

•AGGLOMERATIVE DUST CONTROL•

►•360 DEGREE FOGGER SYSTEMS•

All standard 360 degree fogger systems include a fogger head, #3 nozzles, a valve, and a filter. Custom systems are recommended for optimum effectiveness.

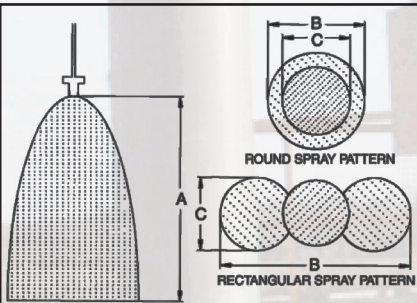
Excellent for controlling fugitive dust at loading areas of a conveyor. For more information go to [www.archenv.com](http://www.archenv.com) or call (800) 553-4567.



Mark 2 in action

System Information

Model	Part Number	Spray Pattern	# of Nozzles (#3)	Water Usage (gpm) @ 100 psi
#3 Nozzle	MFAN00300N00	Cone	1	.078
Mark 2	MSHFSMK2500300100000	Round	7	.548
Mark 3	MSHFSMK3500300100000	Round	13	1.020
Mark 4	MSHFSMK4500300100000	Rectangular	9	.705



Round Spray Pattern (using #3 nozzles)

Head	Dimensions (Ft)			gpm @ 100 psi	gpm @ 150 psi
	A	B	C		
Mark 2	3	5.5	2.5	0.548	0.685
Mark 3	4	6.5	4.5	1.020	1.235

Rectangular Spray Pattern (using #3 nozzles)

Head	Dimensions (Ft)			gpm @ 100 psi	gpm @ 150 psi
	A	B	C		
Mark 4	4	3.5	2.5	0.705	0.855

Spray patterns affected by outside elements.



MARK 2



MARK 3



MARK 4

• No soaps, detergents, or surfactants needed.

• Less than 5.7 gph per nozzle.

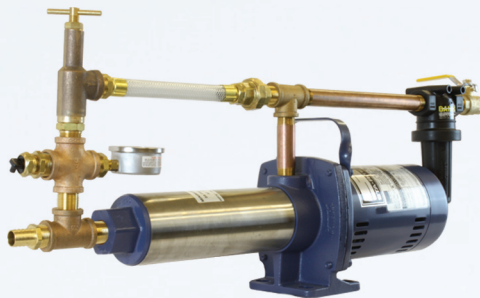
• All spray nozzles have brass housings with stainless steel cores and inserts.

• Fogger components connected to supply pump by a 3/8 in (9.5 mm) supply line.

• Water Pressure: 100 to 150 psi.

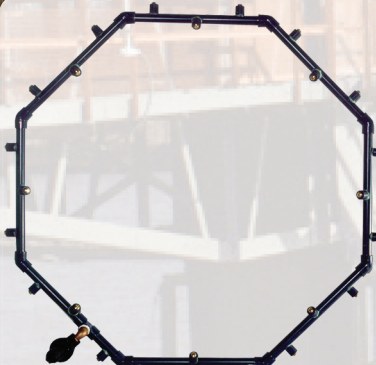
►•PUMPS•

Pump Size	Cluster Head	Water Usage (gph) @ 100 psi	Water Usage (gph) @ 150 psi
3/4 hp	Mark 2	15	6
	Mark 3	8	3
	Mark 4	12	5
1 hp	Single Nozzle	112	47
	Mark 2	22	12
	Mark 3	12	6
2 hp	Mark 4	17	9
	Single Nozzle	159	84
3 hp	Mark 2	36	22
	Mark 3	19	12
	Mark 4	28	16
Single Nozzle	Single Nozzle	255	157
	Mark 2	48	34
	Mark 3	26	18
Single Nozzle	Mark 4	37	27
	Single Nozzle	339	205



Part Number	HP	Volts
MPUFS75HP1PH0010000	3/4	120/240
MPUFS75HP3PH0010000	3/4	230/460
MPUFS01HP1PH0010000	1	120/240
MPUFS01HP3PH0010000	1	230/460
MPUFS02HP1PH0010000	2	120/240
MPUFS02HP3PH0010000	2	230/460
MPUFS03HP1PH0010000	3	120/240
MPUFS03HP3PH0010000	3	230/460

►•HOOPS & CUSTOMS•◀



Mark 6 Octagon

Every application is different. ARCH specializes in custom fogger systems built for your specific needs. Customized fogger systems help you maximize dust control in *hoppers, head & tail boxes, chute mid-points, crushers, and transfer points.*

Call the factory at (800) 553-4567 or visit [www.archenv.com](http://www.archenv.com) for more information on customizing your own fogger system.

►•DUST CONFINEMENT•

Simplicity Chute Baffle®



-stops high-velocity dust at transfer points  
-2 layers of super-premium 3/4" polyurethane  
-24" or 48" baffles  
-custom widths  
-3-stage curtain with grass skirting  
-corrosion-resistant

Simplicity Access Door®



-fasteners and seal included  
-aluminum endoskeleton  
-adaptor plate included  
-8" and 12" openings  
-corrosion-resistant  
-custom imprint (ie, your logo) on 12" doors  
-easily installed on existing structure

►•SPRAY BAR SYSTEMS•

All standard spray bar fogger systems are equipped with #3 nozzles spaced 6" from either end and every 12" in between. Includes a 2-10' bar, #3 nozzles, a valve, and a filter. Custom systems are recommended for optimum effectiveness.

