

Within mining and quarrying, large amounts of dust can be created on-sites from the nature of work. Exposure to dust in the air, both inhalable and respirable can be harmful to workers. Dust can not only cause health issues but can have a role in reducing visibility within mining and quarrying sites and have effects on equipment when largely built up. Dust suppression in mines and quarries is a priority to ensure safety of workers. Fine, dry dust can cause issues such as, irritation to throat, nose, and eyes, which can be unpleasant for workers and in more serious cases cause respiratory issues such as COPD and asthma. Within the workplace both respiratory (invisible) and inhalable (visible) dust can be created from materials such as, coal, silica dust and limestone dust exposure. Within mines, coal dust is extremely toxic. When breathed in, coal dust can be harmful which is why coal dust suppression systems are essential to have in place. Coal dust can also be extremely explosive when in the air, and is the greatest cause of

mining accidents, using systems for coal dust suppression can reduce the associated risks. COSHH regulations state that if dust is present at a concentration in the air equal to or greater than 10mg/m³ (inhalable dust) or 4mg/m³ (respirable dust) it's considered a health hazard. Which is why it's important for the mining and quarrying industry to control dust to stay within Workplace Exposure Limits and improve the environment for workers.

Solutions:

Water based-dust-suppression is an effective way to keep dust grounded on sites and reduce environmental impacts and risks to workers health. The process of wetting, grounds dust and keeps it out of the air. Misting and fogging systems can be adapted to suit individual site needs and ensure dust is grounded on quarry and mining sites. Within quarrying, reducing water has a strong focus currently, options are available to reduce water, with systems such as a Rotary Atomiser PRO – which provides a strong throw, however, uses a fine atomised mist, reducing the amount of water usage. Other sustainable options are also available such as our Rotary Atomiser ecotech. Also using a finely atomised mist and having the benefit of reduced water, ecotech system runs solely from a battery, which means no harmful emissions, the system also does not need a generator, making it significantly quieter, also reducing noise pollution.

Haul roads can also be responsible for creating a large amount of dust, particularly when vehicles are regularly travelling through them, ultimately causing dust to cloud in the air. This can not only be an issue to human health but also be a contributor to poor air quality and have negative effects on the environment.

We offer solutions specifically for haul road dust control and a range of road dust suppression products. DST can be used as a road dust suppressant, used alongside water suppression with fogging/misting equipment. DST can be applied to roads and coats dust to keep it grounded.

DUST MANAGEMENT SYSTEMS

Dust control and management systems and solutions, for use in indoor and outdoor environments.



Water-Based Dust Suppression

Bring dust to the ground using a variety of high-pressure water misting systems.

[View range](#)



Dust Control Liquid Additives

Tackle dust using liquid neutralisers – used in combination with water-based misting systems.

[View product
< https://www.airspectrum.com/product/dst-dust-suppression-additive/>](https://www.airspectrum.com/product/dst-dust-suppression-additive/)



Other Dust Management Solutions

Non-water systems using electro-static technology to remove dust from the air.

[View product
< https://www.airspectrum.com/product/staticair-pamares/>](https://www.airspectrum.com/product/staticair-pamares/)

ODOUR CONTROL SYSTEMS

Odour control systems and solutions for odour neutralising needs.



Water-Based Odour Control

Bring dust to the ground using a variety of high-pressure water misting systems.

[More details](#)



Odour Control Liquid Additives

We offer a wide range of air quality services that we deliver personally on-site.

[More details
< https://www.airspectrum.com/product/odr-liquid-odour-neutraliser/>](https://www.airspectrum.com/product/odr-liquid-odour-neutraliser/)



Odour Impact Assessments

We offer a wide range of air quality services that we deliver personally on-site.

[More details](#)

DISINFECTION & DECONTAMINATION SYSTEMS

Disinfection and decontamination services and systems to disinfect a range of commercial and industrial environments.

DISINFECTION SPRAYING SYSTEMS

Bring dust to the ground using a variety of high-pressure water misting systems.

<

<https://www.airspectrum.com/product/ase-disinfect/>>

**DISINFECTION CHEMICALS <
HTTPS://WWW.AIRSPECTRUM.COM/PRODUCT/ASE-
DISINFECT/>**

Our all in-in-one disinfectant fights viruses, bacteria and fungi.

AIR QUALITY SYSTEMS

Indoor and outdoor air quality monitoring solutions, available for both hire and purchase.

<

<https://www.airspectrum.com/air-quality-monitors-purifiers/>>

AIR QUALITY MONITORS < HTTPS://WWW.AIRSPECTRUM.COM/AIR- QUALITY-MONITORS-PURIFIERS/>

Measure your indoor and outdoor air quality with our range of smart monitors.

<

<https://www.airspectrum.com/air-quality-consultancy/>>

AIR MONITORING SERVICES < [HTTPS://WWW.AIRSPECTRUM.COM/AIR- QUALITY-CONSULTANCY/](https://www.airspectrum.com/air-quality-consultancy/)>

We offer a wide range of air quality services that we deliver personally on-site.

MISTING & FOGGING EQUIPMENT IN OUR RANGE

Misting and fogging equipment for dust suppression and odour management,
available for hire and purchase.

MINI VORTEX FANS

Portable and easily manoeuvrable, the Vortex mobile fan can be used indoors and outdoors for a number of applications including: dust, odour, disinfection and cooling.

