



CATALOGUE



WHO IS LHB SOLUTIONS

LHB Solutions is a 100% women youth owned company with years of experience within the mining and civil sectors. LHB was incorporated in 2022 to provide quality, reliable, durable and efficient branded products and services within the Mining and Industrial Industry

LHB Solutions is committed to the design, development, manufacturing and supply of high-quality robust products for any extreme environment.

We pride ourselves by partnering with buyers and end users to accommodate their needs and requirements.

Our extensive after sale services ensure beneficial partnerships between supplier and end users. Customer values are important to us. Our aim is to cultivate relationships to develop and maintain a comprehensive client relationship.

We endeavor to source the highest quality material and equipment at a premium price to ensure mutually beneficial financial gain to all business partners.

OUR MISSION

To make a positive impact by supplying our customers with the best possible customer service, quality products at competitive prices.

OUR VISION

LHB Solutions endeavors to be the leading supplier to our customers within Africa, by providing quality and robust products with reliable technical assistance.

OUR TEAM

The management of LHB Solutions consists of a reputable team that are well known in the mining and civil industry.

(DUST SUPPRESSION) FULLY AUTOMATED ATOMIZING MIST SPRAY SYSTEMS

Dust Control:

Working with a single supplier who is an expert in all facets of spray technology is the best way to ensure optimal dust control. LHB Solutions is that supplier. We have decades of experience with spray nozzles and dust control.

We have a complete range of :

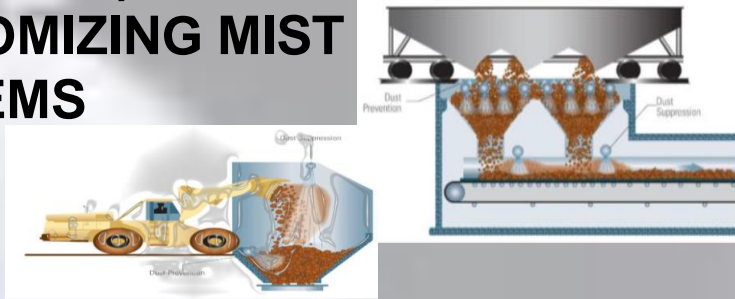
- Spray nozzles
- Spray bars /headers
- Accessories
- Dust control kits

The benefits of spray control are many:

- Improved product/process quality
- Reduced use of water, chemicals, and energy
- A cleaner, safer work environment
- Automated operation frees workers up for other tasks

There are many variables to consider when specifying a spray system for dust control:

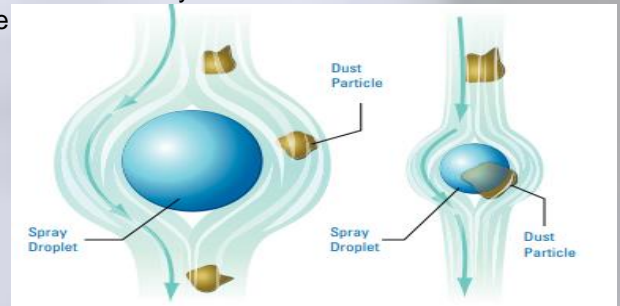
- Dust particle size
- Spray drop size
- Spray pattern
- Spray angle
- Operating pressure
- Surface wetting
- Nozzle placement
- Water quality and availability
- Control options



Operations requiring airborne dust suppression:

- Conveying
- Shearing
- Continuous mining
- Crushing and screening
- Dryers
- Transfer points
- Packaging/filling

Nozzles produce drops to collide with dust particles that are already airborne. The moisture weighs the particles down so they are returned to the material source



If you need to capture airborne dust:

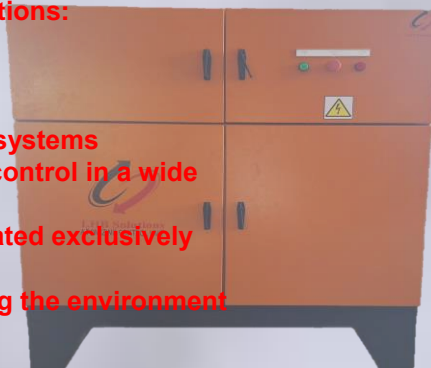
What is the particle size of the dust?

