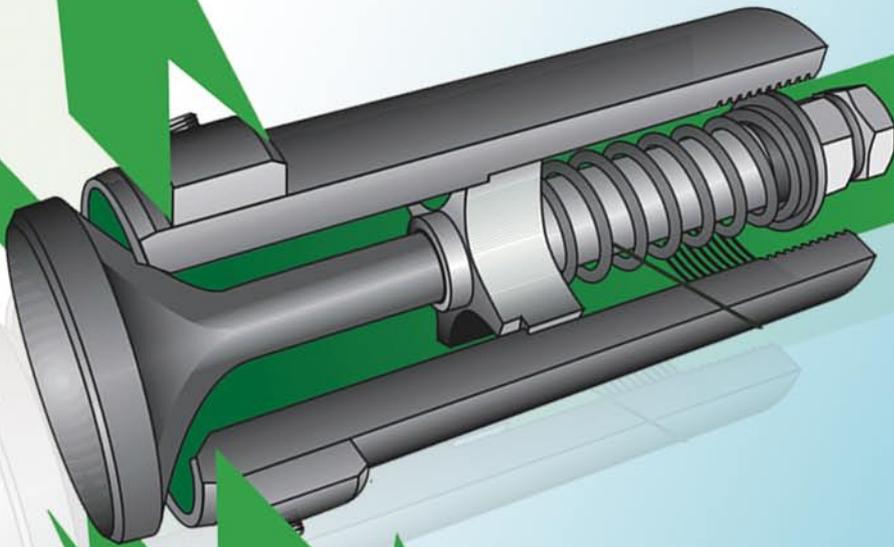


BIN-BUTLER

Aeration System



VERSATILE

The BIN-BUTLER Aeration System will instantly induce, and then maintain the flow of a diverse scope of materials encompassing a broad range of bulk density, size, flowability, abrasiveness, and other powder and bulk solids characteristics. We've solved flow problems from metal, concrete, wood and fiberglass bins, hoppers, and silos; through chutes, batchers, Conveyor transfer points, ducts, channels, railcars, Screens, and feeders. In addition to standard applications, the BIN-BUTLER System can also be used to aid material flow in enclosed chutes, and pneumatic conveying systems. It acts directly on the stored material (not the structure) to eliminate arching, bridging, clinging, piping, and other flow problems. It restores 100% bin capacity and ensures the FIFO free flow of even the most stubborn materials. And, when supplied with clean, dry compressed air (or nitrogen) the BIN-BUTLER System will operate at pressures ranging from 40-125 PSI, and in temperatures up to 550 ° F.

THE SYNERGISTIC APPROACH

Synergy occurs when a total is greater than the sum of its parts-the BIN-BUTLER Aeration System is the definition of synergy. A typical system consists of strategically located BIN-BUTLER Injector Heads; Quick-acting, high-flow Solenoid Valves; Lever-operated, full-flow, self-bleeding, isolation Shut-Off Valves; a Solid State Programmable Time-Sequence Controller; Compressed Air Filter / Dryer; and an Air Receiver Tank. When these components are utilized together, the outcome is complete and consistent material flow-SYNERGY! The System can operate independently, or can be easily integrated into other equipment, or automation Systems to meet your flow requirements.

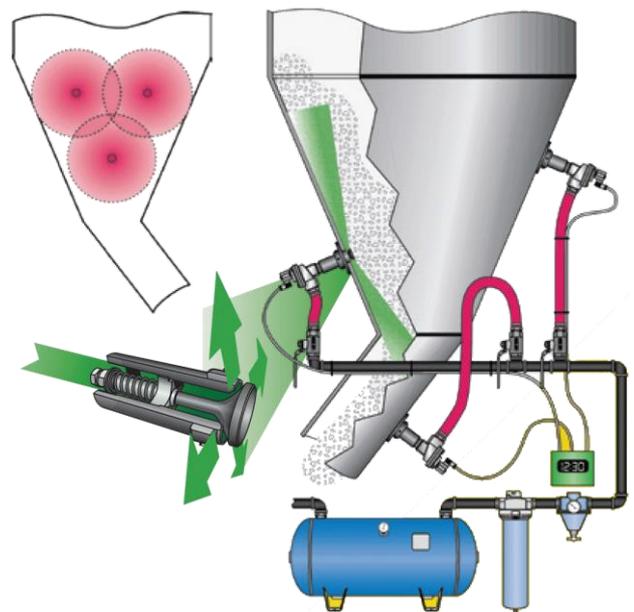
Applications

Adipic Acid; Bentonite; Cement; Diatomaceous Earth; E. P. Dust; Flour; Grain; Herbicides; Iron Ore Jute Products; Kaolin; Limestone; Meal; Nuts & Seeds; Ore Preparations; Pharmaceuticals; Quartz; Resin; Salt; Titanium Dioxide; Uranium; Verniculite; Walnut Shells; Xanthene Dyes; Yellow Pine Chips; Zinc Oxides.

