CAT® WATER SOLUTIONS

Defeat dust. Now you're in control.

777 (05) WATER TRUCK

Engine: Cat® C32B

Emissions: Meets China Nonroad Stage III emission standards equivalent to U.S. EPA Tier 2.

Gross Power - SAE J1995: 765 kW / 1,026 hp

Water Tank Capacity: up to 75 700 L (20,000 gal)

CAT®

What comes to mind when you think about the job site? Dump trucks hauling loads of material, the boom of dynamite blasting through rock, or the dust levels that decrease visibility?

THE CHALLENGE:
DUST

Haul road dust can impact safety and productivity. That's why Caterpillar is now offering a fully integrated solution to control dust – helping you solve overwatering and underwatering issues – to manage your site more safely, productively, and sustainably.

A water truck may be one of the most important pieces of support equipment at your site – and the support you need is just as important.

Cat® Water Solutions is more than a water truck. It's an integrated solution designed with an automated water delivery system, driven by a proven Cat truck platform, connected with advanced technology – backed by the Cat dealer you know and trust.

THE ANSWER:
CAT WATER SOLUTIONS

Whether on a construction site, in a quarry, or at a mine site, the 777 has been a proven performer around the world. That's why we chose this truck to deliver an integrated Cat Water Solution – combining a truck, tank, and water delivery system with flexible levels of connectivity through Cat® MineStar™ – providing a more efficient way to manage haul road dust.

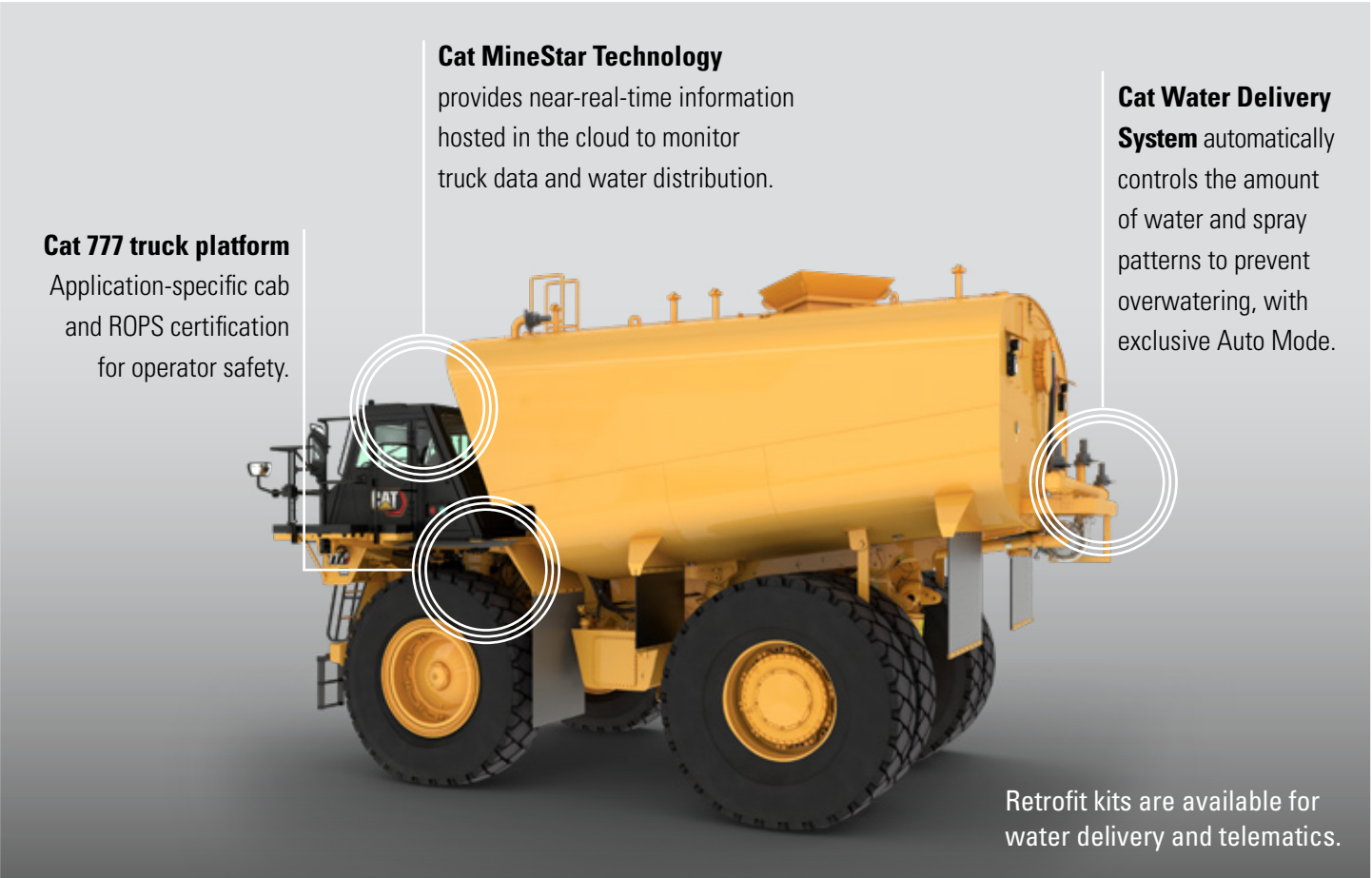**Defeat Dust. Conserve Water. Take Control.**

