



Cat[®] RM800

Reclaimer / Stabilizer

The Cat[®] RM800 Reclaimer/Stabilizer is designed for full-depth reclamation and soil stabilization projects. Get the versatility you need for any application and terrain with outstanding maneuverability. A powerful Cat engine and intuitive machine operation deliver superior mix quality. Easily maintain precision with convenient productivity features in a comfortable operator environment that optimizes visibility. Power combined with advanced machine controls deliver performance to keep you productive all day long.

Efficient Power and Performance

- Powerful Cat[®] C18 twin-turbo engine meets regional emission standards
- Wheels positioned on the corners of the machine provide the smallest inside and outside turning radii to help you maneuver in tight spaces, enhanced by four steering modes:
 - Front wheels only, rear wheels only, crab steering, and coordinated steering
- Front to rear weight distribution provides stability in tough cuts
- 8.72 m (28.61 ft) overall machine length enhances productivity and maneuverability in compact spaces
- Four height adjustable legs provide up to + or - 12.5% (8 degrees) of slope on either side when working on uneven terrain or to maintain traction in challenging soil stabilization applications
- The belt-driven rotor provides flush cut capability on the right-hand side
- Standard electronically controlled all-wheel drive maximizes traction and mobility

Maximize Productivity and Mix Quality from the Cab

- Advanced electronic controls with automatic load control deliver ideal mix quality by keeping the rotor at the proper depth and the machine at an optimized speed for production efficiency
- High power at every rotor speed maximizes your productivity
- Instantly modify material gradation by adjusting the front and rear mixing chamber doors and an easy-to-read indicator on the touch screen display informs the operator of door positions
- Rear rotor chamber door float feature simplifies operation, allowing the operator to select desired down pressure
- Exit and Return-to-cut features help operators save time and maintain consistency with the simple tap of a button
- A multi-function joystick puts speed, rear steering and primary rotor controls at your fingertips



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Superior Visibility and Operator Comfort

- Standard FOPS cab with heating and air conditioning for a comfortable work environment
- Sight lines are optimized with the full left-to-right sliding cab
- Operator visibility to the cutting path is enhanced with floor to ceiling glass and an angled pane on the right-hand side provides a clear view to the leading edge of the cutting chamber
- A heated, 180° positioning, air-ride suspension seat with high visibility seat belt is equipped with fore and aft adjustment increasing operator comfort and visibility
- Touch screen displays can be adjusted to optimize viewing angle
- 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 front and rear mounted cameras with on-screen configurable guidance lines
 - Obstacle avoidance and gradation results can be viewed with cameras mounted above the front and rear mixing chamber doors
 - Visibility to each side of the machine can be supplemented with an upgrade to side mounted cameras
- Convenience features include audio-ready with speakers, USB ports for charging, 12V DC outlets, storage in rear, overhead and console compartments, and phone, cup and bottle holders

Simple to Operate, Easy to Learn

- Easily match machine functions with gradation specifications through the 25 cm (10 in) color touch screen displays and push button controls
- Precise machine control is delivered through hand-wheel and joystick steering
- Controls are ergonomically located and grouped by function for quick and easy access
- Start the engine with a push button; use a Bluetooth key fob or the Operator ID passcode to recall saved operator preferences and profiles upon login

Meet Specifications with Precision

- Meet mix design specifications with precision using optional water and emulsion additive systems
- Additive application rate is monitored with a computerized metering system for accuracy
- Customize spraying width by turning spray nozzles on or off through the touchscreen display in the cab
- Spray bars conveniently slide out on either side for inspection, cleaning and service
- A wide range of variable flow rates can be optimized for a variety of applications:
 - Water flow rates from 30-1900 liters per minute (8-500 gallons per minute)
 - Emulsion flow rates from 30-850 liters per minute (8-225 gallons per minute)
- Emulsion Spray System is capable of delivering water or bitumen emulsion with self-cleaning nozzles to reduce maintenance and provide a consistent spray pattern
- Easily set up the spray system to deliver liquid additives according to specifications:
 - manual or automatic
 - volume per m² (yd²)
 - percent of material density

