



# BWR Torus Inspection Service

- Comprehensive assessment of BWR torus coating condition
- Reduced dose exposure for personnel
- BWR torus coating inspection results recorded to a database for condition comparison between outages

## Innovative Inspection Service

Diakont offers high resolution torus inspections within BWR nuclear power plants using remotely operated underwater vehicles (ROVs). The current method for examining the torus lining below the water level requires divers to manually perform visual inspections. This method is costly, time consuming, challenges the utility's ALARA goals, and is inherently unsafe.

Diakont's torus inspection ROVs are hybrid robots that operate in swim and crawl modes. The robots generate a vortex with built-in fans for adhesion to the torus wall without disturbing sludge. Diakont ROVs are equipped with high-definition color PTZ cameras that meet VT-1 standards. Using this visual inspection equipment, Diakont's torus inspection ROVs provide digital records for trending and comparison during future refueling outages. The deliverables from each inspection include real-time disposition of findings, a comprehensive inspection report, and video recordings.

## Ease of Deployment

Diakont's compact inspection ROVs are easily deployed into the torus through the man way hatch, and the umbilical reel is clamped to the catwalk. All positioning and operator stations for controlling the ROVs are located outside of the radiation controlled area (RCA). The ROVs are also equipped with emergency retrieval capabilities, completely eliminating the need for personnel to enter the torus.



## Benefits

Nuclear utilities that use Diakont BWR torus inspection services significantly reduce inspection costs, duration, schedule risk, and personnel dose exposure, while increasing nuclear safety. These utilities also gain valuable inspection data for comparisons during future outages.

## Your Solutions Partner

Diakont's expert team of experienced robotics engineers and NDE technicians will partner with your plant's outage management and maintenance department to perform comprehensive BWR torus inspections within your outage time frame.