

PROCLEAN SYSTEM FOR SAND REMOVAL



Together creating pure
oil, gas and water.

Since accumulation of sand can interfere with the oil treating process and become detrimental, sand removal is an important function in many primary separation vessels, FWKOs, and treaters.

Most crude oils contain varying quantities of solids and heavier, more viscous oils carry additional entrained solids from producing formations. Accumulations of such solids may cause firetube failures, plugged nozzles, and obstructions that disrupt flow patterns and vessel operations.

Managing the build-up of solids is essential to trouble-free operations. Through efficient removal techniques and optimized sequencing, operators will appreciate substantially simplified annual plant turnaround activities. Frequent shutdowns for cleanout and their resulting production losses will cease to be an issue.



Typical Sand Jet Dump Station. Multiple sand jet / dump stations provide for calibrated solids removals sequencing.

FEATURES

ProClean's efficient automated solids removal system design addresses these important objectives:

- Prevent disruption to the steady-state process
- Prevent large accumulations that may be difficult to remove
- Operate reliably (automated rather than operator-dependent)
- Reduce corrosion and abrasion damage caused by solids build-up
- Minimize use of jetting fluids
- Adjust for actual solids loading

PROCLEAN DESIGN

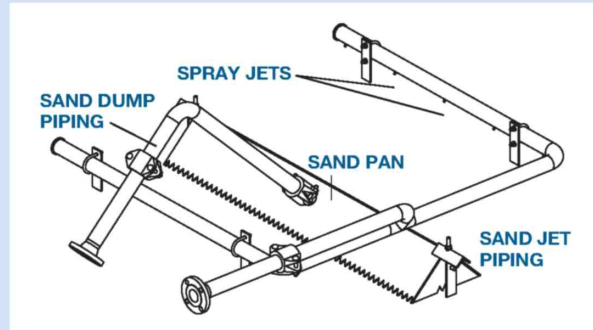
Developed through years of field experience, ProClean accomplishes its objectives with these features:

- Multiple stations for localized, targeted removal
- Jetting fluids that direct solids into the individual sand pan area of influence
- Independently operating stations
- Brief duration jet / dump cycles calculated for optimum vessel maintenance
- Minimal jetting requirement for flushing clean
- Process stability with automation
- Optimized placement of components for longevity

COMPONENTS

The primary components (i.e., the sand pan and dump piping and the jet wash piping) of the ProClean solids removal system are bolted in and completely and easily removable from the vessel. The individual station control valves are externally mounted (not shown) and operate simultaneously. An adjustable PLC panel controls the individual stations to match exact process requirements.

Other sand removal systems typically consist of a single jet wash / dump assembly operating over the full vessel length which consumes excessive jet wash water while disrupting vessel interface levels. With the ProClean system, the operator can better control the solids removal process by being able to calibrate the operating frequency and sequencing of the independent stations to match actual solids deposition.



Vessel cutaway. ProClean solids removal system's sand jet / sand dump (pan and piping) assembly is easy to install.

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, CTour and ProSalt.