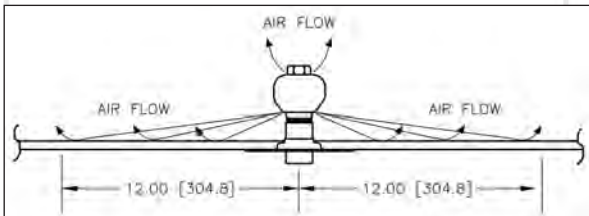




*“Setting The Standard For Supplier Excellence”*

## Evasser

- ▼ Fluidizes materials in Vessels
- ▼ External Mounting Available
- ▼ No Damaging Vibration



**TYPICAL APPLICATIONS INCLUDE, BUT ARE NOT LIMITED TO:**

<b>Cement</b>	<b>Bentonite</b>	<b>Gypsum</b>
<b>Soda Ash</b>	<b>Lime</b>	<b>Flour</b>
<b>Carbon Blk.</b>	<b>Fly Ash</b>	<b>other</b>

The Evasser bin aerator from Monitor Technologies is a device used to promote the flow of dry bulk powders from a storage vessel without the noise and damaging vibration caused by pneumatic or electric vibrators. The Evasser aerator is small, compact and capable of aerating many types of bulk powders and granular solids in bins, hoppers and silos. The Evasser can discharge air up to 80 psi (5.5 bar) to move settled materials. Once material is flowing the Evasser can be used to maintain flowability of material with a constant 2 to 5 psi (0.14 to 0.35 bar) supply of air.

Unlike other types of aerators that use cotton or canvas to diffuse the air, the Evasser is less likely to be bound or clogged due to moisture and can be more effective as it directs air flow to “sweep” the bin wall. In addition, the Evasser is not as prone to back-flow of material as the standard neoprene boot expands to let the pressurized air out and contracts when the air is shut off blocking the air outlets from material backflow.

The Evasser bin aerator is available with a convenient external mounting plate. This means that installation of the device can be done from outside of the bin making it ideal for use in replacing worn and plugged air pads. In addition, with no moving parts or filters to clean or replace the Evasser requires virtually no maintenance.

### PRINCIPLE OF OPERATION

The single Evasser bin aerator operates by continuously introducing air into a mass of stored powder. When first conveyed into a storage vessel, the powder is a highly aerated mixture of air and particulate. In this state, the mixture flows quite easily. As the material settles, the particulate and air separate. The material decreases in volume and increases in density (it packs), and in turn it begins to behave like one solid mass rather than a fluid mixture of particles. The Evasser replaces the naturally lost air and increases and maintains the air-to-particulate mixture ratio, thus allowing the material to flow.

### APPLICATIONS

The most effective aeration of dry bulk materials is typically achieved by the use of four rows of Evassers, one row located in each quadrant of the slopping bin bottom. With aerating dry powders the Evassers will normally be spaced 18" on centers, with the lowermost units located close to the outlet where most of the bridging starts. On granular materials the location of the Evassers will vary with the material being aerated and the configuration of the bin. In all cases, please consult with the Monitor appli-



ation engineers that are ready to provide you with the best recommendation for your specific material flow problem.

## FEATURES

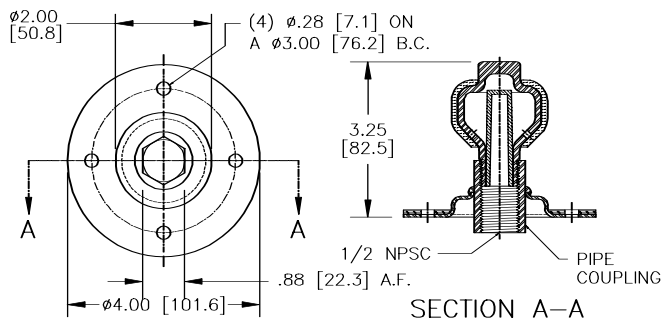
- ▼ Typical effective radius of 12 inches (305 mm)
- ▼ Compact and low cost with virtually no maintenance
- ▼ Available in cast iron or 316 stainless steel
- ▼ Black Neoprene boot or optional white FDA boot

## ACCESSORIES

The Evasser bin aerator is available in several configurations. The Evasser itself can be provided in either cast iron or 316 stainless steel construction. The Evasser is normally supplied with a black Neoprene boot. A FDA approved white boot is also available. For high pressure or high temperature applications where the boot is not acceptable, a sintered metal insert can be provided. In addition, each of these configurations can be provided with or without the external mounting plate.

## MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS



## ORDERING INFORMATION

8-8009	Option 1, single cast iron Evasser with black boot
8-8018	Option 1A, single cast iron Evasser with sintered bronze 90 micron insert
8-8048	Option 1C, single cast iron Evasser with sintered bronze 40 micron insert
8-8021	Option 1SS, single stainless steel Evasser with FDA white boot
8-8011	Option 3, single cast iron Evasser with black boot and steel mounting plate
8-8016	Option 3A, single cast iron Evasser with sintered bronze 90 micron insert and steel mounting plate
8-8020	Option 3SS, single stainless steel Evasser with FDA white boot and stainless steel mounting plate

## SPECIFICATIONS

### Air Supply/Consumption:

**Air Supply:** Continuous clean, dry air 3 to 5 psid (0.2 to 0.35 bar) (the difference between the air feed pressure and the internal vessel pressure)

**Air Consumption:** Typically 3psi (0.2bar) / 3scfm (0.8m<sup>3</sup>/min)

### Materials of Construction:

**Body:** Cast iron (Option 1, 1A, 3 and 3A); 316 stainless steel (Option 1SS, 1ASS, 3SS and 3ASS)

**Mounting Plate (optional):** Mild steel (Option 3, 3A); 316 stainless steel (Option 3SS, 3ASS)

**Gasket (mounting plate):** Cork (up to 175°F/80°C) for mild steel mounting plate; White Nitrile (up to 175°F/80°C) for stainless steel mounting plate

**Boot (standard):** Black Neoprene (up to 175°F/80°C)

**Boot (optional FDA):** White EPDM (up to 175°F/80°C)

**Sintered Metal Insert:** Bronze 90 micron (up to 900°F/480°C) or 40 (optional) micron filter for extra fine materials (up to 900°F/480°C)

**Air Inlet Connection:** 1/2" NPT coupling

## WARRANTY

Monitor Technologies warrants each evasser it manufactures to be free from defects in material and workmanship under normal use and service within two (2) years from the date of purchase. The purchaser must notify Monitor of any defects within the warranty period, return the product intact, and pre-pay transportation charges. The obligation of Monitor Technologies LLC under this warranty is limited to repair or replacement at its factory. This warranty does not apply to any product which is repaired or altered outside of Monitor Technologies' factory, or which has been subject to misuse, negligence, accident, incorrect wiring by others, or improper installation.

