UOP
A Honeywell Company

UOP SeparSIV™ System for Lean Natural Gas Processing

Temperature Swing Adsorption (TSA) technology for enhanced effectiveness and reliability for hydrocarbon dew pointing and dehydration for natural gas processing.



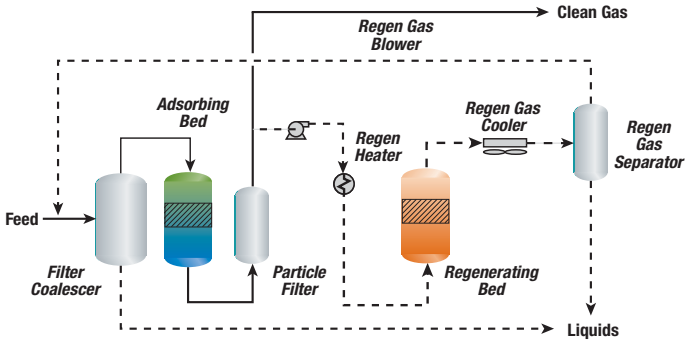
Honeywell UOP's SeparSIV adsorption system is often ideal for gas producers and their EPC suppliers treating feed gas for removal of C_6^+ components and BTEX to below 1 ppm level without removing lighter hydrocarbons. The SeparSIV adsorption system provides on-specification product gas at up to a 50% lower Economic Lifecycle Cost versus a cryogenic solution, potentially resulting in millions of dollars in savings.

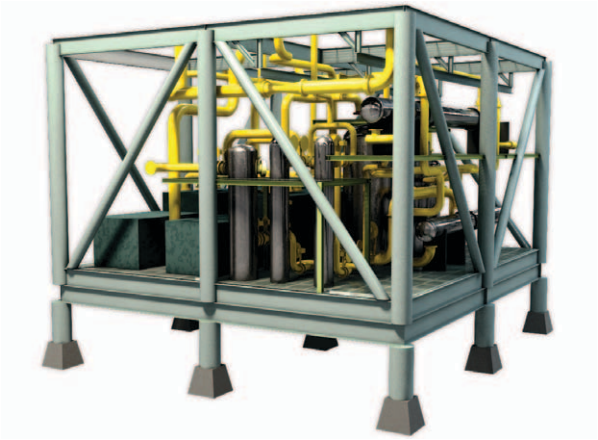
Introduction

Through a unique combination of adsorbents and a comprehensive control system the SeparSIV technology is tunable to meet your dew pointing requirements.

The SeparSIV process is based on the principle that adsorbents are capable of selectively adsorbing impurities. The impurities are adsorbed at low temperatures in a fixed-bed adsorber and desorbed by "swinging" the adsorbers from feed gas temperature (low) to regeneration temperatures (high) with hot regeneration gas. Furthermore, with the proper portfolio of adsorbents, multiple impurities can be removed and recovered within a single system. Typically, the treated gas remains close to feed gas pressure and the hydrocarbons and water are recovered as liquids during regeneration.

UOP SeparSIV System Flow





The UOP SeparSIV system offers:

Reduced manpower needs

- The SeparSIV system is shop fabricated and tested, and a self-contained single lift system minimizes field (offshore) pipe-works.
- A dedicated PLC control system delivers a fast start-up and high on-stream factor.
- The UOP SeparSIV system is a true plug-and-play technology.

Reduced space is required

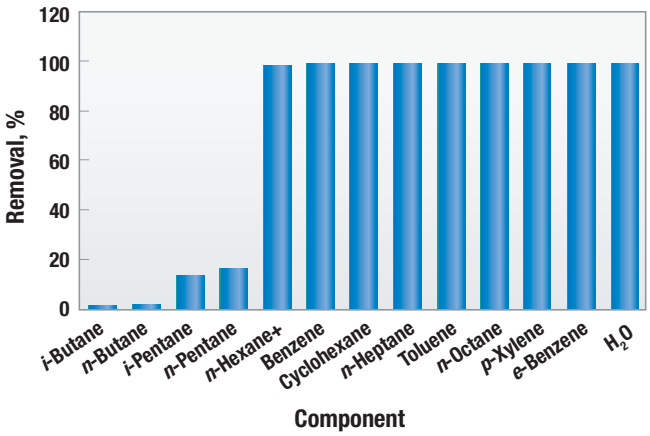
- Dew Pointing and dehydration are both provided by SeparSIV, so no separate unit is required. SeparSIV operates with little pressure drop, lessening the cost and complexity of compression. And the layout, design and construction work seamlessly together, meaning faster and more profitable NGL recovery.

Increased flexibility for enhanced gas processing economics

- SeparSIV is a highly selective process. Each SeparSIV system can be adjusted to "surgically" remove only the contaminants you select—C_5^+, BTX, H_2S, mercaptan sulfur and water—down to the lowest levels.

Technical information

Feed Hydrocarbon Removed



Experience

With 100 years of innovation in oil and gas technology, UOP will provide your operation with unparalleled technical support. UOP technical services can help train operators, perform pre-commissioning check out, assure smooth startup and optimize ongoing operation.

SeparSIV is the latest addition to UOP's growing portfolio of innovative Gas Processing products. In fact, UOP has implemented several regenerable adsorbent-based systems for treating lean gas (see table).

Location	MMSCFD	Service
Thailand	32	Pretreatment
Mexico	120	Pretreatment
Pakistan	500	Pretreatment
Pakistan	200	Pretreatment
Malaysia	680	Pretreatment
Thailand	480	Pretreatment

Backed by experience and commitment

UOP, a Honeywell company, develops and supplies process technology, modular plants, and adsorbents & catalysts for the gas processing, refining, renewables, and petrochemical industries.

With five engineering centers and 11 manufacturing facilities in 16 countries, UOP is close to its customers wherever they are. Since 1914, UOP has developed more than 70 licensed processes for the industries it serves. UOP is the world's leading supplier of catalysts and molecular sieve adsorbents and provides a full range of technical services and support.

For more information

For more information on the UOP SeparSIV System, please contact your UOP representative or visit us online at www.uop.com.

UOP LLC, A Honeywell Company
25 East Algonquin Road
Des Plaines, IL 60017-5017, U.S.A.
www.uop.com

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