

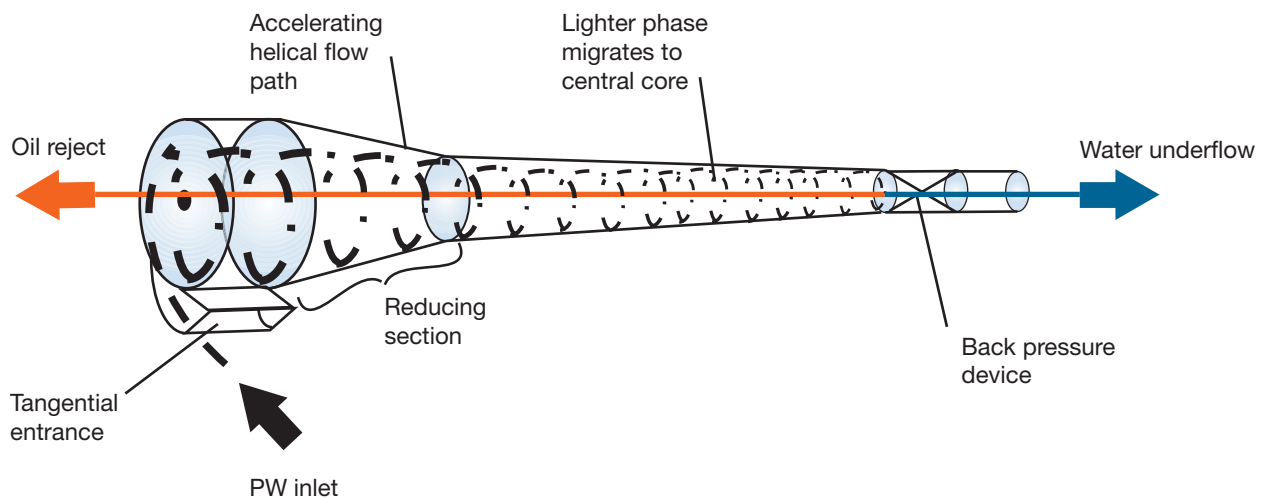
PROSPIN HYDROCYCLONES



Together creating pure oil, gas and water.

As part of effectively treating large volumes of produced water, the ProSpin hydrocyclone separates liquids that have different densities, especially oil and water, by taking advantage of gravity and centrifugal forces. The ProSpin hydrocyclone is an excellent primary separation solution in most offshore applications where sufficient process pressure is available, since it has a small footprint and is highly efficient at separating free oil from water.

PROSPIN FLOW PATH

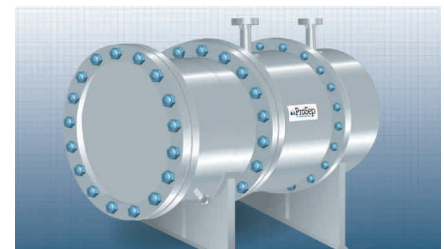


FEATURES

- Customizable size and materials
- Minimal maintenance
- Small footprint
- No external utilities
- Good turndown
- Quality construction
- No moving parts
- Motion-insensitive
- Simple controls
- No chemicals

OPERATING PRINCIPLES

With sufficient pressure from the separator or a pump to serve as a driver, the hydrocyclone takes in oily water at the tangential entrance and moves it through the reducing section. The fluid travels through the narrowing chamber, flowing along the walls and accelerating as it progresses, developing forces that are needed to separate the oil from the water.





The denser fluid moves to the walls of the hydrocyclone and is removed at the downstream fluid outlet (underflow). The less dense fluid is drawn into the low-pressure core and, by applying a back pressure to the outlet, flows back up the hydrocyclone to be removed at the upstream outlet orifice (overflow).

The ProSpin is unaffected by ship or platform motions and delivers typical removal efficiencies of 85-95% of all oil droplets >12-15 microns with effluent quality of 25-100 mg/l OiW.

APPLICATIONS

UPSTREAM PRODUCTION

- Produced water treatment for re-injection or disposal
- Bulk water removal
- Pre-separation ahead of an IGF or DGF

DOWNSTREAM REFINING AND PROCESSING

- Desalter water processing
- API separator replacement
- Ethylene quench water treatment

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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