Durable and Dependable Cutting System

- The rotor drive system features a hydraulically-actuated, heavy-duty dry clutch that does not require adjustment
- Electronically-controlled drive line protection
- Two high tensile, six-rib belts with automatic belt-tensioning to prevent slippage
- Bi-directional cutting capability
- Durable, high-strength, variable volume cutting chamber
- Visual indicators inform ground personnel of cutting depth and leading edge of the rotor when avoiding obstacles

Cat System K Rotor for Reclamation and Stabilization

- Deliver superior material quality on a variety of projects with the versatile System K rotor that uses proven toolholder and base block components from our cold planer System K rotor
- Components are manufactured with abrasion-resistant, high-strength alloys to withstand tough, high-power applications
- Tools are precisely placed on the rotor to deliver ideal material sizing and homogeneous mixing results
- The versatile Cat System K rotor can be configured with bolt-on Paddle or Wedge toolholder protection
 - Paddles provide material sizing in Full Depth Reclamation applications
 - Wedges reduce drag in soil stabilization applications
 - Components can be rotated 180° for extra life
- Replaceable toolholders can be selected for use with 20 or 22 mm shank bits and offer multiple methods for bit removal
- A tapered dual-retention tool holder design secures toolholders in place without a setscrew or bolt, speeding up replacement and eliminating the need for fasteners or torquing
- Bolt-on toolholder protection, endring segments and endring wear protection plates eliminate the need for grinding and welding, simplifying reconditioning

Easier Service, More Uptime

- Daily checkpoints and service access are centrally located on a secure platform for improved safety and efficiency
- Monitor fluid conditions with regular sampling to help extend change intervals up to 500 hours engine oil, 6000 hours hydraulic oil and 12000 hours coolant
- The auto-reversing cooling fan helps prevent debris build-up extending maintenance intervals for cleaning the cooling package
- A standard compressed air system with two access points, speeds up rotor bit changes, powers pneumatic tools for service and can be used for general machine cleaning
- Ground-level controls and optional hydraulically powered rotor turning with pendant simplify bit replacement and rotor cleaning
- A service door on each side of the rotor chamber provides easy access to inspect or change endring bits without having to reach inside the rotor chamber to service
- Optional high-pressure wash system for convenient clean-up
- Built-in diagnostics monitor machine systems, alert the operator of performance issues and provide troubleshooting information
- Operate select machine functions during maintenance and service with the accessory drive system
- Electrical system wiring is color-coded and numbered for easy identification and wrapped in a protective, abrasion-resistant nylon braid for longer life
- Remote Troubleshoot connects the machine to your Cat dealer to diagnose and solve problems virtually and if service is required, a Technician comes prepared with the right tools and parts the first time, reducing downtime
- Remote Flash works around your schedule to ensure your machine's software is up to date for optimal performance and uptime

