VORTEX WYE-LINE DIVERTERS HANDLING PLASTIC PELLETS

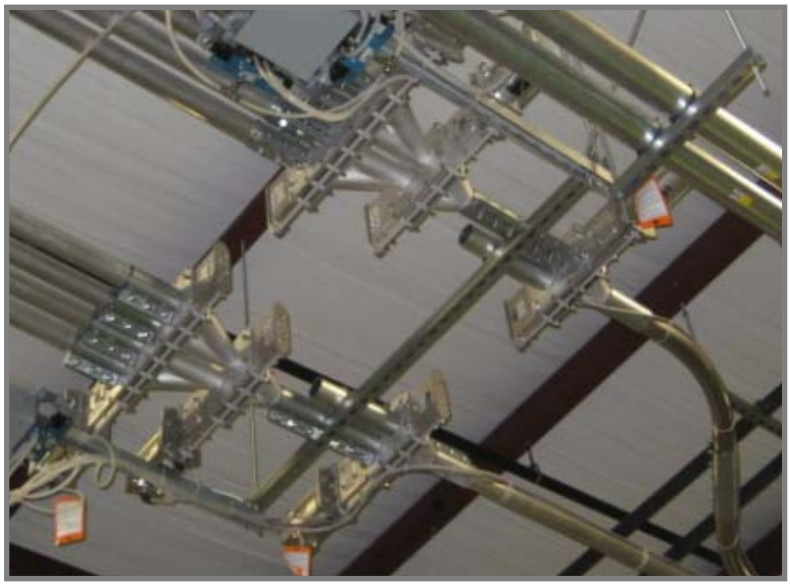
Customer: Automotive Equipment Manufacturer

Material: Plastic Pellets

Application: Convey plastic pellets from individual storage bins to an extruder

Challenge: Replace a cumbersome hose system and automate the process of conveying multiple materials to a common destination

Valves: Vortex Quantum Wye Line Diverters
DR2.5-2AL-MG (2-way)
DR2.5-4AL-MG (4-way)



Results:

For this plastics manufacturer, the process of conveying plastic pellets was a production and safety nightmare. Flexible hoses were utilized to convey different grades and colors of pellets from storage bins to an extruder where the pellets were heated and molded into parts for the automotive industry.

The hoses took up space on the production floor. Employees moving through the facility had to be cognizant of the ever-changing location of the hoses. Production slowed down as hoses were relocated to different source bins. On occasion, hoses were connected to the wrong source material – causing the extruded parts to be rejected. It was not a pretty situation.

The company had utilized Vortex 2-way diverter valves in other parts of their facility with great success. They were pleased with the valves' performance and the exceptional life-cycle costs they provided. A decision was made to replace the hoses with Vortex multi-port diverters.

Two 4-way and two 2-way Vortex Quantum Wye Line Diverters were installed in the ceiling – routing the conveying lines off of the production floor and freeing up the floor area. Employees are now able to remotely select a source bin for the different pellets. The diverters shift into place and conveying automatically begins. All safety, production, and reject issues were solved with this new installation. The customer had the foresight to expose one of the ports of the 2-way diverters – allowing an air intake so the system can be "purged" on occasion.

"When the diverters arrived, we were surprised to see the new design of the quantum-style body. The full flange, in-line serviceability, and improved sealing features were an added bonus to a product that has always provided quality performance!" the production superintendent noted.