**PRESS RELEASE**

Placing SA at the global forefront of oily water separation technology

***06 October, 2014:*** *The highly-advanced and proudly South African ProSpin oily water separator marks a new era for industrial operations, which can now achieve the highest standards of internationally-recognised discharge limits, while supporting and promoting the localisation of technology that has been traditionally imported to date.*

Through its commitment to the localisation of the ProSpin oily water separation solution, leading environmental management expert Procon Environmental Technologies is offering world-class technology at significantly lowered costs, with substantially reduced turnaround times.

Procon founder and Director of Sales & Business Development **Andy Miller** emphasises: “Local manufacture and distribution offsets the effects of volatile exchange rates and eliminates the need for time-consuming shipping. The ProSpin solution offers considerable local benefits without compromising on efficiency and reliability.”

Miller indicates that ProSpin is based on HiPer hydrocyclone designs that use strong centrifugal forces to separate oil and other contaminants from water. “The product range includes pneumatic engineered solutions for 3 m3/h to 9 m3/h of oily water flow, as well as electrical engineered solutions dealing with flows from 3 m3/h - 100 m³/h and upwards.”

At the core of this advanced technology is multi-port entry in the hydrocyclone, which allows for greater separation, when compared to the older two-port entry hydrocyclone. Miller states that contrary to tangential or axial cyclones, ProSpin uses a mixed flow principle which results in a stabilising and coalescing effect on the oil-water flow.

“All available pressure energy is converted in the rotating motion responsible for separation. As a result, common negative effects in conventional cyclones, such as boundary layer disturbances and flow-destabilisation, are eliminated,” he says.

According to Miller, aero-engine fluid mechanics were used for designing the swirl element. “The shape of the swirl is such that the coalescence of light phase droplets is achieved in the first section of the swirl element. In the second section of the swirl, stabilising assures that the flow maintains stability without re-mixing the pre-separated flow.”

Finally, in the third section of the element, the G-force is increased to more than 1000 G’s to avoid boundary layer separation and other losses in the specially designed tapered section. The total result is a cyclone which ensures the highest possible efficiency in combination with the lowest pressure drop.

ProSpin hydrocyclone technology is able to remove 95 per cent of 10 to 15 micron oil droplets from the water. Greater hydrocarbon removal can be achieved by combining Procon's unique Mycelx filtration with the ProSpin oily water system to give a new dimension to oil water separation solutions. After using ProSpin to remove the majority of oil, Mycelx is installed afterwards to filter out the remaining hydrocarbons that the ProSpin is unable to remove. Upon contact with MyCelx, oily pollutants in the water bond immediately and are permanently attached to the filter media.

Mycelx instantly removes 99.9 percent of hydrocarbon contaminants in a single pass, even at high flow rates. What’s more, the system is environmentally sound, and never releases a hydrocarbon chain once in contact with Mycelx. It permanently binds slightly soluble organic compounds and colloidal metals, and will not release pollutants due to its visco-elastic nature. This guarantees that Procon clients will be able meet the national discharge standard of less than 2.5 parts per million (ppm).

Before the in-house development of ProSpin, Procon had supplied and installed more than 300 Ultraspin oily water separation systems across Africa, and Miller stresses that the company remains committed to servicing and maintaining these systems as part of its value-added offering to its clients via its in house service team.

A number of high-profile mining operations, including; BHP Billiton, Exxaro Resources and Glencore Xstrata have already placed orders for the ProSpin oily water separation solution. “The high separation efficiency, low pressure drop, and low maintenance of the system is a major advantage for local operations seeking to meet discharge limits. As a result, I am confident that ProSpin will gain measurable market share in the near future,” Miller concludes.

***Ends***

**Notes to the Editor**There are numerous photographs specific to this press release. Please visit <http://media.ngage.co.za> and click the Procon Environmental Technologies link.

**About Procon Environmental Technologies**  
Today more than ever before it is the responsibility of companies and their employees to be aware of pollution and its environmental consequences. While the first principle of environmental management is that prevention is better than cure, accidents and spills do happen. It is for this reason that Procon Environmental Technologies was established in 1993. We offer a full scope of Environmental Products & Technologies, specialising in systems that minimise the impact of contamination on the environment and surrounding areas. The company has secured exclusive partnerships with international companies that are world leaders in their field of expertise.

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