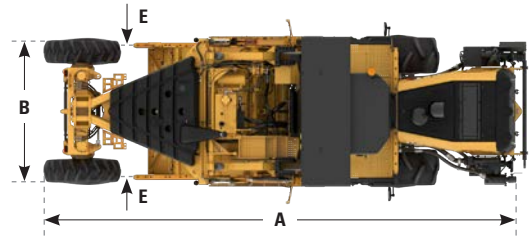
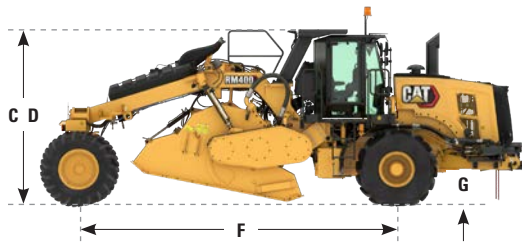
Operating weights are approximate and include ROPS, cab, coolant, lubricants, 50% fuel tank and 75 kg (165 lb) operator.

CUTTING SYSTEM	
3-Speed Direct Drive, Chain Driven	
Rotor Speeds	108 / 134 / 159 rpm
Cutting Width	2438 mm 96 in
Cutting Depth (maximum)	508 mm 20 in
Maximum cutting depth determined by rotor selection	

SERVICE REFILL CAPACITIES	
Fuel Tank	1056 L 279 gal
Cooling System	62.5 L 16.5 gal
Engine Oil	32 L 8.5 gal
Hydraulic Oil	233 L 61.5 gal
DEF Tank	70 L 18.5 gal
U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final	

SPRAY SYSTEMS	
Water Spray System – Flow Rate	30-1900 lpm 8-500 gpm
Emulsion Spray System – Flow Rate	30-946 lpm 8-250 gpm

DIMENSIONS	
A Overall Length	9.56 m 31.4 ft
B Overall Width	3.0 m 9.8 ft
C Height at ROPS	3.5 m 11.5 ft
D Transport Height	3.5 m 11.5 ft
E Cutting Width	2.44 m 8 ft
F Wheelbase	6.32 m 20.7 ft
G Ground Clearance	500 mm 19.7 in
Inside Turning Radius (minimum)	4.03 m 13.2 ft
Outside Turning Radius (maximum)	8.3 m 27.1 ft



ROTOR OPTIONS							
Rotor	Width		Diameter		Tools	Maximum Depth	
Universal 16	2438 mm	96 in	1375 mm	54 in	200	406 mm	16 in
Universal 18*	2438 mm	96 in	1525 mm	60 in	200	457 mm	18 in
Combination	2438 mm	96 in	1625 mm	64 in	114	508 mm	20 in
Spade*	2300 mm	90.6 in	1575 mm	62 in	58	457 mm	18 in

* Not available in all regions. Please consult your local Cat dealer for availability.

STANDARD & OPTIONAL EQUIPMENT

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
Adjustable armrests	●	
Air-ride, heated suspension seat	●	
Audio-ready with speakers	●	
Full width sliding cab with heat and air conditioning	●	
Push button start	●	
Illuminated dual-side access ladders	●	
High visibility retractable seat belt	●	
Mini-wheel steering control	●	
Multifunction propel lever	●	
Steering guides	●	
Color touch screen operator interface	●	
Additional color touch screen		○

POWERTRAIN	STANDARD	OPTIONAL
Air to Air Aftercooler (ATAAC)	●	
Dual element air cleaner with pre-cleaner	●	
Extended life coolant with protection to -37° C (-35° F)	●	
On-demand fan with auto-reversing function	●	
Four steering modes	●	
All-Wheel Drive	●	
Electronic differential	●	
Oil-bath brake system	●	
Powertrain guard	●	
Bio-friendly hydraulic oil		○

ELECTRICAL SYSTEM	STANDARD	OPTIONAL
150 amp alternator	●	
24-volt charging system	●	
Automotive-type fuse system	●	
Remote start/charge receptacle	●	
1365 CCA maintenance-free batteries (2)	●	

SPRAY SYSTEMS	STANDARD	OPTIONAL
Water spray system		○
Emulsion spray system		○
Push bar		○

ROTOR DRIVE SYSTEM	STANDARD	OPTIONAL
Maintenance-free drive shafts	●	
Self-lubricating roller and bearings	●	
Shear disk driveline protection	●	
Torque limiter driveline protection		○
Automatic depth control	●	
Hydraulically-controlled dry clutch	●	
Three rotor speeds	●	
Variable volume mixing chamber	●	
Rotor – Universal 16		○
Rotor – Universal 18*		○
Rotor – Combination		○
Rotor – Spade*		○
Material sizing breaker bar		○

SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Grouped filters with ground level access	●	
Cat Product Link™	●	
Remote Flash	●	
Remote access drains	●	
Ports for Scheduled Oil Sampling (S-O-S SM)	●	
Fluid level sight gauges	●	
Service light receptacles	●	
Integrated air compressor		○
Pneumatic bit removal tool		○
Toolbox	●	
Additional toolbox		○

SAFETY AND SECURITY	STANDARD	OPTIONAL
Back-up alarm	●	
Front and rear facing cameras	●	
Ground level emergency shutdown switches (3)	●	
Horn (front and rear)	●	
ROPS	●	
Platform handrails and guardrails	●	
Mirrors	●	
Working lights (halogen or LED)	●	
LED roading lights		○
Folding LED safety beacon		○
Folding side view cameras (2)		○
Front and rear rotor chamber door cameras		○

* Not available in all regions. Please consult your local Cat dealer for availability.



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

QEHQ2610-04 (06/2021)
Build Number: 01A
Global

© 2021 Caterpillar. All Rights Reserved.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

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

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

www.cat.com www.caterpillar.com

