



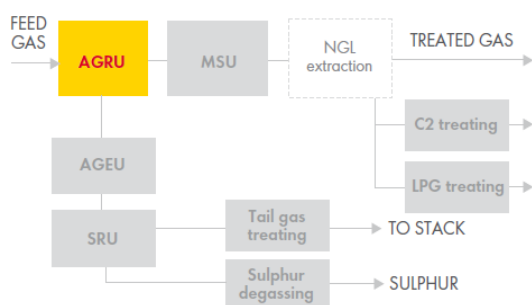
SulSolv® Hybrid Amine Technology

A simple, single-step, sour gas treating process

Gas development projects face growing challenges from increasingly sour resources, tighter sales specifications and stricter environmental emission standards. Meanwhile, operators are looking for solutions to debottleneck existing plants. The SulSolv® hybrid amine technology sour-gas-treating process can be an ideal solution in grassroots applications and solvent swap revamp situations.

Among these hybrid amine technologies, the SulSolv®-X solvent is one of the most efficient designed to leverage the advantages of SulSolv hybrid and accelerated methyl diethanolamine (MDEA) solvents in a single acid gas removal process. It employs two amines, MDEA as the main reactant and piperazine as the accelerator, along with sulfolane and water.

The application of SulSolv®-X technology offers many performance advantages compared with a conventional scheme for treating sour gas. Crucially, the treating line-up is simpler and it enables all-in-one removal of contaminants, which can help to reduce capital and operating expenditure.



Other advantages include:

- Faster CO₂ and COS removal through enhanced reaction kinetics;
- Quicker RSH removal due to enhanced solubility;
- Higher loading capacity, which reduces the solvent circulation rate and facilitates the use of smaller equipment;
- Reduced steam requirements due to its lower solvent circulation rate and heat of reaction;

- Lower hydrocarbon co-absorption through decreased solubility; and
- Reduced solvent degradation, so reclamation is not required.

In addition, all the solvent chemicals can be sourced on the open market.

NAPTA can provide assistance during design, installation, operation and troubleshooting of these installations. In the project phase, NAPTA can support in technology selection, solvent selection and line-up selection. Also NAPTA can advise on equipment design and selection and advice on the materials for construction. NAPTA experts can conduct a site visit for better understanding of site-specific issues; and training of local operational and technical staff.

The provided services can help you to:-

- Identify causes of the problems encountered in your amine unit like foaming, fouling, corrosion and learn and experience how to prevent these problems.
- Optimise the operation of the unit and manage to increase the capacity of the unit. This can entail changing the solvent composition or switching to another amine solvent.
- Learn how to maintain the quality of the solvent and thereby improve the reliability of the unit.

For more information, please connect with NAPTA's Amine Technology SME Mr Egbert van Hoorn via herein below contact details.

Contact

NAPTA's New Business Development team, NAPTA International B.V., The Hague, the Netherlands

Telefax +31 (0)70 211 1312

Mobile +31 (0)6 2819 0101

Email e.vanhoorn@napta.co

Email info@napta.co