Natural Gas Processing & Conditioning Industry

In the face of fluctuating gas prices and constant changes in gas compositions, midstream players must continually find ways to maximize their throughput without compromising profit. As one of the world's largest providers of industrial chemical solutions and services, ChemTreat is strategically positioned to help customers manage these industry challenges.

Critical Systems Need Expert Care

The conditioning and processing of natural gas presents many challenges. ChemTreat understands these challenges and can develop solutions to help you improve the reliability of your operations.

SLUG CATCHER

ChemTreat understands that proper operation of the inlet separator and slug catcher is critical to the overall performance of your plant. Sudden slugs caused by pigging can make it difficult to develop a clean water/hydrocarbon break. Consequently, foaming issues may develop, and liquids can be carried out with the gas stream. ChemTreat has accumulated a wealth of experience and developed unique products and solutions to help you with these challenges.

AMINE UNIT

The amine unit is the heart of a sour gas plant. The efficient removal of H_2S and CO_2 are critical to meeting throughput and quality expectations. Unfortunately, problems such as foaming, corrosion, amine degradation and filter fouling often occur during the sweetening process. ChemTreat can help you address these challenges with customized solutions specifically designed for your system.

GLYCOL UNIT

Dehydration is necessary to ensure water does not condense in the sales gas pipeline. If the glycol unit does not operate properly, meeting sales gas specifications can be difficult. Foaming, corrosion, and reboiler issues are the most common challenges encountered. ChemTreat understands the unique needs of the dehydration process and can help you develop effective programs to minimize issues so that they do not become operational problems.

COOLING & HEAT EXCHANGE

Pressure and temperature must be tightly controlled throughout the gas conditioning process so the desired hydrocarbons can be separated per design conditions. Fouled heat exchangers will rob a plant of its efficiency over time. ChemTreat is best-in-class at developing and implementing strategies designed to help you keep cooling and heat exchanger systems operating efficiently and effectively.

ChemTreat®

PROVEN RESULTS

Improved Corrosion Rates

A south Texas gas processing facility suffered from 80+ mils/year corrosion rates in the amine system. The corrosion by-products led to numerous operational problems. After identifying and trending the issue using advanced datalogging capabilities, ChemTreat implemented a solution strategy. Within four weeks of implementation, the corrosion rates dropped to <2 mils/year. Operations efficiency improved, but more importantly in this case, the useful life of the equipment increased significantly.

Propane Recovery

A large gas processing plant located in the Southern U.S. experienced a loss of refrigeration capacity resulting in increased gas inlet temperatures to the cryogenic demethanizer. These problems reduced deethanizer overhead condenser capacity. ChemTreat found the overhead condensers were greatly fouled and recommended an online cleaning program. Within six weeks, the overall reflux rate improved drastically, resulting in $21,000/day in savings.

Applications Specific to the Natural Gas Processing Industry

Slug Catcher
- Demulsification
- Paraffin inhibitor
- Iron Sulfide dispersant
- Defoamer
- Asphaltene inhibitor

Amine Unit
- Metal passifier
- O₂ scavenger
- Corrosion inhibition and monitoring
- Defoamer

Glycol/Dehydration
- Defoamer
- Corrosion inhibition and monitoring
- Oxygen scavenger

Cooling and Heat Exchange
- Thermal imaging
- On and offline heat exchanger cleaning
- Scale inhibitors
- Corrosion inhibitors
- Biocides
- Chlorine dioxide
- Monitoring and control equipment

Results are examples only- they are not guaranteed. Actual results may vary.

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