Dust capture is most effective when dust particles collide with water drops of an equivalent size. Drops that are too large won't collide with the smaller dust particles and drops that are too small evaporate too quickly and release the captured dust particles. See. Understanding the particle size of the dust is critical in effective system design. You can use these general guidelines regarding dust particle size. However, further research may be necessary depending on the material and stage of the material in processing.

Application	Air Atomizing	Hydraulic Fine Spray	Hollow Cone	Flat Spray	Full Cone
Dust Prevention					
Stackers, reclaimers		x			x
Stockpiles		x		x	
Transfer points		x	x		x
Transport areas/roads			x		
Airborne Dust Suppression					
Jaw crushers	x	x	x		
Loading terminals	x	x			
Primary dump hopper	x	x			
Transfer points	x	x			

We have:

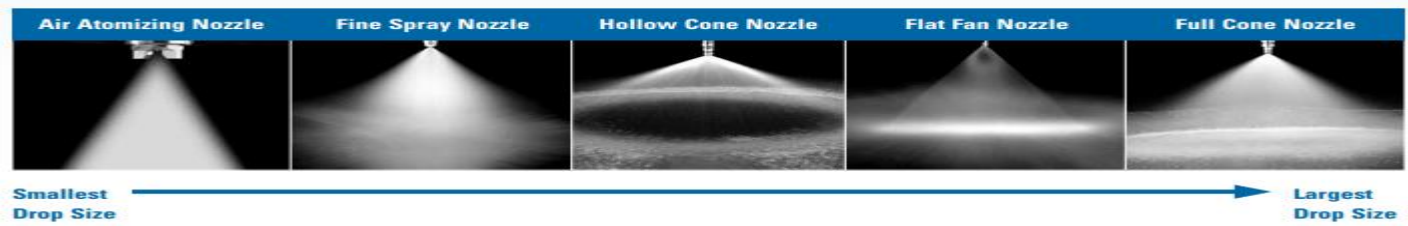
- A complete range of product solutions:
- Spray nozzles
- Accessories
- Spray bars/headers
- Automated spray controllers and systems
- Decades of experience with dust control in a wide range of industries
- A global sales organization dedicated exclusively to spray technology
- A strong commitment to improving the environment



Particle diameter in microns:

- Ground limestone: 10 to 1000 μm
- Fly ash: 10 to 200 μm
- Coal dust: 1 to 100 μm
- Cement dust: 3 to 100 μm
- Carbon black: 0.01 to 0.3 μm
- Pulverized coal: 3 to 500 μm





Air Atomizing & Hydraulic Spray Nozzles

Nozzle Description:

Hollow cone nozzle features:

- Circular ring of water
- Large nozzle orifices that reduce clogging
- Small drop size – generally smaller than other nozzle types
- Typically used in locations where dust is widely dispersed
- Most widely used for dust prevention



Flat spray nozzle features:

- Tapered-edge, rectangular or even spray pattern
- Small- to medium-size drops
- Typically used in narrow or rectangular enclosed spaces
- Widely used for dust prevention



Full cone nozzle features:

- Round spray pattern
- High velocity over a distance
- Medium- to large-size drops
- Commonly used when nozzles must be located a good distance away from the area where dust suppression is needed or to clear mechanical obstructions
- Widely used for dust prevention



Air atomizing nozzle features:

- Choice of spray patterns – round, full and flat
- Very small drops
- Commonly used to capture small dust particles in enclosed areas to minimize drift
- Widely used for airborne dust suppression



Hydraulic fine spray nozzle features:

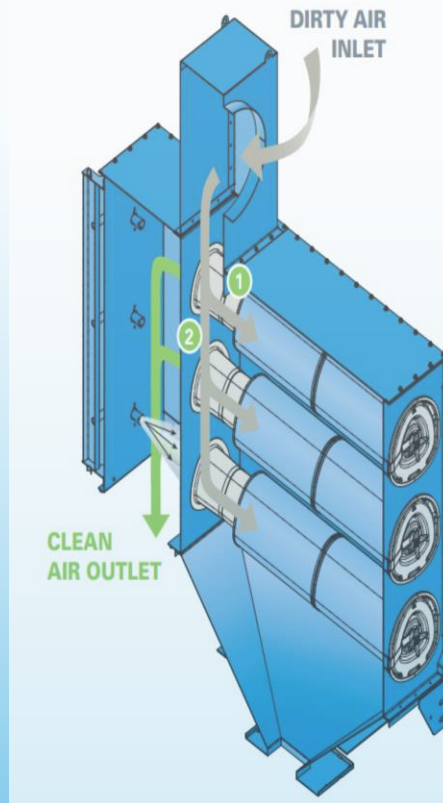
- Hollow cone spray pattern
- Very small drops
- Commonly used to capture small dust particles in enclosed areas to minimize drift
- Widely used for airborne dust suppression and operations requiring a light fog



Please enquire for full selection.



