

# AIRSWEEP: ZERO BUILDUP, EASY CLEANUP

AirSweep® is the only flow aid that can be used for both material flow and vessel cleaning—saving time and money at all stages of production

The AirSweep system has many uses and applications. Aside from promoting on-demand flow, it can keep materials from adhering to the inside surfaces of process equipment to help ensure batch uniformity, and also clean and flush vessels between production runs. This reduces the time needed for final, manual cleaning—and for some industries, it can help protect product quality and safety.

## **PROBLEM**

An infant formula manufacturer produces several formulations in the same processing and packaging lines. They rely on a labor-intensive, multi-step process of flushing and manual cleaning because even trace amounts of cross-contamination may compromise the next batch and affect their consumers. They couldn't take risks with a baby's health.

Formula blends use ingredients containing high fat, sugars, and proteins that tend to cling to process vessel walls and inner surfaces. Some vitamin and mineral compounds also segregate out of the blends, causing out-of-spec formulations in the final product. This results in some batches of finished product to be scrapped or re-blended.

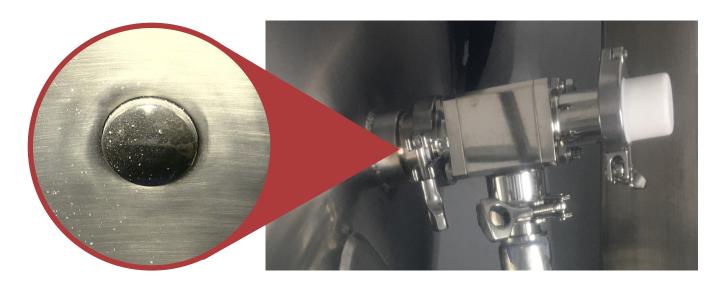




The mixture would cling to the vessel walls, posing the risk of cross-contamination and spoilage

### SOLUTION

The manufacturer installed <u>AirSweep USDA 135 and 185</u> and <u>Straight Shooters</u> in their blenders, vacuum receivers, sifters, and packaging line vessels. By pulsing the AirSweep units during and after the batch runs, they found that the powerful air pulses swept the vessel walls and inner surfaces of residual powder buildup. This made a significant, positive impact on blend uniformity and dramatically lessened the labor and time needed to clean after the batch runs were completed. This allowed them to add batch runs and increase production output.



The AirSweep USDA models can be removed without hand tools, for quick and easy cleaning. The nozzle seals shut after each pulse, for zero material feedback.

## **RESULTS**

AirSweep helped prevent material buildup during, and after, the process—proving its versatility and value.

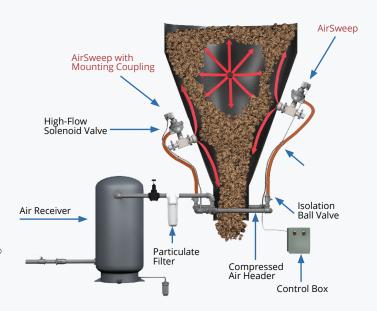
"Beyond reliably producing a consistent product, they've also cut their turnaround and cleaning time significantly—saving tons of money," said Paul Rose, AirSweep's Sales Director. After the initial pilot test in one facility in 2016, they have since added AirSweep units to the other process lines in that plant, and in four other plants worldwide, and are currently adding the system to other plants.

"We went from 40 hours to 10 hours in cleanup time," said the Company's Associate Director for Process Technology Application and Productivity.

The <u>AirSweep</u> and the <u>AcoustiClean Sonic Horn</u> can remove material buildup in all parts of the plant. Contact us to find the best cleaning system for your process.

#### **HOW AIRSWEEP WORKS**

- Each AirSweep® nozzle disperses a powerful burst of high-pressure, high volume air or inert gas in 250 millisecond bursts.
- The quick pulse sends a shock wave along the inner vessel wall, lifting and activating stalled material and breaking the friction bond between the material and vessel wall.
- The system is pulsed in a pre-set sequence when material is to be discharged from the bin.
- A typical system will consist of three or four AirSweep® nozzles, high-flow solenoid valves, sequence timer/ controller, air filter, regulator, air receiver, flex hoses, and ball valves.





Control Concepts, Inc. provides a 7-year warranty on the AirSweep® unit.

## **MORE INFORMATION**

### **AIRSWEEP USDA**



AIRSWEEP USDA VIDEO
AIRSWEEP USDA MATERIAL ACTIVATION TEST (VIDEO)
AIRSWEEP USDA PRODUCT SHEET (PDF)

### AIRSWEEP STRAIGHT SHOOTER



DIFFERENCE BETWEEN STANDARD AIRSWEEP AND STRAIGHT SHOOTER MODELS (VIDEO)

AIRSWEEP STRAIGHT SHOOTER MATERIAL ACTIVATION TEST (VIDEO)

AIRSWEEP STRAIGHT SHOOTER PRODUCT SHEET (PDF)

## **CONTACT US FOR A CUSTOM ENGINEERED SOLUTION**

**CONTACT US** 



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