Integrated touchscreen with user interface for configuring the Cat Water Delivery System (WDS). The display shows a real-time indicator of water tank level, cannon, and spray head operation. View optional camera system for visibility to water tank fill chute.

Keypad to select and control the number of spray heads with buttons for intermittent spray, head cleaning, pump on / off, water cannon on / off, tank fill percentage, and adjustments for water flow rate.

Joystick for cannon control with adjustable spray selection. Choose a stream or fan spray when watering the pile or mining face. The cannon may also be used for fire mitigation.

FULLY INTEGRATED
CAB CONTROLS

Cat MineStar Technology

provides near-real-time information hosted in the cloud to monitor truck data and water distribution.

Cat Water Delivery System automatically controls the amount of water and spray patterns to prevent overwatering, with exclusive Auto Mode.

Cat 777 truck platform

Application-specific cab and ROPS certification for operator safety.

Retrofit kits are available for water delivery and telematics.

SITE SAFETY AND PRODUCTIVITY:
KEEP YOUR OPERATIONS RUNNING AT PEAK PERFORMANCE

ENHANCED SITE SAFETY

The Cat Water Delivery System (WDS) provides variable water flow based on truck speed, helping eliminate overwatering that can lead to slippery roads.

Properly watered haul roads control vision-impairing dust and reduce risk of accidents due to poor visibility.

Help reduce hazardous airborne particulates that cause long-term health issues for workers by suppressing dust.

OPTIMIZED PRODUCTIVITY

Properly watered haul roads directly impact fleet cycle times, enabling you to meet production targets.

Spend less time maintaining haul roads by using proper watering techniques to solve overwatering / underwatering issues.

Prevent damage to trucks and reduce unplanned downtime with better maintained haul roads.

Pump features soft startup and shuts off automatically when the tank is empty, eliminating damage to your investment.

Maintenance-free and self-cleaning water spray heads reduce truck downtime.

SYSTEM INTEGRATION

A proven Cat 777 truck chassis integrated with the Cat Water Delivery System, paired with scalable levels of technology helps meet customer needs for more efficient, productive operations.

TAKE CONTROL WITH

CAT
MINESTAR

MineStar for water includes a cloud-based service offering that collects and communicates machine data that enables site supervisors to know what their fleet is doing, who is operating which machine, and how they are spending their time.
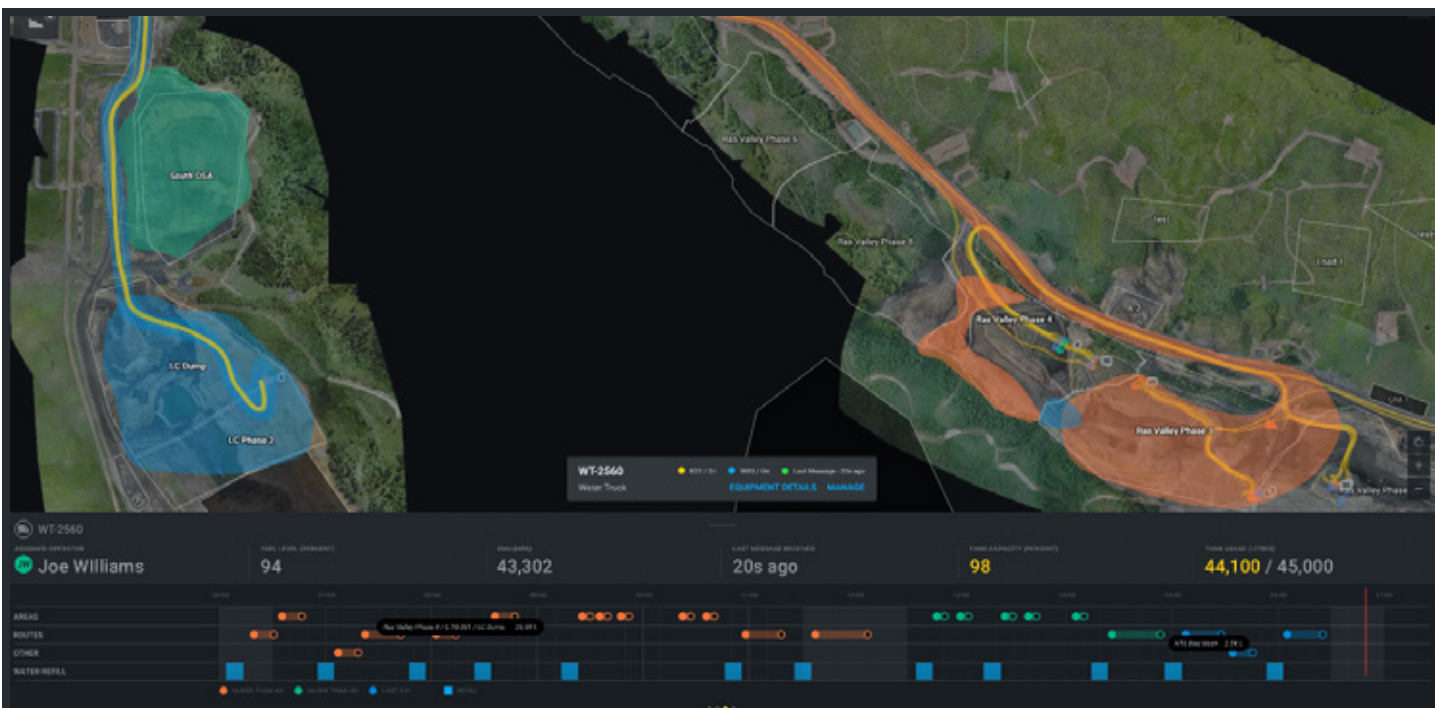
Because it is delivered as a cloud-based, subscription-managed application, this option lowers network requirements and associated costs of deployment, service, and training.

