



The LO-CAT process, available exclusively from Merichem, is a patented liquid redox system that uses a proprietary chelated iron solution to convert H₂S to innocuous, elemental sulfur. It does not use any toxic chemicals and does not produce any hazardous waste byproducts. The environmentally safe catalyst is continuously regenerated in the process.

The LO-CAT technology is applicable to all types of gas streams including air, natural gas, CO₂, amine acid gas, biogas, landfill gas, refinery fuel gas, etc. Flexible design allows 100% turndown in gas flow and H₂S concentrations. With over 35 years of continuous improvement, LO-CAT units are very reliable and require minimal operator attention; many licensees report as little as 1.5 man-hours per day and over 99% on stream efficiency.

LO-CAT Total Package

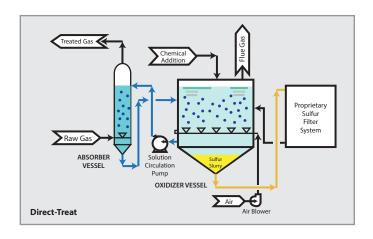
From engineering and fabrication, to installation supervision, training, and startup, through process warranties and onsite service, Merichem provides a total sulfur recovery solution. Each system is custom-designed and built to your specifications and aggressive schedules can be accommodated. Full equipment packages are provided for stick-built or modular configurations.

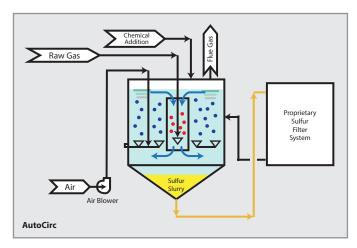
LO-CAT Direct Treatment Scheme

Whenever the treated gas cannot be combined with air, a direct-treat design is employed. This is achieved by use of two separate vessels, an absorber and an oxidizer. The absorber treats the sour gas, producing sweet gas in a single pass. The oxidizer serves two purposes: The regeneration of spent catalyst and the concentration of sulfur particles into a slurry. The proprietary sulfur filter system takes the sulfur-rich slurry, washes it and produces an elemental sulfur cake.

LO-CAT AutoCirc Scheme

When treating a gas that can be mixed with air, the AutoCirc design provides significant cost savings in both operating and capital expenses. By combining the absorber and oxidizer in one vessel, the solution circulation pump is eliminated resulting in reduced electrical consumption. The single vessel approach also minimizes footprint.





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