CASE STUDY: GAS TOWER SYSTEM

High Capacity H_2S Removal for Exploration Well Testing

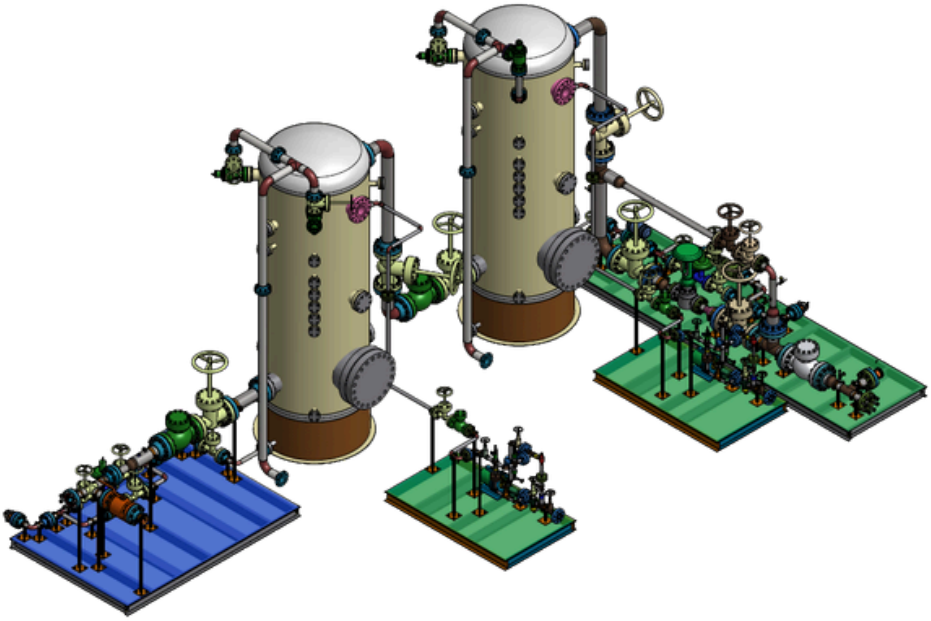
APPLICATION: Lead Lag Dual Gas Tower System - H_2S: 7% - FLOWRATE: 8-10 MMSCFD

During exploration well testing and reservoir analysis at a European field location, a temporary gas treatment solution was required to manage high concentrations of hydrogen sulfide (H_2S) present in produced gas. The objective was to remove H_2S prior to flaring in order to meet European sulfur dioxide (SO_2) emission guidelines while enabling accurate reservoir testing to determine the economic viability of the field.

The operator required a temporary yet robust gas treatment solution capable of treating sour gas before flaring while maintaining flexibility for changing test conditions.

The AMGAS team designed, fabricated, and deployed a lead lag dual gas tower system tailored to expected H_2S levels and flow rates, capable of safely treating high-sulfur gas streams prior to flaring. Built to meet all technical and regulatory standards, the system incorporated high-capacity H_2S removal and was supported by experienced field personnel for installation, commissioning, and operations, ensuring reliable performance under demanding conditions while maintaining environmental compliance and operational safety.

The operator achieved effective removal of high concentrations of H_2S from produced gas, ensuring SO_2 emissions remained within European regulatory guidelines. The system enabled safe handling of high concentration sour gas streams and delivered reliable performance throughout the exploration testing program. This resulted in the successful acquisition of the reservoir data needed to evaluate field economics.



The custom-designed high capacity H_2S removal system enabled safe, controlled, and compliant exploration testing by effectively mitigating the significant safety risks posed by high H_2S concentrations to personnel and equipment, while delivering the reliable data needed for confident field development decisions,