



Spray Technology Solutions for Dust Control in Coal Mining

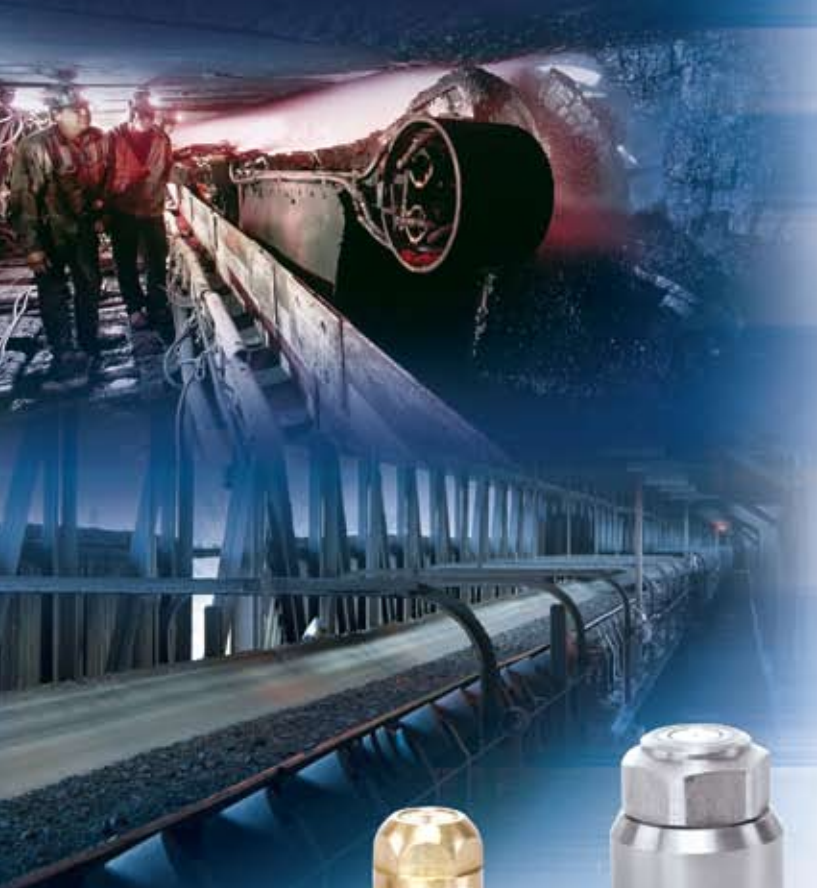
Nozzles and Spray Systems for All Areas of Your Mine

Whether you're spraying water with binders or surfactants, emulsions, foam or plain water, we have product solutions that can help optimize dust prevention and suppression operations. Our offering includes spray products and systems to control dust in the following applications:

- Longwall mining machines, coal shearers, continuous miners, crushers
 - Shearer drum pick-point flushing sprays to suppress dust
 - Shearer drum reverse pick-point sprays to cool bits and hot streaks
- Methane-pocket spraying
- Rollback dust suppression
- Roof support water sprays
- Wetting broken coal to limit dust generated during conveyor transport
- Crusher/stage loader sprays
- Shearer/clearer sprays
- Loading, dumping and transport points
 - Vehicles, conveyors, haul roads
- Shaft fogging systems
- Railcar dust control systems
- Scrubbers
- Stockpiles
- Coal and equipment freeze-prevention spraying

Plus, working with the world's leading manufacturer of spray products offers many benefits:

- Decades of experience with coal mines
- Nozzle selection and system specification assistance
- Single source convenience – nozzles, controls, headers, accessories
- A global sales organization dedicated exclusively to spray technology



TX UniJet®
Nozzle

LN Hydraulic
Fine Spray Nozzle

In-line BD WhirlJet®
Hydraulic Nozzle

J Series
Air Atomizing Nozzle

Typical Product Solutions

In-line and Right-Angle Series WhirlJet® Hollow Cone Hydraulic Nozzles

- Small to medium spray drop size
- Uniform distribution over a wide range of flow rates
- Lower in-line profile projection for installation in a tee or pipe header



J Series Air Atomizing and Automatic Spray Nozzles

- Very small spray drop size – ideal for use in airborne dust suppression
- Provides greater wetting per volume of liquid and reduces water usage
- Suitable for use with surfactants for greater wetting and decreased water consumption



More Dust Control Resources

A Guide to Spray Technology for Dust Control — Bulletin 652

20-page educational guide that addresses the key considerations when selecting spray products for dust control.



Industrial Spray Products — Catalog 70

Full-line catalog including spray nozzles and accessories, technical data and problem solving ideas.

Clothes Cleaning Process, DVD and Instructional Materials

National Institute for Occupational Safety and Health (NIOSH)

Available for download: <http://www.cdc.gov/niosh/mining/products/product21.htm>



Spraying Systems Co.®
Experts in Spray Technology

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Fine Spray Hollow Cone Hydraulic Atomizing Spray Nozzles

- Very small spray drop size – ideal for use in airborne dust suppression
- Standard and wide angle spray patterns available
- Versions with integral strainers available
- UniJet® nozzles feature replaceable spray tips; bodies are re-used



AutoJet® Dust Control Systems

- Pre-packaged, pre-assembled, pre-tested system ready for use immediately upon delivery
- Can operate one or many nozzles, lances or headers
- Automated injection of water and surfactants minimizes waste and ensures consistent application
- Choice of spray nozzles – wide range of flat spray, full cone or hydraulic fine spray atomizing nozzles



A Full Range of Accessories

- T-style strainers designed for efficient liquid straining with minimal maintenance
- Adjustable ball fitting to minimize overspray and ensure precise spray placement
- Split-eyelet connector to simplify installation
- Many more



Spray
Nozzles



Spray
Control



Spray
Analysis



Spray
Fabrication