

# REGEN GAS HEATER

## Hairpin Heat Exchanger vs. BEM Style Shell and Tube

A Regen Gas Heater is used to help de-water natural gas. Natural gas is normally saturated with water which can cause problems and damage to equipment and components. It's necessary for the gas to go through a dehydration process. Moisture and hydrocarbons in the gas are absorbed by using dewatering agents or desiccants. When the desiccants become overly saturated with moisture and hydrocarbons, a Regen gas heater or reboiler is used to vaporize the moisture and hydrocarbons to dry the desiccants.

### CASE STUDY 001

The BEM Style S&T Exchanger requires an expansion joint to deal with temperature differentials. When the 1400psi HP gas tubeside leaked into the hot oil shellside, the expansion joint was immediately compromised. In this case study the process plant was shut down due to a safety violation, creating a 5 week loss of production, not to mention rework costs.

The safest and most efficient choice for this service is a Hairpin Heat Exchanger. Our design allows the tubeside to naturally expand and contract with differentials in temperature, therefore the shellside is not affected by the temperature on the tubeside. Due to its unique design the HPHX is safe and durable for these service conditions.

**One of the Largest Manufacturers  
of Hairpin Heat Exchanger Lines in  
the United States**