Excellent for loading areas of a conveyor. For more information go to [www.archenv.com](http://www.archenv.com) or call (800) 553-4567.

Bar Length	Part Number
2'	MFBFSMK60202S00300100
3'	MFBFSMK60303S00300100
4'	MFBFSMK60404S00300100
5'	MFBFSMK60505S00300100
6'	MFBFSMK60606S00300100
7'	MFBFSMK60707S00300100
8'	MFBFSMK60808S00300100
9'	MFBFSMK60909S00300100
10'	MFBFSMK61010S00300100



(Conveying Confidence)

360 Degree Systems  
Spray Bar Systems  
-Agglomerative Dust Control-  
Hoops & Customs  
Dust Confinement

-What Dust Control?-

2009 AGGLOMERATIVE DUST CONTROL  
AGGREGATE/COAL/PULP & PAPER/WASTE HANDLING

[www.archenv.com](http://www.archenv.com)

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P.O. Box 1760, Paducah, KY 42002 (800) 553-4567 [info@archenv.com](mailto:info@archenv.com)  
Primary Cleaners•Secondary Cleaners•Belt Support•Sealing Systems•Belt Scales•Scale Integrators  
Belt & Personnel Safety•Dust Suppression•Conveyor Management



## •WHAT DUST CONTROL?•

### IS DUST CONTROL REALLY NECESSARY?

Yes. Dust control is no longer just an act of goodwill. Today, it's not an option and more than ever people are paying attention; **enforcement of environmental regulations is a priority and stiffer penalties are the result.**

### HOW CAN DUST BE CONTROLLED?

Even in hard times a **FUGITIVE DUST PREVENTION PLAN** must be in place. How you plan to attack problem areas on your conveyor can have far-reaching consequences, good and bad.

The most proven method of controlling fugitive dust consists of 3 steps:

1. **CONFINE** the dust to an enclosed area
2. **SEAL** material on the conveyor
3. **SUPPRESS** dust particles back to material flow

All 3 play integral roles in effective dust management. Here we focus on number three, dust suppression.

### HOW DO YOU SUPPRESS DUST?

Water is the constant variable of most suppression systems. Its tendency to bond to surface materials such as minerals, wood products, and chemicals makes water an effective bonding agent. Gravity takes over by pulling dust particles back down to the material flow. **Water is the most natural element used to control dust. It's safe for your material, equipment, and crew, while easily accessible, inexpensive, and simple.**



How water affects the material conveyed and other components is often the deciding factor in whether a plant will make their own suppression systems with material on hand or invest in a professionally engineered system tailored to their needs. If using a hose and dousing the material (left) threatens your inventory or conveyor components, then a home-made solution isn't a solution at all.

**The most efficient, chemical-free method of suppressing fugitive dust is agglomeration.** Agglomeration moistens the material enough to allow gravity to pull the extra mass back into the material flow **without corroding your equipment (right) or saturating your product.**



Bonding to like-sized water droplets, dust particles become denser and immediately re-join the material flow. Reduced to a fine spray, **atomized water collides with dust particles and they agglomerate, or cluster**, increasing the gravitational pull and accelerating their return to the material flow. **This is done with a minimal amount of water and no chemicals.**

ARCH Fogger Systems use quality components and are engineered to your specifications and are:

- **CHEMICAL-FREE**
- **SAFE FOR MOST BULK MATERIALS**
- **EASY TO INSTALL AND MAINTAIN**
- **COST-EFFECTIVE**
- **EASILY CUSTOMIZABLE.**

For more ARCH Fogger information visit [www.archenv.com](http://www.archenv.com).



-proud member

## THE FRONTS OF AGGLOMERATIVE DUST AND SOLUTIONS

### 1. HOPPER

U-SHAPED HOOP AROUND OPENING IN WINDSCREEN. SPRAY BAR AND V-JETS ON SIDES.  
STRAIGHT FOGGERS ALONG TOP.  
IF NO WIND SCREEN, HOOP MOUNTED HORIZONTALLY.

### 2<sup>ab</sup>. LOAD CHUTE HEAD

MULTIPLE 7-NOZZLE SPRAY HEADS ALONG LENGTH OF LOAD CHUTE.  
CHUTE BAFFLE ON END.

### 3. HEAD BOX

9-NOZZLE CLUSTER HEAD.

### 4. TRANSFER CHUTE

9-NOZZLE CLUSTER HEAD.

### 5. LOAD CHUTE TAIL

7-NOZZLE HEAD WITHIN TAIL BOX.

### 6. INSIDE LOAD CHUTE

7-NOZZLE CLUSTER HEAD.

### 7. LOADING CHUTE MID-POINT

CHUTE BAFFLES IN CONJUNCTION WITH SPRAYS  
(SEE NUMBER 6 ABOVE) TO CREATE FOGGING CHAMBERS  
IN CHUTE.