DUST EXTRACTION SYSTEMS (MINI SCRUBBER UNITS)



INTELLIGENT DROPOUT ZONE

- 1 Metal venturis
- 2 Dropout zone ensures
 - Pre-separation of heavy dust particles
 - Lower pressure loss than baffle design used by competitors
 - Minimal filter element abrasion

94.4m² filtration area

Systems Comes Fully Supplied with:

- Fan set.
- Start/Stop panel.
- Clean & Dirty Air ducting
- Ducting Design
- Fireretardant cartridges

Please request for alternative air filter solutions.



ECO DUST FOOT WALL TREATMENT



Dust Primer

High range dust suppressant – surface primer that is a co-product of cellulose production that aids as a binding additive.

Eco Dust 200

High range dust suppressant – surface sealer that is an emulsified dust lubrication system that aids in suppression of rising dust particles and spores.

Eco Dust 100

High range dust suppressant – a fine particle size surface poly-adhesive that exhibits excellent dust binding and prolonged water resistance properties.

Uses



- Unpaved roads (gravel, farm, quarry roads).
- Road stabilisation (gravel airstrips).
- Mine and Industrial dust suppression (stock pile, mine dumps).

Easy application and safe to use.

Priming



- Pre-wet road and leave to penetrate surface.
- Profile and scarify road surface.
- Apply to surface with a water/tank truck with a rear mounted distribution bar that spreads the liquid evenly.

100% natural, all-purpose liquid soil additive.

Sealing



- Work slurry evenly over the road.
- Compact road with vibratory roller.
- Sweep the surface with a mechanical road broom.
- Compact road again without vibration.

UV resistant and VOC free.

Maintenance



- Quality of the base material.
- Climate conditions.
- Volumes and type of traffic.

Factors influencing intervals between maintenance applications and life time of surface.

Pumps



**HYDRA-CELL SEAL LESS HIGH PRESSURE
DIAPHRAGM PUMPS & METERING SOLUTIONS**

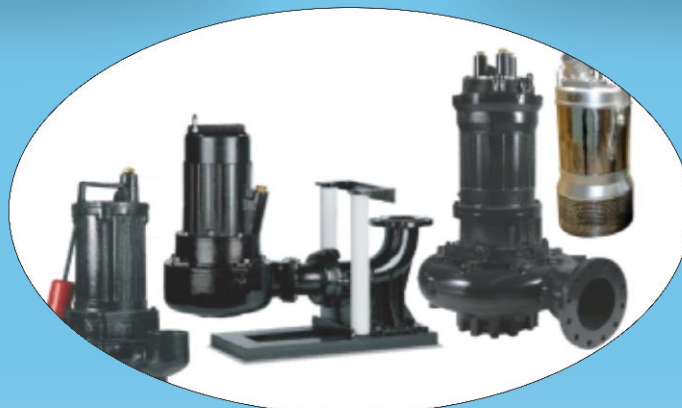
**HYDRA-CELL MT8 METERING AND DOSING
PRODUCT RANGE**



**VESTA DOUBLE DIAPHRAGM
PUMPS**



**SEOCA CENTRIFUGAL
PUMPS**



**FIPS SUBMERSIBLE VORTEX &
DEWATERING PUMPS**

Please request for alternative solutions.

