



VORTEX QUANTUM WYE LINE DIVERTER HANDLING CHLORINE

Customer: Pool Chemical Manufacturer

Material: Dry chlorine powder

Application: Processing dry chlorine powder into tablets used to treat pools and spas

Challenge: Purchase a reliable diverter valve that seals material to atmosphere, routes material from one source to any of three destinations, and will not rust in a corrosive environment.

Valve: Vortex 3-Way Wye Diverter
DR3-3AL-MG-PET-special

Results:



Chlorine is a hazardous substance that may require such safety equipment as ventilation fans, self-contained breathing apparatus, and eye/skin protection when handling. In a dry state, chlorine is noncorrosive; however, it reacts with moisture in the air to form hydrochloric acid that will corrode most steels. It can combine with moisture on skin to cause burning and irritation.

Because of its ability to kill many viruses, bacteria, and protozoa, chlorine is an excellent chemical for use to sanitize, clean, and disinfect. It is both efficient and cost effective when used by pool and spa owners to keep the water free of bacteria that may be hazardous to humans.

When selecting equipment to handle dry chlorine, consideration must be given to the type of metal of the equipment. Dry chlorine and moisture in the air will attack metals made of iron to form iron oxide (rust). One metal that is more resilient to this corrosive environment is aluminum.

Vortex offers customers the ability to modify each valve to address material handled, environment, and system placement. In this application, the Vortex 3-way Quantum Wye Line Diverter valves were constructed of aluminum. This included the valve body, inlet and outlet weldments, air cylinder, and blade. After two-and-a-half years of trouble-free performance, the company is specifying the same valve for an upcoming expansion.

During a visit to the facility, the maintenance foreman commented, "These diverters have more than proven themselves to me!"