Cryomax Frac2

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Application

• A cryogenic process to produce both a treated gas, which can be liquefied at very high pressure, and a saleable condensate with a low vapour pressure, all with a minimum number of equipment items minimising the required foot print for the process and down time for maintenance

Advantages

All the refrigeration needed to achieve the recovery of the C5+ components is provided by a turbo-expander.
• Low liquid inventory increases safety
• No additional refrigeration, for example from a mechanical refrigeration cycle, is needed.
• Start-up (and restart) of the process is smooth and fast

Reduced footprint – as no fractionation unit is required to separate C2+ into commercial products

Description

• The feed gas is cooled and partially condensed in a shell & tube heat exchanger. The vapour is separated from the liquid and routed to a turbo-expander. Flow is routed to a fractionation column operating at relatively high pressure.
• The Treated Gas from the column overhead is heated against the feed gas. It is first compressed in the compressor driven by the expander and then by a booster compressor to allow the liquefaction unit operating at high pressure to improve the efficiency.
• The liquid product is routed to a fractionation column operating around 5 bar. The bottom product is reboiled to produce stabilised C5+. The top vapour is condensed sent as reflux of the two distillation columns

Licensor

• TechnipFMC

Installations

• None