The cloud-based platform also speeds the time from order to use, and allows automatic upgrades, updates, and fixes. In addition, sites have the option to have some applications hosted locally to ensure higher connectivity and less latency.

We offer two levels of connectivity (Basic and Premium*) to meet any customer need.

» Connectivity includes data logging capabilities critical to minimizing safety-related liability.

» Water Solutions data can help ensure customers are meeting regulatory requirements.

» Asset management options include water usage, fuel and water tank levels, when and where to apply water, asset location and remote management of water distribution.

» Additional functionality will be released in the future.

*optional upgrade

BASIC CONNECTIVITY:*
Equipment Tracking

Equipment Tracking will not interfere with existing fleet management systems. And tracking capabilities are available without the need for infrastructure investment. Equipment Tracking provides insights that help mines better manage their assets, and as a result deliver more value — lowering total cost of ownership.

Features include:

- » Near-real-time & historical reporting.
- » Truck location and utilization data:
  - – Starts and stops.
  - – Routes.
- » Fuel and water level.
- » Whether or not the truck is spraying water.
- » Water Delivery System utilization (auto vs. manual mode).

PREMIUM CONNECTIVITY:
Equipment Tracking + Production Recording

Paired with Equipment Tracking, Production Recording delivers an accurate and automated near-real-time solution that measures and reports on every aspect of the watering cycle without requiring operator input.

Additional features include:

- » Water usage by truck/fill station.
- » Volume of water put down over time and area covered.
- » Rate of water being put down, water delivery system setting by location, truck, and conditions.
- » Activity breakdown including time and distance (watering, not watering, stopped, etc.)
- » View and export at least 8 weeks of historical data of watering activities.
- » In-cab reporting to operator on water coverage and need (route, heat map, decay map).[1]
- » Future enhancements and new feature developments.

Based on equipment connectivity via WiFi or cellular data. *Basic Connectivity Package comes standard on new truck purchase with a 6-month complimentary service-based offering for better data insights.[1] Feature to be included in future update.

INTEGRATION AND SUPPORT
+ FLEXIBLE OPTIONS =
PROVEN COMPONENTS FOR RELIABLE PERFORMANCE

The Cat 777 has been a proven performer at mines, quarries, and job sites for decades. Designed into a water solutions configuration with scalable technology offerings and support from your local Cat dealer, this offering is more cost-effective as an integrated solution than its individual components.

A SMARTER SOLUTION TO MEET YOUR UNIQUE NEEDS

» Upgrades and retrofit kits available for Cat Water Delivery System and MineStar telematics.

» A range of offerings to fit every job site, quarry, or mine.

» Try before you buy: the Basic connectivity package comes standard on all Cat Water Solutions, with a 6-month complimentary service-based offering, for better data insights.

