

Advanced PRISM® Membranes for OEM Partners

**The simple solution to adding value
for your customers**

“We have been very pleased with the CACTUS membrane dryers, and our customers really like their drying performance, quick start-up, and the low maintenance.”

*Bob Brown
Project Engineer
Novatec Inc.*

An Overview

Understanding your specific requirements for cost-effective and efficient gas separation is a major strength at Air Products. As a world leader in the supply of gas separation systems and industrial gases, we own and operate PRISM membrane equipment in multiple gas processing applications. We know the value of a reliable and responsive equipment supplier.

As an original equipment manufacturer, you know your business needs and your industry. As a leader in membrane technology, we know ours. Working together, we can meet your specific requirements, either through standard designs, configurations and materials, or through custom solutions. No other manufacturer of membrane products can economically provide the broad range of product customization and consistent performance that we provide.

For years OEMs have maximized added value by using PRISM membranes to dry compressed air or gas and to generate nitrogen.

Applications Proven with PRISM Membranes

OEMs can choose from a wide variety of PRISM membranes and CACTUS® dryers:

- PRISM nitrogen membranes can generate nitrogen at purities up to 99.9 percent
- PRISM process gas membranes can be used for adjusting synthesis gas (CO/H₂) ratios and recovering hydrogen from reactor off-gases
- PRISM natural gas membranes can reduce CO₂ levels or dehydrate natural gas to pipeline specifications
- CACTUS dryers are ideal for drying compressed air and gas to very low dew points

Key Benefits of Membrane Technology

- Significant savings versus other technologies
- Membranes are simple, passive devices
- No maintenance is required on membrane separators
- Field-proven in a wide variety of applications and industries

Advantages of PRISM Membranes

- Consistent product quality
- Custom designs are available

Many different types of membrane fiber are available to OEM partners.



- Very experienced staff of engineers for process design support
- Proven history of reliability in the field
- More tolerant of particulate dust than other brands
- Able to withstand liquid water, while most competitors require predrying of the feed gas
- Highest operating temperature and pressure capabilities in the industry
- Better efficiency at higher purities than other brands
- Large, flexible manufacturing capacity with proven capability to deliver high volumes on time
- Valuable product promotional and design tools

The Simple Solution

PRISM membrane technology offers simple solutions for your gas separation and dehydration needs. Maintenance-free membrane separators can be easily integrated into your equipment.

Pretreatment requirements for CACTUS dryers are as simple as coalescing filters. Membrane systems using PRISM process gas or nitrogen membranes will often benefit from heating as well as prefiltration, and our staff of engineers can easily assist you in optimizing your design.

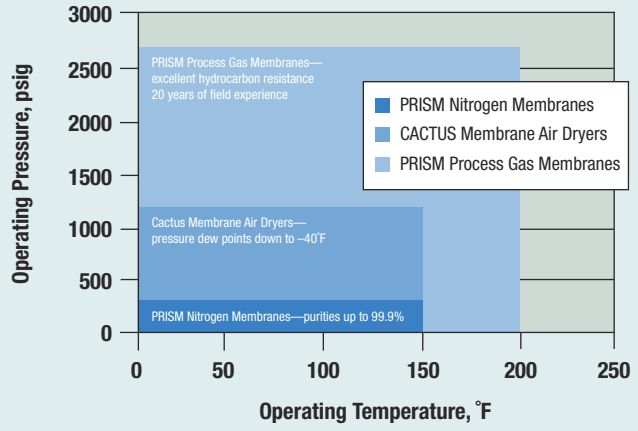
Backed by Our Expertise

Our expertise in membrane technology makes us an excellent product development partner and supplier to OEMs. We are very committed to helping you succeed in the marketplace.

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Figure 1

Pressure and Temperature Map for PRISM Separators



Operating pressure and product purity are key factors determining membrane performance. PRISM membranes operate across the widest available range of purities and pressures of all membranes, giving OEMs maximum flexibility in their applications.

The people behind PRISM membranes are organized into a flexible business unit structured to provide a quick response to your needs, and they are backed by all of the technical and financial resources of the multibillion-dollar global industrial gas, equipment and chemical company that is Air Products.

You can expect the best from PRISM Membranes.

For More Information

For more information about our membranes and OEM partners, visit our website at the web address shown below. If you are interested in purchasing membranes as an OEM, contact us by phone, fax, mail, or e-mail at our location below.

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