Water Strainers

Strainer Options:	Image:	Strainer Options:	Image:
<p>TWD 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2" female conn. Removable bottom plug for easy screen cleaning Bottom plug can be replaced with drain cock for flush cleaning Max. pressure: 300 psi (20 bar) Materials: Aluminum, brass, stainless steel Mesh: 16, 30, 50, 80, 100, 40 x 200 Dutch weave</p>		<p>Product specifications: Filter housing color: blue Size: 10 Inch Big Blue (/Fat/Jumbo), i.e. 10 x 4.5 Inch O-Ring type: Single O-ring seal Inlet/Outlet port sizes: Female 1 Inch / 25mm thread Maximum pressure: 6 bar / 90psi Operating temperature range: 4 - 38°C</p>	
<p>16106 1-1/2", 2", 2-1/2" female conn. Removable bottom plug for easy screen cleaning Bottom plug can be replaced with drain cock for flush cleaning Max. pressure: 200 psi (14 bar) Materials: Brass, stainless steel Mesh: 16, 50, 80, 100</p>		<p>The Whole House System is designed with a three-stage water filtration system that consists of Polypropylene Sediment Removal filters an A Activated Carbon Block filter. This System is a simple way of removing unwanted particles from the water supply</p>	
<p>9830 3/4", 1" female conn. Hand removable ribbed bottom cap for easy cleaning of screen Max. pressure: 300 psi (20 bar) Materials: Aluminum, brass, ductile iron Mesh: 16, 50, 100</p>		<p>Various Screen Irrigation Water Filter</p>	
<p>AA122 1/2", 3/4" female conn. Hand removable outer bowl for easy screen cleaning Max. pressure: 150 psi at 100°F (10 bar at 38°C) Materials: Polypropylene, polypropylene head with clear nylon bowl Mesh: 15, 30, 50, 80, 100, 200, 40 x 200 Dutch weave</p>		<p>Various Filter Cartridge</p>	

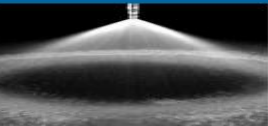
Air Atomizing Nozzle

Fine Spray Nozzle

Hollow Cone Nozzle

Flat Fan Nozzle

Full Cone Nozzle

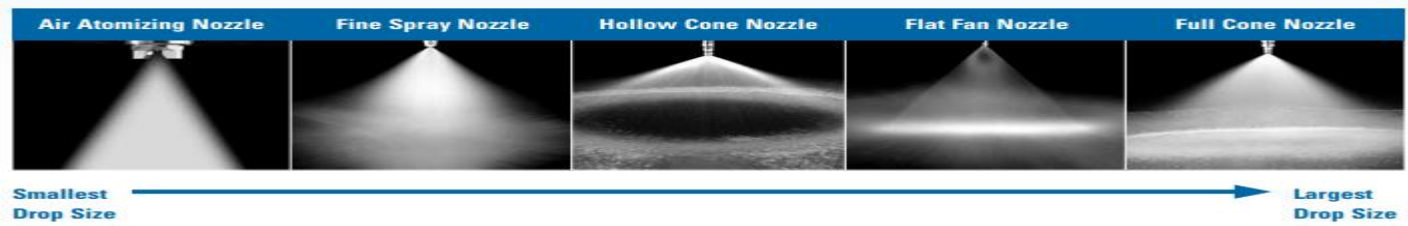


Smallest Drop Size

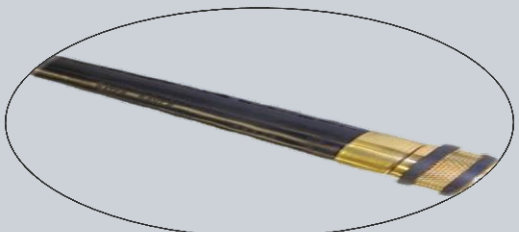



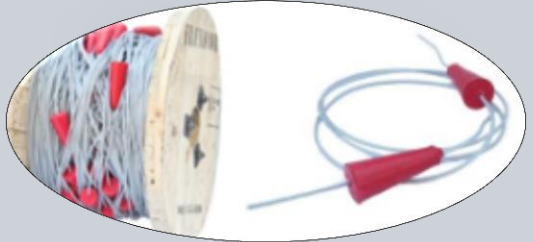
Largest Drop Size

General Mining

Description:	
<p>Twister Airmover</p> <p>A venturi type airmover that make use of 25mm compressed air to assist with ventilating areas and dead spots or to blow out pockets of methane</p>	
<p>Watering Down Stope Water Atomizer</p>	
<p>Blasting Barricade</p> <p>Light weigh gate type of barricade used to prevent contamination to the back area of the blast</p>	
<p>Tip cover</p> <p>For assisting Ventilation control and safeguarding persons at tips, special designs are made</p>	
<p>Whipcheck Safety Slings</p> <p>To secure Air hoses to manifolds or Rockdrills to safeguard operators should hose pull out</p>	



