# HPW-DUST High Pressure Dust Suppression System

HPW-DUST High Pressure Dust Suppression System is the most innovative dust control system for mobile machinery in demolition, street cleaning, quarrying, crushing, recycling etc. The system produces atomized water mist to suppress the dust and prevents the emissions from spreading to the environment.

High pressure water

**HPW-DUST HIGH PRESSURE DUST SUPPRESSION SYSTEM**

## Key Benefits

The system produces high-pressure water mist for effective dust control.

* Targeted water mist straight to the dust source
* Minimal water consumption
* PM10 dust concentrations are 82% less with high-pressure dust suppression than without dust control while brushing (according to impartial research by Metropolia University of Applied Sciences)
* The high-pressure dust suppression reduces 52% of PM10 dust concentrations compared to a low-pressure irrigation system while brushing (according to impartial research by Metropolia University of Applied Sciences)
* The air remains cleaner after brushing when high-pressure dust suppression is used (according to impartial research by Metropolia University of Applied Sciences)
* Easy to use
* Prevents muddying
* Doesn’t wet the worksite or street
* Streets can be brushed without watering
* Demolition site dust control without watering
* Crushing without watering
* Reduces health hazards at worksites
* Improves working conditions
* Saves time, space, labor costs and water
* Easy to install on all hydraulic systems
* Eco-friendly
* Small carbon footprint
* Two-year or 2000 hour warranty

## Features

While small droplet size effectively binds dust emissions and even prevents the dangerous PM10 dust particles from spreading to the environment, there is even more great features.

* Compact size
* Light weight
* Cabin operated
* Optional Double Dust boosting system
* The system Includes a robust, self-priming HPW High Pressure Water Pump
* The pump has linear output adjustability from 0% to 100% by controlling hydraulic flow
* Dust suppression nozzles can be installed on an attachment
* The world’s best power-to-size ratio
* The world’s best power-to-weight ratio
* A washing gun for pressure washing

## Applications

* Prevent dust emissions in street cleaning
* Prevent dust emissions in demolition
* Prevent dust emissions in recycling
* Prevent dust emissions in quarrying
* Prevent dust emissions in mining
* Prevent dust emissions in crushing
* Prevent dust emissions in material handling

## How Does the High Pressure Dust Suppression System Work?

The hydraulic high pressure dust suppression system utilizes a machine’s, vehicle’s or vessel’s hydraulic system as power source to generate high pressure water mist for dust suppression

1. Hydraulic oil flow is led to the hydraulic high pressure water pump through the pressure line
2. The hydraulic high pressure water pump converts the hydraulic oil flow and pressure into high pressure water
3. The hydraulic oil is led back to carrier machine’s hydraulic oil tank through the return line
4. The water is pumped to the high-pressure nozzles with the correct water pressure level which forms atomized water mist
5. Atomized water mist consists of tiny water droplets which suppress the dust efficiently