

Methanol Recovery



Methanol Recovery Package - UGS Aldbrough

Product Definition

Methanol is a highly efficient hydrate inhibitor for low temperature applications. Frames has developed a methanol recovery system that efficiently recovers methanol from continuous injection operations and recycles the valuable inhibitor.

Product Description

As opposed to MEG, which freezes at lower temperatures, methanol will remain in solution at temperatures as low as -90°C . Frames Methanol Recovery Units use conventional distillation technology to efficiently recover used methanol from waste (water) streams.

Our team of engineers will design a system with the ability to achieve methanol purity of up to 99%. After recovery the methanol is ready for reinjection, allowing our clients to benefit from lower system emission and reduced operating costs.

Skid-mounted units for easy installation

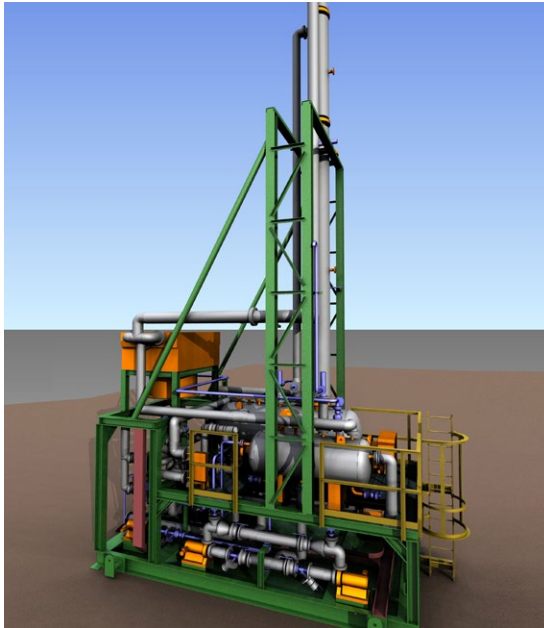
Our Frames Methanol Recovery Systems are usually supplied as a skid-mounted unit for easy installation. The units require minimum supervision and maintenance, and are designed to optimize the recovery and reuse process.

Process Description

After separation from the gas, the methanol stream is still mixed with water. To separate the methanol/water mix from the lighter hydrocarbons, the mix is fed into a liquid/liquid separation tank. Once settled, the recovered hydrocarbons are pumped off for downstream processing, and the methanol-rich water is sent to the distillation column for purification.

The distillation column is fed by water vaporized by the reboiler. Excess purified water is drawn off from the bottom of the column for disposal, while the pure methanol vapors are condensed using a heat exchanger at the top of the column. The condensed methanol is collected in a buffer tank and is ready for reinjection into the main process. The purity of the recovered methanol is controlled by varying the reboiler duty and reflux rate.

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Methanol Recovery Package - Dimlington Terminal

Project Management

At Frames, we look at the bigger picture. Our team of in-house experts works with our clients to understand their business, and challenge them to examine better solutions that give them the competitive edge.

From optimizing production to cutting operating costs, we work to fully integrate our Frames solutions into your production system within budget, on time, and in spec for years of trouble-free operation.

We understand your expectations for high performance, and use industry-leading project management and document control to design, construct, and commission quality products where and when you need them. Our centralized engineering and construction teams in the Netherlands work together to find effective answers to each unique project, with our global network of offices, suppliers, and trusted service providers giving us the global reach to fully accomplish the most challenging projects.

Technical Details

- Cost-effective recovery of methanol
- Ideal for low-temperature operations
- Able to achieve methanol purity of 99%
- Skid-mounted units for easy installation
- Low-maintenance design

Added Value Frames

- Produces methanol at the specified purity, ready for reuse
- Energy-efficient units that optimize the recovery of methanol
- Built for performance in the most demanding environments

References

- SSE Hornsea - AMEC, United Kingdom
- GDF SUEZ E&P Nederland B.V. - the Netherlands

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