GAS SWEETENING MEMBRANES FAQS

ProSep

Together creating pure oil, gas and water.

WHAT PRESSURES AND CO_2 CONCENTRATIONS CAN BE TREATED WITH MEMBRANES?

Our units have successfully treated feed gas at 300-1715 psig and 3.0%-88% CO_2 concentrations. Residue CO_2 concentrations of below 2.0% are easily achieved.

HOW LONG DO THE MEMBRANE MODULES LAST?

Although some installations have gone several years without module replacement, generally performance will naturally decline with time as a function of the feed gas pressure, temperature, and composition. With proper operation, under 20% per year is normal. ProSep units have extra capacity to accommodate module additions.

HOW MUCH PRETREATMENT IS REQUIRED, AND WHAT ARE THE MOST COMMON MEMBRANE CONTAMINANTS?

Liquid water, glycol, amine, lubricating oil, and other aromatic hydrocarbon liquids / vapors can adversely affect the permeation characteristics of the membrane; therefore, the producer must take steps to prevent liquid carryover from upstream separation equipment. Typically, pretreatment equipment is designed to remove small liquid aerosols, particulate matter, and certain heavy and aromatic vapor-phase hydrocarbon contaminants as required.

HOW EFFICIENT ARE MEMBRANE SEPARATION UNITS?

Since it is a partial pressure driven process, membrane separation technology is more efficient with bulk acid gas removal. As with amine and other physical / chemical solvent processes, some hydrocarbon losses occur. When treating lower feed gas CO_2 concentrations, in some cases a two-stage membrane system can keep overall hydrocarbon losses to less than 1.5%.

WHAT TYPE OF TURNDOWN AND EXPANSION CAPABILITIES EXIST?

Membrane separation units are modular and can easily be modified to accommodate changes in processing requirements and feed gas conditions. ProSep membrane separation units are designed with housing banks that can easily be brought on or off line with automated or manual valves. Expanding the treating capacity of existing systems is often easily accomplished.

WHAT ABOUT THE USE OF HAZARDOUS CHEMICALS AND ENVIRONMENTAL IMPACT?

ProSep membrane separation units don't require the use of any chemicals or liquids. No moving parts means minimal noise, and the small size provides a low profile in environmentally sensitive areas.

About ProSep

ProSep is a technology-based process solutions provider for the upstream oil and gas industry.

The Company designs, develops, manufactures and commercializes technologies to separate oil, gas and water generated by oil and gas production.

ProSep's innovative offerings have been awarded three Spotlight on New Technology Awards from the annual Offshore Technology Conference in Houston in 2005 and onwards, comprising the proprietary technologies ProScav, CTour and ProSalt.

REFERENCES

Available upon request.

FOR MORE INFORMATION

Contact your nearest ProSep office.
www.prosep.com