

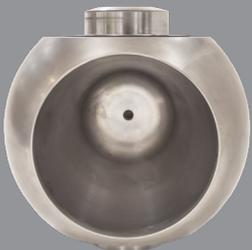
# VALVTECHNOLOGIES' SUCCESS STORY

JANUARY 2020

**INDUSTRY:** Chemical  
**PLANT TYPE:** Petrochemical  
**LOCATION:** Texas  
**APPLICATION:** Dosing cup valve  
**PRODUCT:** TrunTech®

**BACKGROUND:** A Texas polyethylene plant had valves grouped in a pair of fours with a drive system that could operate one or multiple valves as required. Instead of a traditional hole through the valve, these unique valves had a dosing cup that metered catalyst into the reactor, rotating 360° based on the drive system.

The original manufacturer had gone out of business, leaving the plant no choice but to utilize four different shops to manufacture parts and service the valves. The repaired valves had a shortened the lifespan of approximately three to six months.



The customer sought an innovative, cost-effective solution that would not only work with their existing automation but also meet the unique needs of the plant. The customer's requirements included:

- Engineer a custom valve that met the original valves precise internal and external dimensions
- Absolute zero-leakage
- Torque requirement that met the existing custom automation systems
- Extend service-life to a two-year minimum
- Reduce maintenance costs and turnaround time

## SOLUTION:

ValvTechnologies' chief engineer, who has more than 30 years of product design experience, custom-fabricated a 6" 300# Class A105 carbon steel TrunTech® valve designed to exceed the customer's requirements and expectations.

ValvTechnologies designed the valve to match the exact dimensions of the existing tapered dosing cup ball, reducing costs and ensuring ease of installation. Special face-to-face, centerline offset and self-aligning pins were also engineered.

The unique trunnion design included an HVOF RiTech® coated ball/cup and aluminum bronze seats with elastomer seat seals and springs.

By using ValvTechnologies' proprietary spray technique, the end user was able to use their existing automation system, reducing downtime and saving the customer tens of thousands of dollars.

A severe service application challenge was solved with an innovative ValvTechnologies' solution; a trunnion dosing cup valve, the first of its kind. Two of the four valves were installed in September and are providing exceptional product performance. Two remaining valves are slated for installation early 2020.

## INFORMATION:

For more information, contact ValvTechnologies at [info@valv.com](mailto:info@valv.com).