



## Remote Robotic Cavity Cleaning and Decontamination Services

### Outage Services Partner

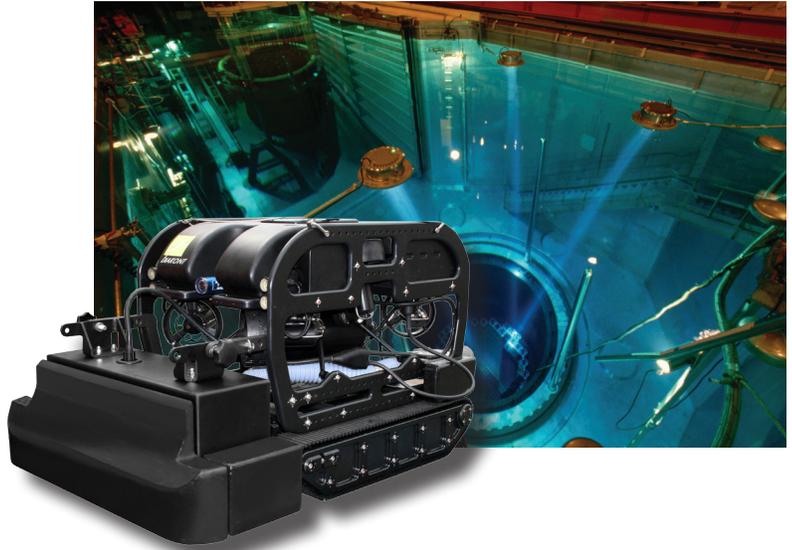
Diakont is pleased to deliver advanced underwater cleaning and decontamination services for reactor cavities. This service is performed using innovative robotic tooling to deliver safe, efficient, remote cleaning and decontamination of the refueling, component storage, spent fuel, cask loading, and other cavities, while flooded. The robotic cleaning can be performed in parallel with other operations, and can reduce both personnel dose exposure and critical path schedule duration.

### Flexible Mobility for Maximum Efficiency

The key functional element of the Diakont cleaning tool is a hybrid crawler-ROV with an integrated cleaning system, remotely operated by a small team of Diakont field technicians from a control station on the perimeter of the refueling floor. Only a single technician is required at the side of the cavity, to belay the umbilical. The tool transitions seamlessly during operation between ROV "flying" mode and cleaning "crawler" mode, for maximal deployment flexibility and bridge-free operation. No adjustments to the tool are required during operation, including when transitioning between cleaning the cavity floor, walls, and complex shapes such as a drywell head. The tool attaches and drives along cavity and component surfaces using a high-force, no-flow vortex generator, even in the presence of RHR or shutdown cooling flow. Efficient, effective cleaning is performed utilizing rugged brushing action to detach the crud, while vacuuming it away at high flow rates to a submerged filter.

### Purpose-Designed, Built, and Proven

The tooling utilized by Diakont for cleaning and decontamination leverages mature, nuclear-proven, FME-compliant modules and meets or exceeds EPRI and industry-standard FME guidelines for nuclear plants.



Hybridized crawler/ROV cleaning decon tool

### Diakont Services Advantages

Partnering with Diakont for your cavity cleaning and decontamination operations can result in:

- Minimizing or eliminating the need to put personnel into the dry cavity to perform manual brushing, reducing personnel dose exposure
- Reducing critical path by conducting the decon while flooded, in parallel with fuel movement and other tasks
- Improved cleaning coverage that results in cavity dose reduction, through the use of automation rather than relying on personnel performing the task manually

Robotic cavity cleaning is yet another example of plant operators leveraging Diakont's trusted track record for innovation excellence to reduce schedule, dose, and risk. For more information about using these services at your next refueling outage, please contact Diakont today.

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