



CAT® WATER DELIVERY SYSTEM

FOR THE 777, 785D, AND 789D WTR BARE CHASSIS

AN EFFICIENT WAY FOR MINING AND QUARRY OPERATIONS TO CONTROL DUST ON HAUL ROADS.

This automated system controls the amount of water and spray patterns to prevent the hazards common with overwatering. This fully integrated Cat® design employs a self-contained hydraulic system that controls spray patterns and allows for consistent water coverage regardless of engine RPM — capable of spraying up to 0.8 L/m² at speeds ranging from 3 to 25 mph (5 to 40 kph), covering an 80 foot (24 m) wide road in one pass. Factory option for Cat 777, 785D, and 789D WTR truck bare chassis. Retrofit kits for 777F, 777G, and 785D trucks.

System Features

Ground speed sensing system delivers a consistent amount of water

Constant coverage spray regardless of speed

Totally independent hydraulic system

Controls integrated with the truck systems

Automatic start/stop based on ground speed

Soft pump start and shut down

Self-cleaning spray heads

Active system functions displayed on control monitor

Automatic shut off when water tank is empty

Remote tank fill controls

Intermittent spray pattern based on time on and time off or distance

Hydraulic operated cannon nozzle options

Hydraulic, electrical and water systems diagnostics

Control monitor in multiple languages

Ceramic water pump seal for improved reliability

Leverages standard tilt system for maintenance

Stainless steel pump

Optional Camera System: includes three cameras, three camera washers and cable assemblies

Technical Specifications

Operator selectable coverage	0.2-0.8 L/m ² (4 kph - 40 kph)	0.05-0.2 gal/ft ² (3 mph - 25 mph)
Maximum water flow	3785 L/min	1,200 gal/min
Water per spray head (minimum)	130 L/min	35 gal/min
Water per spray head (maximum)	2270 L/min	600 gal/min
Spray head opening range (minimum)	1 mm	0.04 in
Spray head opening range (maximum)	19 mm	0.75 in
Maximum size debris flushed through spray head	19 mm	0.75 in
Spray width per head (dependent on flow)	4.5-9.1 m	15-30 ft
Spray system hydraulic tank capacity	27.5 L	7.25 gal
Maximum number of rear spray heads		5
Minimum number of rear spray heads (recommended 3)		2
Maximum number of front/side spray heads		2
Minimum number of front/side spray heads		0
Maximum water from cannon (idle)	2271 L/min	600 gal/min
Maximum water from cannon (high idle)	4732 L/min	1,250 gal/min
Maximum cannon spray distance	61 m	200 ft

Wet water pump/hydraulic motor coupling

- Coverage rates above 0.6 L/m² may not be available at higher speeds depending on head count and configuration.
- Opening is automatically controlled by the system to achieve AutoMode Coverage or Manual Mode Flow Rate.
- AutoMode Spray controls water coverage automatically to the number of heads being used and ground speed achieved.
- Manual Mode allows the operator to set a water flow rate that is constant regardless of ground speed.
- Spray Heads on competitive water distribution systems require tools and maintenance to change flow and spray pattern. Caterpillar is the only company to have variable active spray heads to regulate water spray.
- Water flow is continually adjusted during operation to conserve water and achieve desired coverage and flow rate.