

# Process Gas Membrane Performance Evaluation



A performance evaluation of your Prism® membrane system by Air Products can provide information about overall membrane system conditions and valuable guidance on how to achieve optimized performance.

The assessment requires **flow rate, pressure, temperature and composition (all components and their concentrations)** data for each of the following streams.



- Feed to membrane.
- Permeate from membranes, i.e. the lower outlet pressure stream from the membranes. Your system could have multiple permeate streams, especially if it has multiple stages of membranes. Information on permeate streams from each stage must be provided.
- Non-permeate from membranes.

If the parameter is not available through the distributed control system (DCS), local gauge readings from time of sampling will be required.

Additional Sampling Requirements:

Permeate block valves on individual membranes must be 100% open or 100% closed. It is imperative that the system is stable and data is collected in as short a time as possible (duration of test should not exceed one (1) hour). Ensure that all of the instruments used to provide the data have been recently calibrated, including flow transmitters and the lab analysis equipment.

Stream	Flow	Pressure	Temperature	Composition
	Units	Units	Units	All components
Feed	X	X	X	X
Stage 1 Permeate	X	X	X	X
Stage 1 Non-permeate (stage 2 feed)	If available	X	X	X
Stage 2 Permeate	X	X	X	X
Stage 2 Non-permeate	If available	X	X	X
Number of membranes on line				

If present, please include all information on streams to/from subsequent stages (e.g. flows, pressures, temperatures and compositions of stage 3, 4 etc.)

Contact us prior to sampling for specific requirements for your system to ensure a thorough analysis is completed.

Air Products' focus is to help keep your system running optimally. Our highly skilled Customer Plant Support team has the knowledge and expertise to deliver results. Put our experience to work for you.

#### For More Information

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