

Fractionation



Our engineers are experienced in designing a system that optimizes the recovery of light hydrocarbons. By carefully evaluating the composition of the hydrocarbon resource, and the opportunities to generate value from the light hydrocarbons, our clients benefit from a complete fractionation arrangement that generates maximum value from their gas stream. This includes the cost-effective recovery of LPG and C5+. This generates retail value as an alternative fuel for cars and as a feedstock for the chemical industry instead of being flared off as a waste product.

Product Definition

Frames Fractionation Technology recovers and increases the purity of valuable light hydrocarbons found in natural gas, including the recovery of Liquefied Petroleum Gas (LPG) and C5+ gasoline.

Product Description

At Frames, we are focused on helping our clients maximize the value of their petrochemical resources. Frames Fractionation Technology is a cost-effective method to recover and separate valuable light hydrocarbons, making them ready for sale or downstream processing.

The Frames process separates out the light hydrocarbons by exploiting their different boiling points. This is accomplished by the controlled heating and cooling of the raw incoming stream in a series of fractionation columns.

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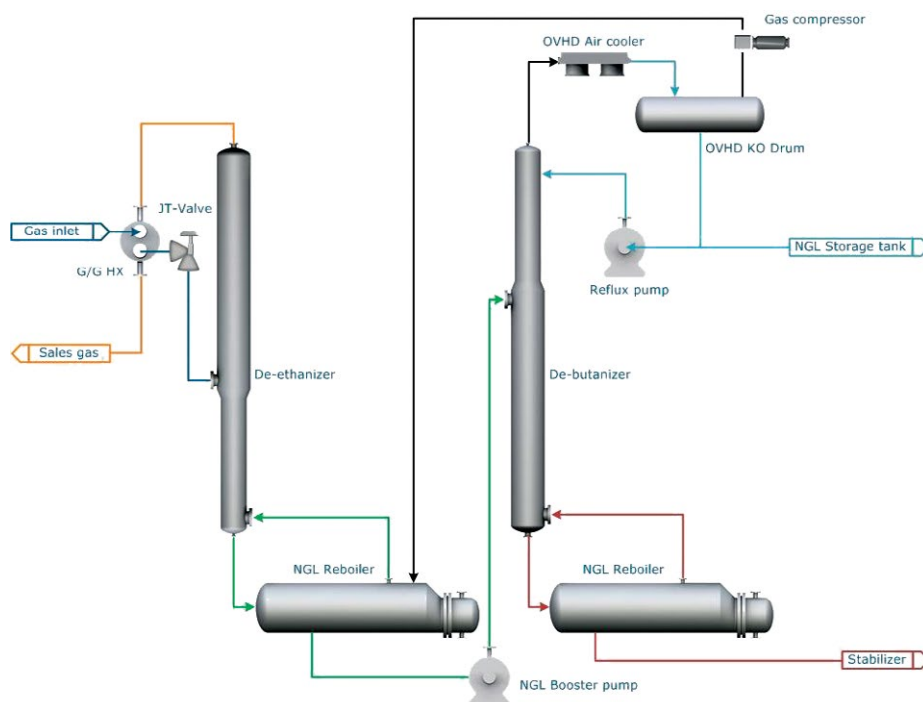
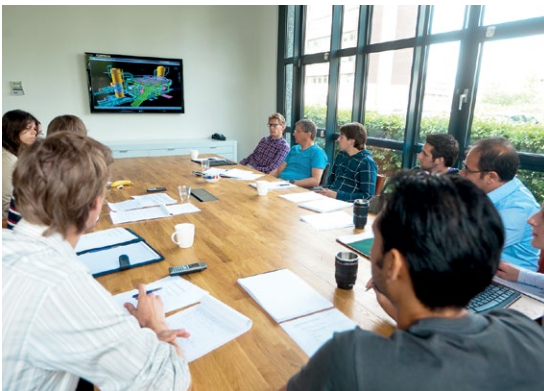


Process Description

Natural gas is typically comprised of about 10% to 40% propane and butane. Using Frames Fractionation Technology, up to 95% of this propane and butane content can be cost-effectively extracted as a one-liquid mixture using a single fractionating column.

The gas feed is pre-cooled before it enters the de-ethanizer column, where a reboiler at the bottom of the column maintains the system at operating temperature. Vapors from the boiling liquid, which primarily contain the lighter components, rise up to the top of the column through bubble cap trays or packing where they are drawn off, ready for use.

The remaining liquids are drawn off as a bottom product and routed from the reboiler connected to the bottom of the column. Here the NGLs are extracted and routed to the LPG/C5+ fractionator, where the principal bottom product is C5+ petrol. This is then routed to final treatment.



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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

- Efficiently separates light hydrocarbons
- Recovers up to 90% of available propane and butane
- Improves product recovery and lowers system emissions
- Adds value to natural gas

Added Value Frames

- Fully integrated into your production system for continuous, trouble-free operation
- Designed according to your system's unique gas composition
- Reduced energy consumption thanks to heat integration technology
- Low-maintenance units designed for minimum operating costs
- Worldwide service with full, expert support

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Frames Family Tree

