



We're your "One-Stop" Solution for Dust, Dirt, Odours and Flies!!

The **mist-air**[®] system will significantly reduce airborne dust without wetting stock, floors, machinery or personnel. Unlike lines of static misting nozzles and rotary atomisers, **everything stays virtually dry.**

mist-air[®] forms very fine fog particles (typically 8 microns) which are blown by fan assisted stainless-steel manifolds (typically mounted on roof girders) into an ever enlarging circle. The fog floats in the air without dropping to the floor and actually attracts and collides with the airborne dust and odorous particles, suppressing them immediately and preventing them from migrating to other areas.

It must be appreciated however, that in times of very high humidity (rain storms or morning dew) and if the system should be left running without any dust to suppress, dampness may be evident on empty conveyor belts or steel structures. The auto-pause system (which is standard on all our **mist-air**[®] systems) will virtually solve this particular problem.

Because the **mist-air**[®] Base Unit has the capacity to produce huge volumes of fog, just one unit can supply several areas or buildings simultaneously with precise control over each area, delivering just as much or as little fog as required for any given application.

With thousands of installed systems that are already successfully operating to effectively reduce airborne dust and odours by at least 90%, we have many years' experience in a very wide range of varying applications. We are able to offer a system designed specifically to meet individual requirements for solving airborne dust and odour problems.

Main Advantages:

- ***Extremely low operating and maintenance costs***
- ***Quickly installed by our own team of engineers***
- ***Independent operating control in the individual dust zones***
- ***System extension due to operational changes can be easily and retrospectively accommodated***
- ***Over 5000 systems already in successful operation***
- ***20 Years corrosion warranty***
- ***Money back guarantee if you are not totally satisfied with the finished system***



The **mist-air**[®] Dust Suppression system – How it Works

The entire system is supplied from a single Base Unit that weighs 120 kg and has Dimensions of 1200 mm x 900 mm x 600 mm (H x W x D). The free standing lockable steel cabinet can be positioned anywhere convenient indoors or outdoors. The switches for the system are normally mounted on this cabinet; however, radio control, remote switches, proximity switches and signals from your conveyors or equipment are available if required.



The Base Unit is complete with:

- A high-pressure pump, 2.2 or 5.5 kW, governed by inverters to save power and to provide just sufficient fog on demand.
- Water filtration system complete with water softening cartridge, 2 x 8µ filters and (if required) UV filter.
- Stainless steel header tank with “Type A” Air Gap (to prevent water contamination caused by backflow into the tank) and fitted with a low-level switch.
- Electronic additive dosing system for biocide flushing (**mist-air**[®] **Circuit Cleaner**) and for automatic dosing of the **mist-air**[®] **Odour-Neutraliser**.
- Automatic frost protection.
- Programmable PLC control system with auto-pause function for intermittent operation.
Auto-pause can be selected at any time and allows each circuit to run and stop intermittently and independently as required.
- Electro-magnetic, stainless steel solenoids for each system circuit.
- All controls and solenoids for each circuit are housed within the Base Unit, therefore servicing is simplified.



Stainless steel, fan-assisted misting manifolds are fitted to the roof trusses to direct mist to precisely the right areas when required, but positioned well out of the way of loading equipment and tipping vehicles. For extremely dusty areas, tunnel fans are used by cutting a hole through the building sheeting and drawing clean air past the fans and misting manifolds and therefore preventing the fans from becoming dirty.



Stainless steel static manifolds can also be used to good advantage where there is continually moving air, for example at Vibrating screens, fines bays, air knives and conveyor transfer points. These manifolds create localised fog which instantly suppresses the new dust that is released.

Reinforced, two part nylon hydraulic circulation hose (tested to 1200 bar) fitted with hydraulically swaged stainless steel inserts together with SY sheathed armoured cable, are fed from the base unit to the various circuits required around the site, allowing each area to be treated individually or simultaneously as required. These are securely fastened to existing building structures (such as girders, RSJ-Sections etc.) and normally out of sight.

For extremely dusty and enclosed areas where fog is distributed using **mist-air**[®] fan-assisted misting manifolds, the fans can also be installed with outside ducting to draw in clean air to the fan motors, thus ensuring that the fans stay clean.

