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NATCO MRU Mechanical Refrigeration Units

Effective hydrocarbon dewpoint control across a wide range of process conditions

APPLICATIONS

- Hydrocarbon liquid recovery
- Treatment of both lean and rich gas streams

BENEFITS

- Higher liquid recovery through lower temperature operation
- Standard features that reduce opex

Nearly all mechanical refrigeration units (MRUs) recover some liquids, however, they are conventionally designed for a process temperature of –10 degF [–23 degC], which can be problematic. To increase your profit potential from hydrocarbon liquid recovery, NATCO MRU* mechanical refrigeration units are designed to operate at –20 degF [–29 degC]. Operation at a lower temperature delivers more marketable liquid hydrocarbons, which means more revenue.

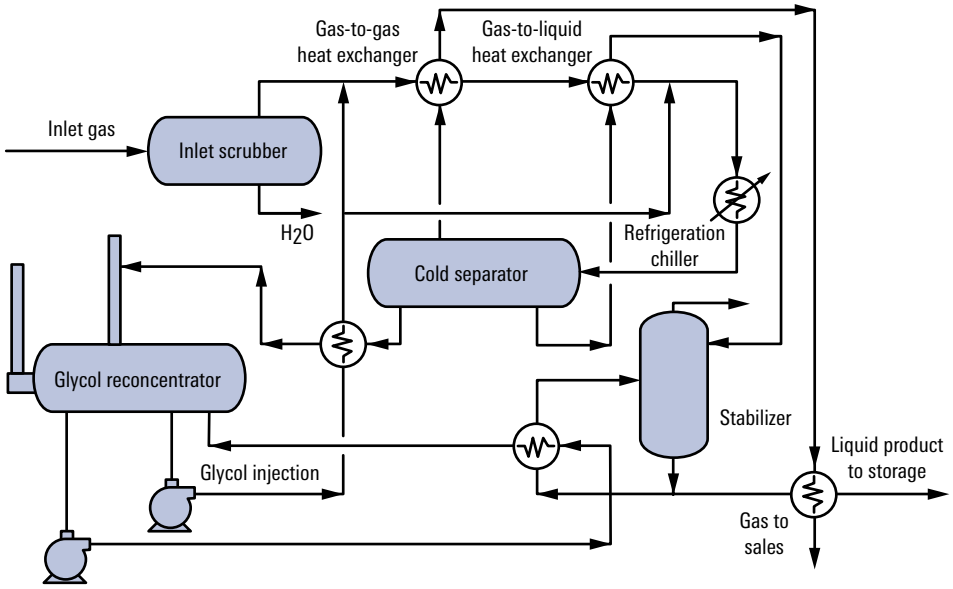
Improved recovery through flexible designs

NATCO MRU units are available in the standard plant sizes, for gas volumes from 250 Mcf/d to 15 MMcf/d. The plant design is flexible to provide higher liquid recovery rates: The MRU-2 unit uses a propane refrigerant system and the larger standard units—MRU-6 and MRU-11—use a propane system with an interstage economizer.

Optimized energy usage from standard features

In addition to lower process temperatures, the NATCO MRU units are built with more features standard to help lower your operating costs.

- Gas-to-liquid exchanger recovers heat and recycles it back into the system to support greater operational efficiencies.
- Standard inlet scrubber removes free water.
- Glycol injection provides hydrate protection—no upstream dehydration is necessary.
- Glycol reconcentrator serves as the heat source for the demethanizer or deethanizer.
- Stabilizer also removes light ends for extra sales potential.
- Simple control system enables unattended operation.



Gas-to-liquid exchanger.

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Installed NATCO MRU unit.

Each NATCO MRU unit comes skid-mounted. Putting it on line is not complicated: Hook up the gas inlet, gas and liquid outlets, and electrical connections and then charge with refrigerant—and it is ready for operation.

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