Reference List For Regenerative Siloxane Removal Systems

In gas engines, siloxanes are oxidized to silicon dioxide (SiO_2) in combustion chamber forming solid, hard and abrasive crystals. Silicon dioxide deposits on cylinders, pistons, valves and many other engine components. These deposits cause severe damages to the engines, lead to frequent equipment maintenance, reduce generation capacity and shorten spare part replacement interval.

SGS ® by ANKA Enerji offers a unique solution for all these problems and treat the landfill or biogas to the acceptable limits by the gas engine manufacturers. Seymen LFG treatment plant is on duty since the beginning of September 2020 for 10.000 m^3/h LFG.

After 1 year of operation of 10.000 m³/h Seymen LFG treatment plant, the SGS system has been upgraded to 20.000 m3/h on February 2022. Next expansion to 30.000 m3/h will be completed in last quarter of 2022 by ANKA.

Landfill Gas Treatment System SGS-1400 is supplying clean gas for two of 1200 kW MWM type landfill gas engine for landfill gas to electricity power plant in Edirne. It has capacity of 1.400 Nm³/h gas flowrate. It started working in November 2020 and it is up and running now successfully.
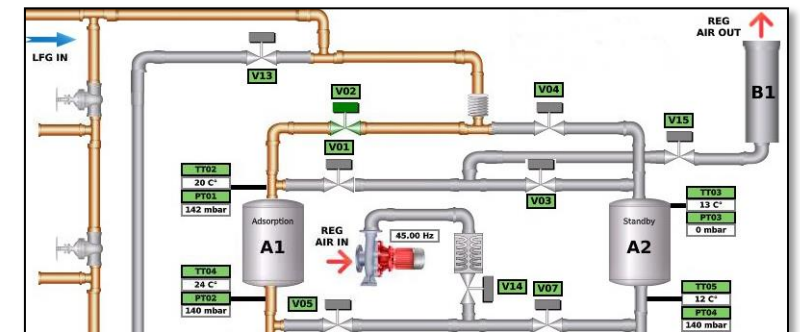
Completed Projects– SUEZ Çanakkale Regenerative Siloxane Removal System (1.400 Nm³/h)

Landfill Gas Treatment System SGS-1400 is supplying clean gas for two of 1200 kW MWM type landfill gas engine for landfill gas to electricity power plant in Çanakkale. It has capacity of 1.400 Nm³/h gas flowrate. It started working in April 2022 and it is up and running now successfully.
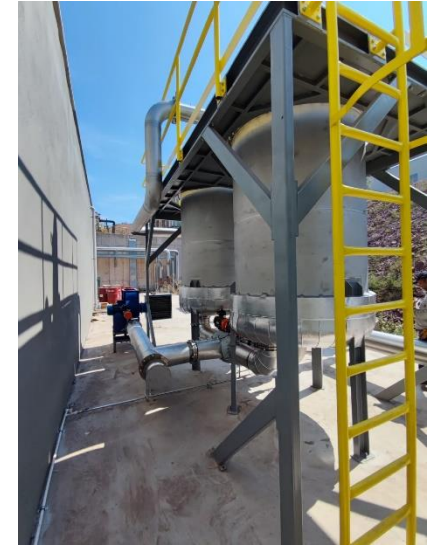
Landfill Gas Treatment System SGS-2500 is supplying clean gas for four of 1457 kW CAT type landfill gas engine for landfill gas to electricity power plant in Sakarya. It has capacity of 2.500 Nm³/h gas flowrate. It started working in March 2022 and it is up and running now successfully.

Biogas Gas Treatment System SGS-2500 is supplying clean gas for four of 1457 kW CAT type biogas gas engine for landfill gas to electricity power plant in Sakarya. It has capacity of 2.500 Nm³/h gas flowrate. It started working in July 2022 and it is up and running now successfully.

Landfill Gas Treatment System SGS-2500 is supplying clean gas for four of 1415 kW Jenbacher INNIO type landfill gas engine for landfill gas to electricity power plant in Manisa. It has capacity of 2.500 Nm³/h gas flowrate. It started working in June 2022 and it is up and running now successfully.

Landfill Gas Treatment System SGS-1400 is supplying clean gas for four of 1200 kW MWM type landfill gas engine for landfill gas to electricity power plant in Osmaniye. It has capacity of 1.400 Nm³/h gas flowrate. It started working in June 2022 and it is up and running now successfully.

Ongoing Projects by Commisioning Dates–Regenerative Siloxane Removal

- Siloxane Removal (600 m³/h) 1st Phase of Psyttalia WWTP, J/V AKTOR S.A – AVAX S.A. – ERGOTEM S.A, Psyttalia, Athens, Greece

- Siloxane Remroval (10.000 m³/h) 3rd Phase of SEYMEN LFG Siloxane Removal Plant, İstanbu Enerji A.Ş., İstanbul, Turkey

- LFG Booster and Cooling (6.000 m³/h) 4th Phase of Seymen LFG Booster and Cooling Plant, Istanbul, Turkey

- LFG Booster, Cooling, H_2S and Siloxane Removal (1.000 m³/h) Kulavosky LFG Plant, Moscov, Russia