

MEETING THE CHALLENGES OF FRP PIPING SYSTEMS

SEALEX® and Soft-chem®



Mountain Pass Mine, located in the Clark Mountains of California, was one of the largest construction sites in the United States. Due to the insatiable global demand for rare earth minerals, Mountain Pass Mine was also considered by some, to be the most important industrial facility in the US because it is the only place in the country where rare earth elements are concentrated enough to mine.

This is also one place where SEALEX® Joint Sealant and Soft-Chem® gaskets were called to serve outside of their typical service duties and solve leak issues from existing and new piping systems made up of FRP resins.

FRP (Fiberglass Reinforced Plastic) piping systems are becoming more and more prevalent due to its corrosion resistance and therefore longer life. Better flow efficiencies due to the smoother bore means less horsepower is required to move media. FRP piping systems are also light weight, and therefore, less equipment is needed to erect. FRP piping systems are found in a wide variety of industries that include chemical, pulp and paper, petrochemical, marine, mining, etc.

The process industry has long struggled with sealing FRP flanges for a number of reasons. Some of the challenges are related to flange design and condition, while other challenges focus on installation procedures and maintenance practices.

Our sales and technical team were tasked to solve problems in such applications. Using our technical experience and material selection, we were able to expedite start up and minimize downtime. Customers using SEALEX® Joint Sealant and Soft-Chem® gaskets are finding success time and time again.

Per ASTM standards, the FRP manufacturers often select the appropriate elastomeric gaskets based primarily on its chemical resistance. However, in order to achieve a leak-free joint, there are many factors to consider. Our expanded PTFE offerings seal due to their low minimum sealing stress, superior chemical resistance, superior temperature resistance, and their inherent forgiving properties and characteristics.

From standard 150# class flanges to manways, SEALEX® and Soft-Chem® have sealed where thicker and more costly alternatives have failed.

REPRINTED FROM MARCH 2014

KLINGER Thermoseal

2350 Campbell Road, Sidney, Ohio 45365
Tel: +1 937 498 2222

3803 S. Sam Houston Parkway W., Houston, Texas 77053
Tel: +1 713 997 8111