



# REMOTE WELDING ROBOTICS

SOLUTIONS:  
Remote Repair

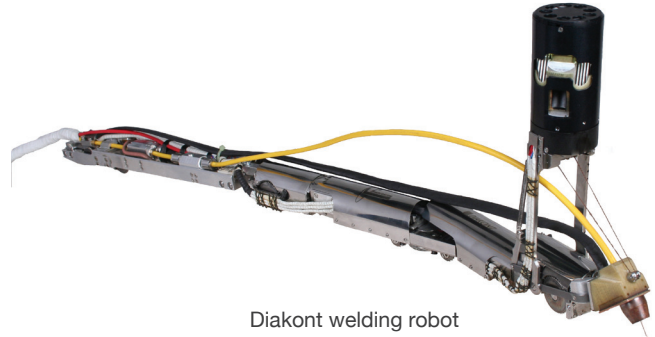
- World's only remote robotic nuclear welding system of its type
- Combination delivery, work, and inspection robot
- Carbide-studded drive wheels for firm traction even on slick surfaces
- Radiation-hardened for operation anywhere
- Built-in camera, EMAT UT inspection probe, grinding wheel, and welding

## Do the repair on your own schedule

Conducting a welding repair within the reactor environment is not something that should be rushed. To alleviate the dose hassles associated with using a personnel and lead shielding, Diakont has perfected a robotic system for performing remote welding in high-radiation areas.

## One robot does all

The principal component of the system is the SDC Robot, which functions as both the delivery vehicle and the tool. It is a radiation-hardened magnetic crawler, resembling the form factor of a snake. It is umbilical-deployed to nearby the subject position, and then crawls along a horizontal, vertical, or curved surface to the work site. It can navigate through bores as narrow as 2.1", and over bumps at high as 0.4". Once the SDC arrives at the subject position, an onboard radiation-tolerant camera deploys to survey the area, and facilitate operation. Then a grinding wheel preps the surface for welding. Following the automated weld process, an EMAT UT array performs a volumetric exam on the weld to validate results and thickness.



Diakont welding robot



Deployment station with welding rod pusher

### USA

Diakont Advanced Technologies  
3821-C Calle Fortunada  
San Diego, CA 92123 USA  
+1-858-551-5551 phone  
sales@diakont.us.com

### RUSSIA

ZAO Diakont  
Uchitelskaya St. 2  
St. Petersburg, Russia 195274  
+7-812-324-6637 phone  
sales@diakont.com