

TEADIT® 913M w/PTFE Filler CASE HISTORY

INDUSTRIAL SEGMENT

Pulp & Paper

APPLICATION Cooking Liquor (Ammonium Bisulphite)

Equipment

Digester



SCENARIO

A pulp and paper mill was having issues with microcellular PTFE in the liquor lines of their digester process. They first contacted Teadit's engineering team to confirm the maximum temperature for a skived PTFE product. However, our experience and expertise immediately recognized that would be a poor choice for the application. The digester process runs fairly warm and is also prone to experience vibration. PTFE based gaskets don't typically exhibit great recovery and resiliency in that type of environment, as they were seeing with their current gaskets.

SOLUTION

Teadit's approach to sealing liquor lines in a digester is to recommend the use of a more robust gasket, like a 913M spiral wound with inner reinforcing ring. The inner and outer solid metal support rings work to confine the sealing force applied to the winding sealing element, and effectively "energize" the gasket. This allows the metal wraps of the winding to flex, but not permanently deform, creating a spring like reaction that helps the gasket to rebound and recover well when exposed to movement. The plant preferred PTFE in the service, so Teadit 913M's with PTFE filler were ultimately recommended.

CUSTOMER GAINS

The plant followed Teadit's recommendation and moved away from the problematic PTFE cut gasket and replaced it with the more robust 913M spiral wound. They immediately noticed improved performance and the elimination of their previous issues leading to longer run times and decreased maintenance and down-time.