

TEADIT[®] Dual Packing Combination Kit In Sugar Industry CASE HISTORY

INDUSTRIAL SEGMENT

Sugar Mill

APPLICATION

Fluid(s):

Raw Sugar Cane dissolved mass (Molten liquor),
molasses, and Warm Water (affination Syrup)

Equipment

Mingler



SCENARIO

A major sugar mill was looking for a more reliable, rugged, and durable packing solution for its Mingler. The current packing style was experienced leakage problems approximately 1 month after being put into service for the crop run. Over time, the leakage became more severe. The product loss was so significant that it was unquantifiable throughout the entire season's run.

SOLUTION

The customer reached out to Teadit's technical team for a solution that would be easy to install and reduce the product loss. The Teadit team developed a solution consisting of a combination kit of Teadit packing styles 2774 and Sealpak[®] 46. Style 2774 is an inter-braid cross-section mechanical packing with a proprietary yarn composed of Phenolic and other high-quality synthetic fibers that is impregnated with PTFE and mineral lubricant. Style 2774 was chosen because it is a robust packing that can handle the abrasives found in sugar processing. Sealpak[®] 46 is an extruded packing composed of pure, virgin PTFE and a food-grade approved lubricant, which meets FDA guidelines. Sealpak[®] 46 is a soft, yet dense packing with a very low coefficient of friction. This product has excellent resistance to gas permeation and is self-lubricating. Sealpak[®] 46 remains soft and pliable even after extended service, helping to reduce the wear on the shaft and sleeves. By involving Style 2774 in the combination, it protects the Sealpak[®] 46 from abrasives, which allows Sealpak[®] 46 to provide a reliable and long-term seal.

CUSTOMER GAINS

After installing the Teadit specified packing sets, the customer was able to keep product loss to a minimum without equipment intervention throughout the entire crop run. Upon routine inspection, they noticed less shaft and sleeve wear. This led to increased gains in end product and reduced maintenance costs. After seeing the benefits from the test run throughout the season, the Teadit packing combination kit was approved and then specified to the customer's other sugar mill plants.