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# PRESS RELEASE

## DIAKONT'S UNDERWATER ROBOTIC DECONTAMINATION SERVICE FEATURED IN NUCLEAR PLANT JOURNAL AS A DOSE AND TIME SAVING SOLUTION

FOR IMMEDIATE RELEASE

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San Diego, California – Diakont's underwater robotic decontamination service was featured in the [September-October issue of the Nuclear Plant Journal](#) as a dose saving, more efficient solution. Diakont used the robotic decon solution to clean and decontaminate the refueling cavity, dryer and separator pools for a North American nuclear power plant. Historically, nuclear plant operators have conducted cleaning and decontamination of these surfaces manually, after draining water from the space. However manual decon is slow, and can result in excessive personnel dose exposure. Diakont's underwater robotic decon services present a vast improvement over manual decon because it reduces personnel dose exposure, reduces radwaste, doesn't impact plant chemistry, and doesn't risk inadvertently spreading contamination. Also Diakont's decon method avoids the risk of personnel injury and component damage associated with hydrolasing. And by performing the decon robotically while the cavities are flooded, in many cases the critical path outage schedule can be shortened.

Able to decontaminate horizontal, vertical, and curved surfaces, Diakont's tools easily navigate to areas within flooded cavities that are inaccessible to previous solutions, performing decon in parallel to other activities including fuel movement. Also, unlike other legacy solutions, the Diakont tools do not require continuous use of an overhead crane or other method of suspension while performing the decon activities.

The ROV-type decontamination tool attaches and drives along the cavity and component surfaces using a high-force, no-flow vortex generator, even in the presence of Residual Heat Removal (RHR) or shutdown cooling flow. Efficient, effective cleaning is performed using a rugged brushing action to detach the crud, while vacuuming it away at high flow rates to a submerged filter.

During the refueling outage, Diakont's decontamination services were so effective that no additional manual cavity decon was required after drain-down. Using the tool's ability to swim,

attach, and crawl, Diakont decontaminated the majority of the surfaces designated by the plant operator. Preliminary surveys indicated that all contamination levels were reduced to <50K dpm/100 cm<sup>2</sup>, helping the utility meet their INPO/Industry collective radiation exposure goals.

### **Applications**

Diakont cleaning and decontamination services are ideal for servicing various underwater areas within nuclear power plants:

- Refueling cavity
- BWR-6 drywell head, and other curved surfaces
- Equipment pools/pit
- Spent fuel pool
- Cask loading pool
- Fuel transfer canal

“Diakont’s remote decontamination service helped the plant operator meet the INPO/Industry collective radiation exposure goals,” says Jacco Goemans, Director of Nuclear Solutions for Diakont. “Diakont’s decontamination system provides crucial decontamination services in a safer, more efficient manner.”

### **About Diakont**

[Diakont](#) is a leading designer, manufacturer and provider of high-technology products and services for the nuclear power industry, providing radiation-tolerant cameras and robotics, as well as inspection, maintenance and repair services for plants of all designs. With a mission of enhancing safety while improving the overall efficiency of the nuclear industry, Diakont has been deploying state-of-the-art robotics and world-class service to solve inspection and repair challenges for over 25 years.

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