General Mining

Description:	
<p>Watering Down Nozzle LONN Water Saver</p> <p>Additional details available on request</p>	
<p>Thomas - Ultra Clamp</p> <p>Various sizes available</p>	
<p>Straining Wire</p> <p>Various sizes and Lengths</p>	
<p>PVC Coated Straining Wire</p> <p>Various sizes and Lengths</p>	
<p>SAFETY DIRECTIONAL GUIDANCE SYSTEM</p> <p>Steel/Ski Rope</p>	

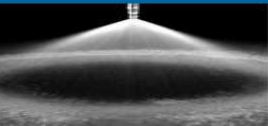
Air Atomizing Nozzle

Fine Spray Nozzle

Hollow Cone Nozzle

Flat Fan Nozzle

Full Cone Nozzle



Smallest Drop Size

Largest Drop Size

General Mining

Description:

Tip Sign Unit

Information signs in a fixed frame that is displayed at Tip areas regarding use of PPE and travelling arrangements past a tip area



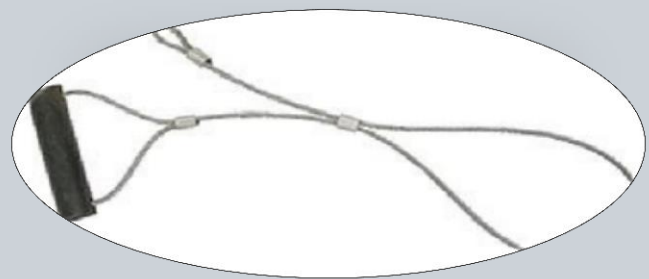
Laser unit mounted on a tripod

Laser unit is a tripod with protractor and a laser used in development to turn off angles
Request more information



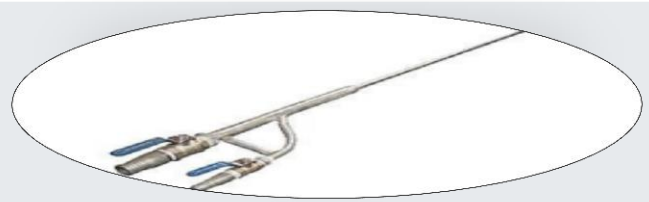
Minepole Carrier Slings

A tool used to transport mine poles to prevent hand injuries



2 or 1 Way Blow Pipe

Used to desludge shotholes or to remove explosives from "Misfire" holes



Aeroplane Device

Installed at Fouling marks, curves and areas where persons are working on rails to warn loco's and other persons of a restricted area, or at areas where rolling stock is required to stop



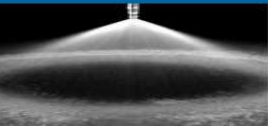
Air Atomizing Nozzle

Fine Spray Nozzle

Hollow Cone Nozzle

Flat Fan Nozzle

Full Cone Nozzle



Smallest Drop Size

Largest Drop Size

General Mining

Description:	
<p>Pinch Bars Material Specifications • Aluminium Pipe 34.92mm outside diameter and 25.52mm inside diameter • Hexagon bar quality 080A42, 22.4mm Ø Sizes • 1.0m – 3.0m • Forged ends to specification</p>	
<p>S Hooks 51mm-64mm 76mm-76mm 76mm-102mm</p>	
<p>Pipe Suspension Bracket with U Bolts (DRAIN COLUMN PARROT SWINGS EACH PARROT SWING SET INCLUDING) 2 OFF 125NB x M16 U-BOLTS C/W NUTS & WASHERS, GALV - 1 OFF CHANNEL C152X76 - 2 OFF M16 TURNBUCKLE (EYE TO EYE) GALV - 4 OFF 1 1/2 TONNE S.W.L SHACKLES</p>	
<p>Ventilation Tool Bags This bag comes delivered with the following 1 x Whirling Hygrometer 1 x Digital Hand-Held Wind Speed Guage Meter 1 x Distance Meter (Additional add-ons can be added)</p>	
<p>Miners Tool Bag Selective tools will be quotes on. (Bags only can also be ordered)</p>	



General Mining

Nozzle Description:	
Barrier Netting	
Black & Yellow Chain Steel or Plastic	
Disto Laser Meter Variety	
Various SENSORS N/O N/C 4-20mA <b style="color: red;">Specs needs to be supplied with sensor required	

General Engineering
& Automation

Please speak to your LHB representative with regards to your automation requirements.



Notes



Notes





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Thank you