SEPURAN® Noble

Membrane Technology for Efficient Helium Recovery & Purification



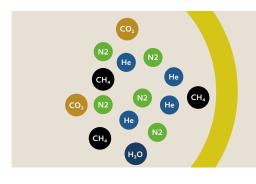
Don't Let Your Next Helium Project Take You for a Ride!

Never miss out on a helium recovery and purification project again. With SEPURAN® membrane technology, you can achieve the high quality and efficient gas separation levels that make new projects viable.

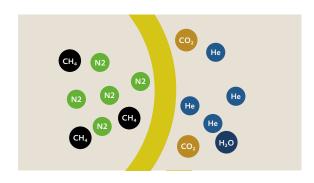
SEPURAN® Noble membranes work on the principle of selective permeation through a membrane surface. Helium is more soluble in the membrane material than larger molecules, so it passes through the membrane at a higher rate, while other gases are left behind.

Benefits of SEPURAN® Noble

- Helium recovery of more than 95%
- · Lower energy consumption and capital required
- Stable separation process without regular monitoring
- Robust polyimide fibers provide long lifetime









Helium Purification

In the past, high helium yields could only be achieved with expensive cryogenic technology, which requires distilling gases at their boiling points. SEPURAN® Noble requires only a fraction of energy input compared to a cryogenic process without sacrificing performance. Pre-treated raw gas is fed into the membrane module under high pressure. With the membrane process, 95% purity helium is delivered with yield above 95%, making operating helium wells more economical.

SEPURAN® Noble can cost-effectively recover high-purity helium from nitrogen-rich natural gas.

Helium Recovery

Helium is becoming increasingly scarce but maintaining access to this irreplaceable resource is as important as ever for many specialty applications. With SEPURAN® Noble, spent helium is collected, purified and re-used. As gas runs through the module, the helium is selectively pulled off, filtered back into the system and 99% of unused helium can be upcycled. SEPURAN® offers an efficient way to recover this expensive consumable.

SEPURAN® Noble can collect and upgrade spent helium, leading to enormous cost savings.



SEPURAN° Noble	2" Module	4 " System	6" System	8″ Cartridge
Housing Material	SS316	SS316	SS316	SS316
Trans Membrane Pressure	25 bar / 362 psi	40 bar / 580 psi	25 bar / 362 psi	80 bar / 1160 psi • 70 bar / 1015 psi
Temperature	<70 °C / 158 °F	<70 °C / 158 °F	<70 °C / 158 °F	<50 °C / 122 °F • <70 °C / 158 °F

Evonik is the innovation leader in membrane-based separation technology.

EVONIK CORPORATION

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