- **INSTANT, CONTROLLED "FIFO" FLOW**
- **OPERATING PRESSURE 40 PSI – 125 PSI**
- **OPERATES IN TEMPERATURES TO 550°F**
- **HEAVY-DUTY, DURABLE, MAINTENANCE-FREE**
- **AVAILABLE IN CARBON OR STAINLESS STEEL**

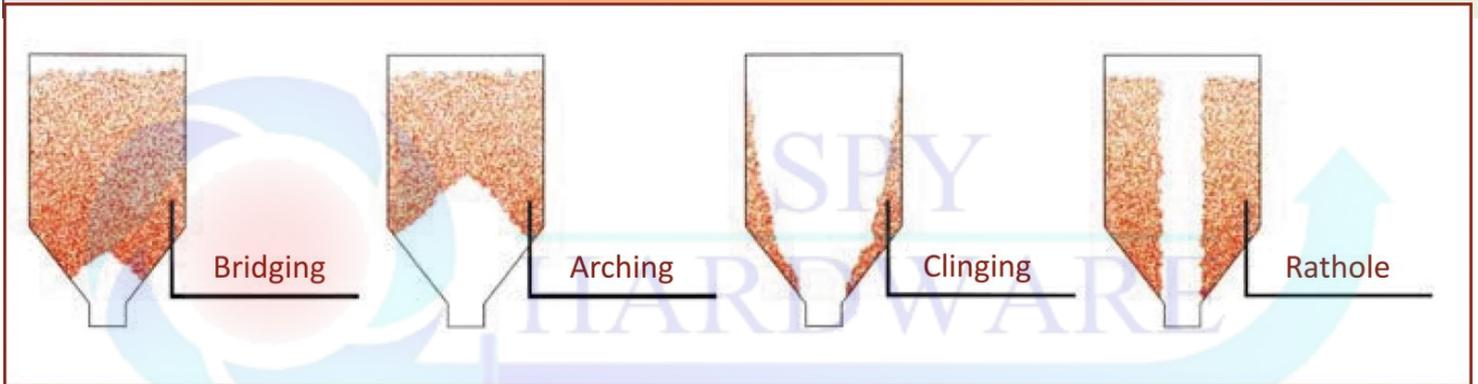
BIN-CHARTING

The determination of model, quantity, and area-of-influence of each Injector Head's air pulse is dependent on the geometry of the storage vessel, the stored materials properties and characteristics, the Current low pattern, and the desired outcome. To regain 100% bin capacity, or achieve metered discharge rates, the BIN-BUTLER Injector Heads need to be sized and positioned correctly, the applications air Supply needs to be analyzed, and the time-sequence firing pattern determined.



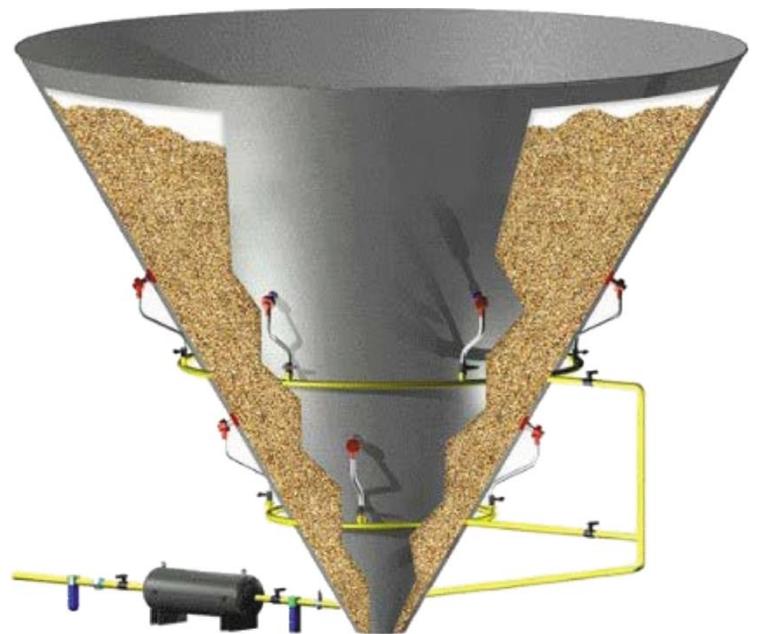
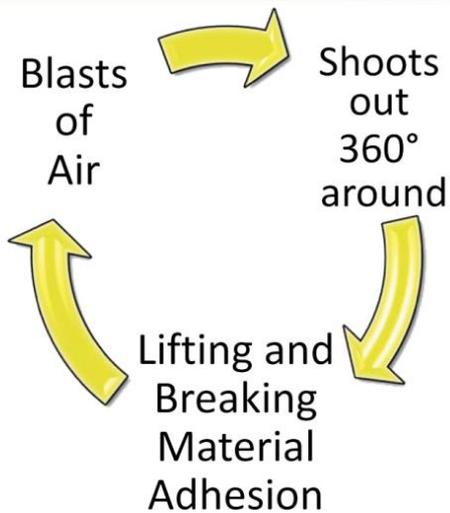
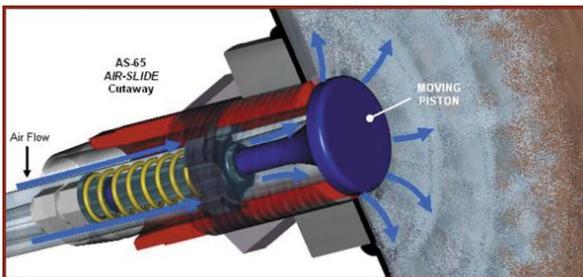
BIN-BUTLER