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Sustainability

- The Cat C18 twin-turbo engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards
- Cat U.S. EPA Tier 4 Final and EU Stage V diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to: 20% biodiesel FAME (fatty acid methyl ester) or 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.
- Cat engines equivalent to U.S. EPA Tier 2 and EU Stage II are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to: 20% biodiesel FAME (fatty acid methyl ester) or 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.
- Engine Idle Speed Management helps maximize fuel efficiency and reduce greenhouse gas emissions by elevating engine speed to an intermediate idle to complete specific tasks and returning to low idle when finished.
- Automatic Load Control helps you save fuel and reduces greenhouse gas emissions by automatically matching propel speed to engine load for maximum production at peak efficiency
- Electronically controlled All-Wheel Drive with Traction Control maintains consistent traction to increase machine efficiency, helps reduce fuel burn and greenhouse gas emissions
- Performance and safety can be augmented with standard and optional cameras that are viewed on large, in-cab displays
- Extended maintenance intervals not only reduce downtime but decrease the amount of fluid and filters that are replaced over the life of the machine
- Cat Scheduled Oil Sampling (S•O•SSM) Services helps reveal excessive wear, contaminated fluids or other “unseen” issues that can shorten component life. In many cases, you can extend oil and coolant change intervals by using fluid monitoring. Consult your Cat dealer or the machine’s operation and maintenance manual for more information.
- The engine, hydraulic system and Diesel Exhaust Fluid (DEF) tank (if required) are equipped with ecology drains for easy servicing and to help prevent spillage
- Don’t waste fuel idling. Cat VisionLink® online fleet monitoring helps you manage idle time and reduce fuel burn and greenhouse gas emissions
- VisionLink displays the CO₂ emissions for monitored assets, calculated by fuel type for the Runtime Fuel Burned each day in a selected date range
- Remote Troubleshoot decreases maintenance time and keeps your machine running with maximum efficiency by allowing your Cat dealer to virtually test the machine while working. Once a problem is identified, a technician can fix it the first time, saving time and money.
- Remote Flash minimizes downtime and maintenance time while keeping your asset running with maximum efficiency. Alerts for machine updates are sent virtually from your Cat dealer and updates can be deployed without a dealer technician needing to be onsite.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OPERATOR ENVIRONMENT			ELECTRICAL SYSTEM		
Adjustable armrests	✓		150 amp alternator	✓	
Air-ride, heated suspension seat	✓		24-volt charging system	✓	
180° rotating operating station	✓		Automotive-type fuse system	✓	
Audio-ready with speakers	✓		Remote start/charge receptacle	✓	
Full width sliding cab with heat and air conditioning	✓		1000 CCA maintenance-free batteries (4)	✓	
Push button start	✓		SPRAY SYSTEMS		
High visibility retractable seat belt	✓		Water spray system		✓
On-screen steering guides	✓		Emulsion spray system		✓
Color touch screen displays (2)	✓		Push bar		✓
12-volt and USB power ports	✓		ROTOR DRIVE SYSTEM		
POWERTRAIN			Electronic driveline protection	✓	
Dual element air cleaner with pre-cleaner	✓		Automatic depth control	✓	
Extended Life Coolant (ELC) with protection to -37° C (-35° F)	✓		Hydraulically-controlled dry clutch	✓	
Auto-reversing, on-demand cooling fan	✓		Twelve rotor speeds	✓	
Engine idle speed management	✓		Variable volume mixing chamber	✓	
Automatic load control	✓		System K rotor	✓	
Four steering modes	✓		Toolholder protection – Flat paddle		✓
All-wheel drive	✓		Toolholder protection – Wedge		✓
2-speed planetary gearbox	✓		Toolholder – 20 mm shank bits		✓
Electronic differential	✓		Toolholder – 22 mm shank bits		✓
Bio-friendly hydraulic oil		✓	SAFETY AND SECURITY		
CE certificate		✓	Back-up alarm	✓	
SERVICE AND MAINTENANCE			Ground level emergency shutdown switches (4)	✓	
Cat® Product Link™	✓		Horn (front and rear)	✓	
Remote Flash	✓		ROPS	✓	
Remote Troubleshoot	✓		Platform handrails and guardrails	✓	
Remote access drains	✓		Folding rear view mirrors	✓	
Ports for Scheduled Oil Sampling (S•O•S SM)	✓		Illuminated access ladder	✓	
Fluid level sight gauges	✓		Operator ID profiles	✓	
Service light receptacles	✓		Bluetooth key fob		✓
Air compressor	✓		LED working lights	✓	
Lockable storage	✓		LED roading lights		✓
Bit bucket tray	✓		Folding LED safety beacon		✓
Fast fill fuel system		✓	Front and rear facing cameras	✓	
Hydraulically powered rotor turning with pendant		✓	Front and rear rotor chamber door cameras	✓	
High pressure washdown system		✓	Folding side view cameras (2)		✓
Magnetic service light		✓			
Pneumatic bit removal tools		✓			

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Technical Specifications

Powertrain

Engine Model	Cat C18 Twin Turbo	
Cylinders	6	
Emissions	U.S. EPA Tier 4 Final, EU Stage V	
Gross Power – SAE J1995:2014	568 kW	762 hp
Engine Power – ISO 14396:2002	562 kW	754 hp
Emissions	U.S. EPA Tier 2, EU Stage II equivalent	
Gross Power – SAE J1995:2014	576 kW	772 hp
Engine Power – ISO 14396:2002	569 kW	763 hp
Maximum Operating Speed	56 m/min	184 ft/min
Maximum Travel Speed	12.1 km/h	7.5 mph
Propel System	All-Wheel Drive	

