SEPURAN® Noble

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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





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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. www.membrane-separation.com www.evonik.com