Reason for Air-Slides



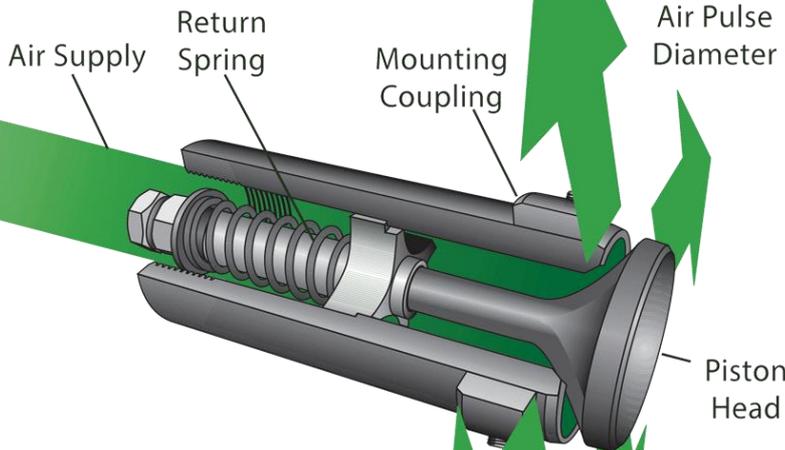
- Create and Maintain material flow
- Eliminate sticky build-up, bridging and rat holes
- Guaranteed flow solution

BUILT-TO-LAST



FORMULA FOR SUCCESS

The BIN-BUTLER Aeration System is a cost effective solution for prompting and maintaining the flow of a variety of powders and bulk solids. The System's Injector Heads fire a radial pattern of powerful air pulses between the material and the container wall to undercut, excite, and put the material in fast motion. The dislodged, stimulated material then flows downward to the outlet. Our solid-state, Programmable Time-Sequence Controller is used to precisely fire the System's strategically located Injector Heads so that they act in concert to maintain a consistent, regulated outflow during the storage vessel's discharge cycle.



- RESTORES 100% CAPACITY
- NON-DAMAGING TO VESSL
- FAST, SIMPLE INSTALLATION
- WON'T JAM OR CLOG
- MOUNTS TO ANY STRUCTURE OR SURFACE
- INJECTOR HEAD WARRANTY – 1 MILLION CYCLES!

PERFORMANCE DATA

MODEL#	MATERIAL	MOUNT	DISCHARGE (in)		
BB-075	Carbon or Stainless	Coupling	3/4		
BB-200	Carbon or Stainless	Coupling Or Flange	2		
AIR PRESSURE (PSI)		AREA OF INFLUENCE (Dia in Ft)		AIR CONSUMPTION (CFM)	
40	60	2	3	0.3	0.5
80	100	4	5	0.7	0.9
40	60	2	4	0.6	1.2
80	100	6	80	1.8	2.4

*CFM Measured at one PPM (Pulse per Minute)

DOLLAR SMART

The BIN-BUTLER Aeration System is quiet, long-lasting, and energy efficient. The average system uses less than 10-CFM of plant air – significantly less than other types of aerators (ie, air pads, activators, disk/jet type fluidizers), air cannons, lances, or pneumatic vibrators. Because there's no induced vibration, the BIN-BUTLER System won't fatigue storage vessel walls. And, since the System can be mounted from outside the container, the installation is simple and fast so as to minimize labor and downtime costs.

BUILT-TO-LAST

To obtain maximum strength and wear resistance, all BIN-BUTLER injector parts are precision-machined from a high-grade, carbon steel (also available in Stainless). Because all components are subject to a rigid quality control system, you'll get years of continuous, trouble-free operation even under the most severe conditions. In fact, the only moving parts, the piston and spring, exhibit very little wear-even after 1-million cycles. Furthermore, the operating design of the BIN-BUTLER Injector Head enables it to close rapidly, and completely reseal after each firing-no need for a check valve. The stored material (including dust and fines) is locked out, eliminating the production downtime and maintenance costs associated with the clogging and jamming of air cannons, and other types of aerators.