Machine Weight

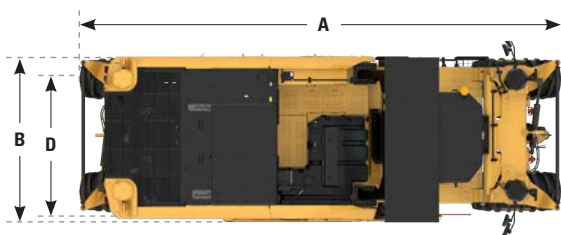
Emissions	U.S. EPA Tier 4 Final, EU Stage V	
Operating*	32 205 kg	71,000 lb
Maximum**	34 347 kg	75,722 lb
Emissions	U.S. EPA Tier 2, EU Stage II equivalent	
Operating*	33 135 kg	73,050 lb
Maximum**	35 352 kg	77,938 lb

* Base machine, no options, ROPS, cab, coolant, lubricants, 50% full fuel tank, 50% full water tank and 75 kg (165 lb) operator.

** Base machine, all options, ROPS, cab, coolant, lubricants, full fuel tank, full water tank and 75 kg (165 lb) operator.

Dimensions

A Overall Length	8.72 m	28.61 ft
B Overall Width	3.0 m	9.8 ft
C Transport Height	3.5 m	11.5 ft
D Cutting Width	2438 mm	96 in
E Wheelbase	7.05 m	23.13 ft
F Ground Clearance	506 mm	19.9 in
Inside Turning Radius (minimum)	3.09 m	10.14 ft
Outside Turning Radius (maximum)	6.96 m	22.83 ft
Maximum Cross Slope	8 degrees	



Spray Systems

Water Spray System – Flow Rate	30-1900 lpm	8-500 gpm
Emulsion Spray System – Flow Rate	30-850 lpm	8-225 gpm

Cutting System

Rotor Drive	Belt	
Cutting Width	2438 mm	96 in
Maximum Cutting Depth	508 mm	20 in
Number of Cutting Tools	208	
Tip Diameter	1450 mm	57.1 in
Tool Spacing	15 mm	0.59 in
Tool Tip Height	300 mm	11.8 in
Flush Cut	Right Hand Side	

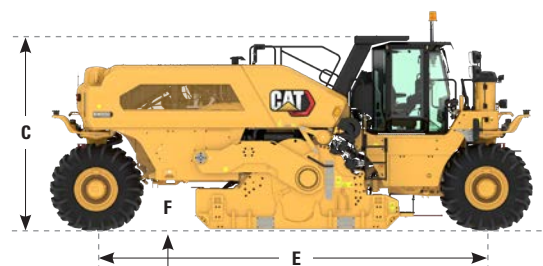
Rotor Speeds

Rotor Gearbox Speed	Engine Speed	Low Pulley Position	High Pulley Position
Low	1	97	120
	2	103	128
	3	109	135
High	1	144	179
	2	153	190
	3	162	201



Service Refill Capacities

Fuel Tank	1230 L	325 gal
Cooling System	99 L	26.1 gal
Engine Oil	68 L	18 gal
Hydraulic Oil Tank	225 L	59.4 gal
Washdown Water Tank	454 L	120 gal



Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit www.caterpillar.com/en/company/sustainability.html.

ENGINE

- The Cat C18 Twin Turbo is available in configurations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards or equivalent to U.S. EPA Tier 2 and EU Stage II.
- Cat U.S. EPA Tier 4 Final and EU Stage V diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
- Cat engines equivalent to U.S. EPA Tier 2 and EU Stage II are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

AIR CONDITIONING SYSTEM

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.0 kg (4.4 lb) of refrigerant, which has a CO₂ equivalent of 2.860 metric tonnes (3.153 tons).

PAINT

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

SOUND PERFORMANCE

With cooling fan speed at maximum value:

Operator Sound Pressure Level (ISO 11204:2010) – 77 dB(A)

Exterior Sound Power Level (ISO 6393:2008) – 115 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

OILS AND FLUIDS

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

FEATURES AND TECHNOLOGY

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Engine Idle Speed Management keeps the machine idle at lowest possible RPM
 - Automatic Load Control automatically matches propel speed to engine load
 - All-wheel drive with traction control maintains consistent traction
 - Extended maintenance intervals reduce fluid and filter consumption
 - Remote Flash and Remote Troubleshoot

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

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

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