

TEADIT[®] 946 Camprofile CASE HISTORY

INDUSTRIAL SEGMENT

Water Treatment

APPLICATION

Ethanol and Methanol solvents,
API 605 fire-test rated

Equipment

Butterfly Valve



SCENARIO

An environmental engineering and design company was working with a major pipe, valve, and fitting supplier to place butterfly valves into a specialized water decontamination unit. They were utilizing traditional B16.20 spiral wound gaskets to seal the valve flanges and experiencing failures during hydrotesting.

SOLUTION

Teadit's application engineering team was able to determine that the sealing issue was being caused by the seat removal bolts of the valve body which happened to line up directly with the winding sealing element of the spiral wound gasket. The application also required a sealing element that would be API 605 fire safe. It was determined that a custom gasket with a sealing element sized appropriately to address the interference was necessary, however due to the other dimensional requirements of the valve, a spiral wound gasket would be problematic. Teadit was able to design a custom style 946 Camprofile gasket utilizing special exotic metals to match the valve body that would address the dimensional constraints and provide a tighter seal at a lower seating stress. They also completed a full load analysis, recommended target torque values to achieve an optimal seal, and prepared drawings of the part for the end-user.

CUSTOMER GAINS

The end user was in dire need of parts to complete the project by the completion date. Teadit was able to provide a viable solution and manufacturer over 60 custom made parts the same day to ship to the end user for testing and installation. The customer was able to meet their deadline for project delivery with our help.