CAT WATER SOLUTIONS MINESTAR CONNECTIVITY FEATURES*	LEVEL 1: BASIC** Equipment Tracking	LEVEL 2: PREMIUM Equipment Tracking + Production Recording
Near-real-time and historical reporting.	●	●
Truck location / utilization data: routes, starts, and stops.	●	●
Fuel and water level.	●	●
Whether or not the truck is spraying water.	●	●
Water Delivery System Utilization. (Auto Mode vs. manual mode operation)	●	●
Home Page View.	●	●
Home Page View with Cumulative and Hourly graphs.		●
Water Distribution Map.		●
Volume of water put down over time and area covered.		●
Water distribution rate, water delivery system setting by location, truck, and conditions.		●
Activity breakdown including time and distance: watering, not watering, stopped, etc.		●
Water dispensed by time/rate and mode, last 5 water activities, water dispensed by age.		●
View and export at least 8 weeks of historical water activity data.		●
Replay provides the ability to review and replay shifts by selecting a historical date and time. Review water level, pump on/off, heads on/off, cannon on/off, WDS Mode (Manual or Auto Mode), and coverage rates.		●
In-cab reporting to operator on water coverage and need: route, heat map, decay map.[1]		●
Future enhancements and new feature developments.		●

For more information, contact your local Cat dealer or visit Cat.com/WaterSolutions

*Based on equipment connectivity via WiFi or cellular data. **Basic Connectivity Package comes standard on new truck purchase with a 6-month complimentary service-based offering for better data insights.

THE TRUCK
Cat 777 (05) chassis

THE TANK
Manufactured by local tank providers

Features Include:

Application-specific Cab and ROPS certification for operator safety.

Superior braking performance meets the latest brake standards – ISO 3450:2011.

Caterpillar durability, reliability, and efficiency.

Engine emissions to meet regional requirements.

Hoist capability to raise and lower water tank from inside the cab for easier access when performing maintenance.

Eligible for Equipment Protection Plans (EPP) and Customer Value Agreements (CVAs).

Features Include:

Optional WDS Camera System: includes a camera to view spray bar on back of water tank and two cameras on top of tank for water fill positioning.

Tanks are offered by local 3rd party providers with customization based on water application and regional customer requirements. Tie offs, ladders, splash guards, fill chute, rock ejectors, cannon selection, and additional options are available.

Cat dealer or local tank manufacturer installation.

Contact your local Cat dealer or Caterpillar OEM Solutions for recommendations on local tank providers and available options.

THE SOLUTION YOU NEED, FROM THE ONE YOU TRUST.

THE CAT WATER DELIVERY SYSTEM

THE TECHNOLOGY

Features Include:

Control spray patterns with self-contained hydraulic system for consistent water coverage, regardless of engine RPM.

Capable of spraying up to 0.8 L / m² (0.2 gal/ft²) ranging from 5 to 40 kph (3 to 25 mph), covering a 24 m (80 foot) wide road in a single pass.

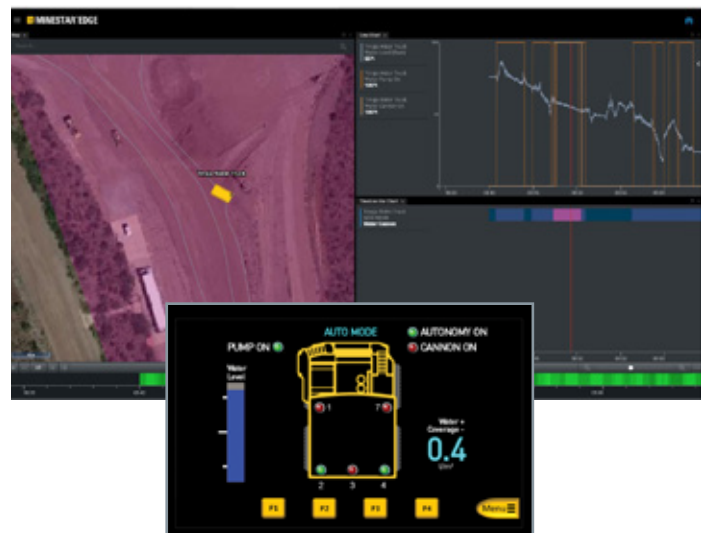Auto Mode: variable water flow based on truck speed with automatic start and stop.

Water cannon operates at idle, saving fuel.

Pump features soft startup and shuts off automatically when the tank is empty.

Factory-installed, integrated and durable ergonomic cab controls.

Patented spray head design regulates water spray with integrated software.

Features Include:

Cat MineStar cloud-based application.

Data with maps and graphs for water truck asset tracking.

Dedicated software and product support team.

Service-based offering by site or by asset.

Flexible levels of connectivity: choose from Basic or Premium packages.

Cat dealer support for software and upgrades.

777 (05) WATER TRUCK

CONTROL DUST • INCREASE VISIBILITY • REDUCE RISK

FOR SMARTER, SAFER, MORE PRODUCTIVE OPERATIONS

Visit Cat.com/WaterSolutions for more information.

PEDJ1171-03 (Build Number: 05C)

CAT®