

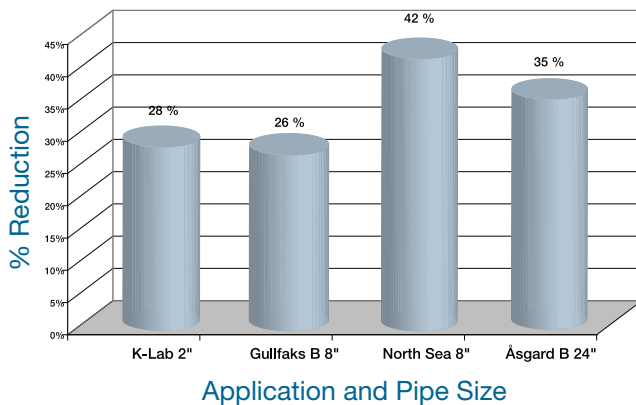
PROSCAV H₂S REMOVAL



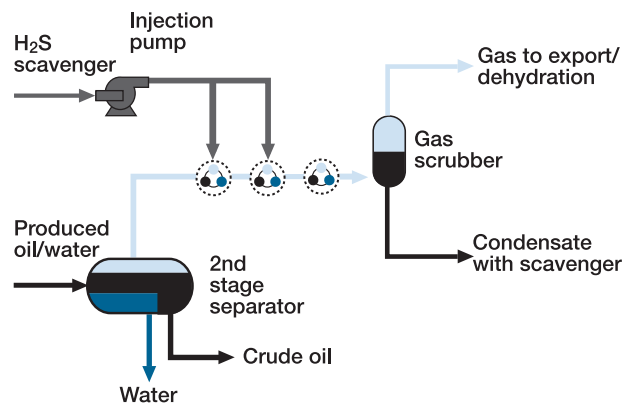
Together creating pure oil, gas and water.

ProScav is a system for injecting and mixing H₂S scavenger in the pipeline to remove moderate amounts of H₂S from gas or liquids. ProScav utilizes the scavenger chemical more efficiently than do conventional injection and mixing methods such as atomizing nozzles, quills and static mixers. This added efficiency allows operators to reduce their scavenger consumption by 30-40% while reducing the related operating expenditure (transportation, storage, handling and disposal). In less than a year, a typical ProScav system will show a significant return on investment.

REDUCTION IN SCAVENGER CONSUMPTION



PROSCAV SYSTEM PFD



EXTREMELY EFFICIENT MIXING WITH A LOW PRESSURE DROP

The C100 Injection Mixer, the key component of the ProScav system, achieves efficient mass transfer between an appropriate scavenger chemical and H₂S in gases or liquids contaminated with H₂S. Its internal geometry provides an extremely efficient mixing with a low pressure drop, typically below 0.3 bar.

IDEAL FOR OFFSHORE APPLICATIONS

The H₂S scavenging process has been installed in over 30 applications worldwide, mainly for offshore operations. The system's compact size, low-maintenance, robustness and tolerance to flow variations make it ideal on offshore installations, where the spent scavenger can be discharged

to sea or to disposal wells. Compared to other offshore gas sweetening methods, ProScav is very cost efficient, particularly compared to alternatives like amine plants and solid scavengers.

BENEFITS

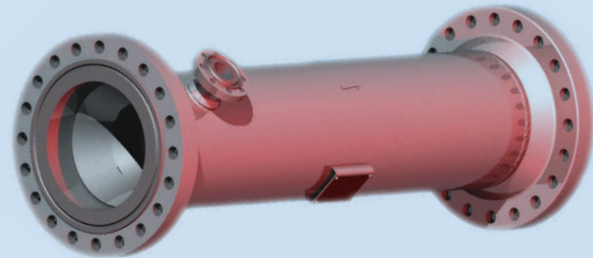
- 30–40% reduced scavenger consumption
- Cost-efficient compared to other offshore H₂S removal processes
- Reduced chemical transportation, handling and storage costs
- Efficient even with high flow variations
- Compact inline system, easy to install at any pipe angle

STATOILHYDRO ÅSGARD B PLATFORM

As part of the qualification program for ProScav, ProSep's contactor was installed on a 24" gas line for a demanding high pressure and temperature application. The inlet H₂S concentration was 7 ppmv and needed to be reduced to below 2.5 ppmv. ProScav managed an outlet of 0.5 ppm, which reflects a very efficient use of the injected scavenger. Compared to a quill or nozzle injection, this represents a 35% reduction in chemical consumption with the corresponding OPEX savings related to logistics, storage, handling and pump capacity.

In 2001 Statoil (now StatoilHydro) reported in a letter to the Norwegian Pollution Control Authority SFT:

"... the installation of the ProSep contactor at Åsgard B achieves a reduction in chemical consumption of more than 35%."



REFERENCES

Available upon request.

FOR MORE INFORMATION

Contact your nearest ProSep office
www.prosep.com

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, C-Tour and ProSalt.

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