More details
< <https://www.airspectrum.com/product/vortex-440-mobile-fan/> >

JETSTREAMS

Suitable for: Dust, Odour, Disinfection, Cooling. Jetstream systems are a fixed solution, installed at the source of the problem.

[More details
< https://www.airspectrum.com/product/jetstream/>](https://www.airspectrum.com/product/jetstream/)

DUST CANNONS

Dust suppression cannons are one of our most popular pieces of equipment in our dust suppression water cannon ranges. They are available for hire long and short-term.

[More details](#)

PACIFIC RANGE

Pacific nozzle line systems use high pressure, multi-nozzle dispersal delivery to a localised area for dust suppression, odour control and disinfection applications.

[More details
< https://www.airspectrum.com/product/pacific-systems/>](https://www.airspectrum.com/product/pacific-systems/)

ROTARY ATOMISERS

The Rotary Atomiser range is suitable for a variety of applications including; odour control, dust suppression, disinfection and cooling.

[More details](#)

ECO TECH

Our range of misting systems are now available with a battery-operated power system rather than a generator.

[More details
< https://www.airspectrum.com/product/ecotech-rotary-atomiser/>](https://www.airspectrum.com/product/ecotech-rotary-atomiser/)

SERVICES TO SUPPORT OUR SYSTEMS

In addition to our range of equipment and chemical additives for fogging/misting, we also offer assessment services via Spectrum Environmental Services, our consultancy branch. Dust & odour impact assessments, Boundary monitoring and Occupational hygiene assessments are just a few off the services we can assist with.

DUST CONSULTANCY & LAB SERVICES

Air Spectrum's consultancy branch- Spectrum Environmental Support – offers a range of air quality assessment and monitoring services.

RENTAL & PURCHASING OPTIONS < [HTTPS://WWW.AIRSPECTRUM.COM/HIRE/](https://www.airspectrum.com/hire/)>

Air Spectrum is the industry leader when it comes to hire equipment for both odour control and dust suppression.

MAINTENANCE, SERVICING & SPARES

Our team of skilled engineers are always on hand for breakdowns and call-outs – we will ensure you're back up and running as soon as possible should you experience an issue.

Air Spectrum Environmental Services

Sectors We Serve

**Hire
Equipment <
[Https://Www.Airspectrum.Com/Hire/](https://www.airspectrum.com/hire/)>**

Dust Management & Dust Suppression Hire
Odour Control Hire
Disinfection & Decontamination

**Purchase & Install
Equipment <
<https://www.airspectrum.com/buy/>>**

Dust Management & Dust Suppression
Odour Control
Disinfection & Decontamination

**Consumables, Spares
& Maintenance**

Liquid Additives Range< <https://www.airspectrum.com/liquid-additives-range/>>
Maintenance & Servicing

**Air Quality Monitors
& Purifiers <
[https://www.airspectrum.com/air-
quality-monitors-purifiers/](https://www.airspectrum.com/air-quality-monitors-purifiers/)>**

**Air Quality
Consultancy <
[https://www.airspectrum.com/air-
quality-consultancy/](https://www.airspectrum.com/air-quality-consultancy/)>**

**Book A Service <
[https://www.airspectrum.com/request-a-
service/](https://www.airspectrum.com/request-a-service/)>**

**UKAS Accredited Odour Laboratory <
[https://www.airspectrum.com/Air-
Quality-Consultancy/Ukas-Accredited-
Odour-Laboratory/](https://www.airspectrum.com/Air-Quality-Consultancy/Ukas-Accredited-Odour-Laboratory/)>**

**Buy Online <
<https://www.airspectrum.com/Buy/>>**

SALES & SUPPORT

Our team are happy to help with any enquiries you may have regarding our products or services. Our experts are on hand to answer your air quality related queries, whether you're an existing customer or looking at bringing us on board.

Did you know – we can also service and upgrade a large range of misting equipment – not just our own range.

 Hire & Sales: 01905 362100

 Request a Service/Booking
< <https://www.airspectrum.com/request-a-service/> >



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 sales@airspectrum.com

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Industrial Estate,
Checketts Lane, Worcester,
Worcestershire
WR3 7JW

SERVICES

Systems & Solutions

Air Quality Monitors & Purifiers< <https://www.airspectrum.com/air-quality-monitors-purifiers/> >

Consultancy and Laboratory< <https://www.airspectrum.com/air-quality-consultancy/> >

Chemical Additives Range< <https://www.airspectrum.com/liquid-additives-range/> >

Maintenance and Servicing

ecotech< <https://www.airspectrum.com/product/ecotech-rotary-atomiser/>>

EQUIPMENT RANGES

Mini Vortex Fans< <https://www.airspectrum.com/product/vortex-440-mobile-fan/>>

Dust Cannons

Rotary Atomisers< <https://www.airspectrum.com/hire/dust-hire/rotary-atomiser-range/>>

Jetstreams< <https://www.airspectrum.com/product/jetstream/>>

Pacific Range< <https://www.airspectrum.com/product/pacific-systems/>>

ecotech Range< <https://www.airspectrum.com/product/ecotech-rotary-atomiser/>>

COMPANY INFO

About Us< <https://www.airspectrum.com/about-us/>>

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Account< <https://www.airspectrum.com/my-account/>>

Buy< <https://www.airspectrum.com/buy/>>

Hire< <https://www.airspectrum.com/hire/>>

Contact Us< <https://www.airspectrum.com/contact-us/>>



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