

Sealing solution for flanges in the chemical industry

Burachem® MultiTex for glass-lined reactors



Properties:

- Good longitudinal and transverse strength in demanding applications
- Minimal increase in width under the given operating conditions
- Very high stability under pressure
- Extremely low settling
- Minimal cold flow
- Adapts very well to any unevenness in the flange

EagleBurgmann carried out the Burachem® MultiTex retrofit on the tank covers in February 2010. The customer is completely satisfied with the performance of the gaskets.

Tytan Organics Chemical Company operates a chemical park at the Sharjah site in the United Arab Emirates. The principle activity at the park is the production of chemicals which are used in the construction industry, including a broad range of concrete superplasticizers. One production line is dedicated to sulfonated naphthalene formaldehyde polymers which have excellent solubilizing properties and enhance the workability and pumpability of poured concrete. A reliable sealing solution is needed for covers on special reactors which are used at the plant.

caused extremely high wear, and the gasket had to be replaced every three months on average. The life of the gasket did not meet customer expectations. Reactor maintenance costs and effort were excessive, and gasket replacement work had a negative effect on production line availability.

Against this background, Tytan Organics Chemical Company began looking for an alternative solution which offered better sealing properties, lower failure susceptibility and higher quality. The prospective supplier also had to provide dependable service.

By now, the service life of the EagleBurgmann solution is three times that of the previous gasket. The customer's maintenance costs have decreased significantly, and there has been substantial improvement in system availability. Tytan Organics Chemical Company is highly satisfied with EagleBurgmann's performance, and plans to retrofit eleven additional reactors with Burachem® gaskets.

Operating conditions

Medium: Sulfonated naphthalene formaldehyde
Operating temperature: 220 °C max.
Operating pressure at the seal: 6 bar max.
Placement: Cover and flange on glass-lined steel reactor
Flange dimensions: 1,280 x 1,195 mm

The EagleBurgmann solution

The gasket which is now being used, the Burgmann Burachem® MultiTex 9654/MB, meets all of the customer requirements. It is reliable and easy to install, and the customer can fully rely on our TotalSealCare™ service.

- Gasket dimensions: 9 mm + 3 mm multiply thickness x 65 mm wide
- Material: pure virgin, expanded ePTFE with multidirectional fiber structure.

The problem

Prior to retrofitting, a Teflon®-coated steel gasket supplied by an Indian competitor was installed on the reactors. High temperature and pressure

