

# Gas Permeation System

## System Overview:

The gas permeation test rig is designed to study and demonstrate the gas separation characteristics of membranes under a wide range of temperatures and pressures. This system is adaptable to test and characterize flat sheet, tubular or hollow fiber membranes.

## Current Ceramic Tubular Membranes:

Source	Minimum	Maximum
Length (mm)	100	250
Outer diameter (mm)	10	10

## Operating Limits:

Source	Minimum	Maximum
# of Gases	1	2
Single gas flow rate	--(?)	2 L/min
Temperature	25 °C	300 °C
Pressure	14.5 psi/1 bar	145 psi/10 bar

## Chemicals and Hazards:

Name	Hazard	Mitigation	PPE
Gas / cylinder	Flammable / pressure	Training Fume Hood Gas Monitoring	Safety Glasses
Heating tape	Fire / Burns	Signage / Insulation	Safety Glasses / Insulated Gloves
Electrical	Fire / Electric shock	Training	