

Abrasive Dust Causes Rough Issues

A national supplier of sand and aggregate, after using Aerodyne's Vacu-Valve to great effect on its baghouses, sought a larger Vacu-Valve that could handle the large amount of build-up in its dust collector during peak intensity and prevent the backup of particulate. Simultaneously, their sister company required a new method of handling the particulate in quarry dust collector. The collection system dealt with large influxes of abrasive material, wearing out their rotary valves quickly. Not only did the rotary valves have short operational lives and often need replacement, but the baghouses had to be shut down during the period of assessment and replacement, halting operations. These issues were hurting these sister companies, so they looked to Aerodyne to provide a simple solution.



The Vacu-Valve is an easy replacement for a rotary valve in many applications. The lack of moving and internal metal parts reduces the long-term damage caused by abrasives compared to rotary valves. In addition, replacing the duckbill sleeves takes no more than 5 minutes. Different sizes of the Vacu-Valves create greater flexibility in terms of capacity, fitting different input and output requirements.

Ultimately, the national supplier bought a 10" Platypus Vacu-Valve, ending their issues with dust backup during peak hours, solving the overflow that would occur during peak hours. The sister quarry tested an Armadillo Vacu-Valve on their dust collector. Immediately, the ease of maintenance and the greater durability against abrasives reduced the man-hours and costs associated with replacement parts and halting operations. The quarry was so pleased with these changes that additional Armadillo units were purchased for other dust collectors.