



VORTEX GRAVITY VEE DIVERTER HANDLING POLYVINYL COPOLYMER

- Customer: Company policy dictates name cannot be used
- Material: Polyvinyl Copolymer
- Application: Need valve for hygroscopic material
- Challenge: Modify valve to withstand sticky material, yet be able to wash down and clean quickly
- Valve: Vortex Gravity Vee Diverter



Results:

A customer has been so pleased with the performance and serviceability of their Vortex valves that Vortex was specified in its new facility.

The customer manufactures a polymer powder that is used as an expedient (carrier) for vitamin manufacturers. The advantage of this powder is that once the vitamin is ingested, it expands, breaks apart and delivers the “drug” portion of the vitamin to the lining of the stomach. The disadvantage of the powder is that it is extremely hygroscopic and sticky to handle.

The customer also supplies polyvinyl copolymer powder to the beer industry. It acts as a filter used to absorb proteins that make beer cloudy.

For its new facility, the customer ordered a 6” and an 8” Vortex Gravity Vee Diverter. They chose this style diverter due to the valve’s dust tightness and independent actuators. The diverters were modified to accommodate higher temperatures (-HT3) and water wash down / sticky material (-WS1). In addition, all the internals were electropolished.

The company is striving to provide a higher quality powder that will allow them to supply new markets. Since the powder reacts with moisture, which degrades the product, the new facility will be handling the powder with nitrogen gas instead of air. The resulting product will be “purer” and sell for a higher price. The diverters will be located beneath a hopper. Powder will be directed to a mill (to reduce the particle size – if necessary) or to packaging.