

DUST SUPPRESSION SYSTEMS: THE FINEST WAY TO ATTRACT AND SUPPRESS AIRBORNE DUST.

Dust-A-Side are at the forefront of dust suppression systems worldwide – in fact we currently have over 100 fully operational systems in use globally. All are custom-engineered and purpose-built to meet the requirements of each individual customer and project. There are many applications for these systems, such as conveyors, rail wagons, transfer stations, quarry and rock crushing equipment, stockpiles and more.

HOW OUR DUST SUPPRESSION SYSTEMS WORK:

The systems effectively eliminate airborne dust control issues by atomising low volumes of water under high pressure exceeding 40bar to create a fine mist that can effectively capture airborne dust.

Therefore, dust suppression systems can be focused on specific problem areas and can be used, for example, to create a fine mist over a screen to capture airborne dust and force it back onto the material.

The systems are fully automated, and controlled through a programmable logic controller and remotely located sensors; thereby allowing for a system design that suits each client's specific plant control philosophy.

They incorporate fully automated water filtration systems that self clean and enable clean water to be supplied to the dust-suppression infrastructure at satisfactory levels to ensure reliability of the system.

All pump modules are constructed from industrial grade components and are UL and CE rated.

The manufactured systems are fully containerised, air conditioned and incorporate dust-proof components to protect them from the harsh operating environment of heavy industry.



CASE STUDY 1: BEFORE



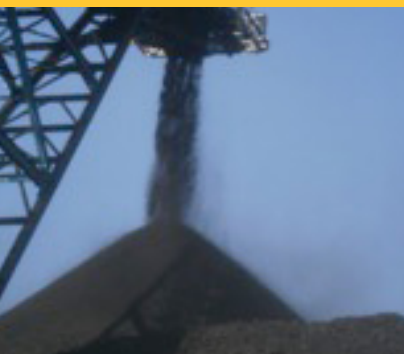
CASE STUDY 1: AFTER



CASE STUDY 2: BEFORE



CASE STUDY 2: AFTER



The systems can also incorporate automatic dosage of surfactant and binder products to further enhance dust control performance and reduce water use:

- Surfactant based products such as Hydrowet can be used through Dust-A-Side's systems to assist in obtaining smaller water droplet size and help break the surface tension of water particles. This enhances the attraction of the water particles to the dust particles and increases the water droplets' performance as a wetting agent.
- Binder products such as Aquatarp and Hydrotac can be used through Dust-A-Side's systems to veneer or bind particles that are being stockpiled or transported over long distances. The crusting and binding properties of these products will help to ensure long-term dust control effectiveness of the material being handled without the need for further addition of water or chemicals.

BENEFITS:

- Reliable, efficient and cost-effective solution for suppressing airborne dust
- No moisture contribution to the material handled, as moisture is added to the air and not to the material itself when suppressing dust
- Reduced water usage

DUST SUPPRESSION SYSTEMS / BEFORE-AFTER CASE STUDIES.

CASE STUDY 1:

- > Use of Dust-A-Side Dust Suppression System on a conveyor transfer point.
- > **Results** – 80% reduction in respirable dust after installation.

CASE STUDY 2:

- > Use of Dust-A-Side Dust Suppression System on a stacker at a ROM coal stockpile.
- > **Results** – Dramatic reduction in dust levels.

