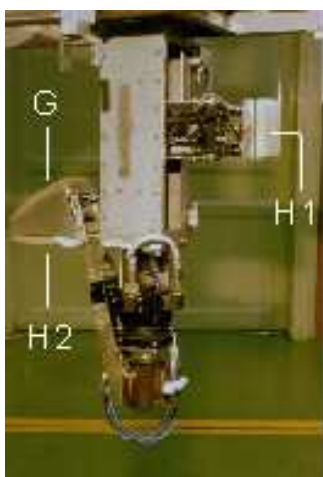


Robotics to minimize the exposure of maintenance personnel

Automated equipment for the decontamination of the Main Gate Valve



Theory in motion: the equipment in test operation



Application-specific heads for MGV housing

The dose exposure of human personnel during maintenance in the nuclear power plant is one of the key factors to be minimized.

The automated machinery is able to clean most of the inner surfaces without human intervention at the site. The robot can be lifted into position with the overhead crane and can be supervised from a remote location.

The equipment is in regular use during the preparation of the preventive maintenance activities at the Paks NPP.

Advantages

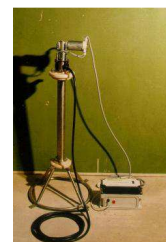
- Minimizes human dose exposure
- Remote monitoring station with signal and camera feedback on the progress
- Proven task-oriented design

The cleaning technique is a proprietary technology. The automated process has been developed after successive tests with manual devices.

Technical information

- Regular complete decontamination cycle around 3,5 hours
- Autonomous cleaning of 70% of the Main Gate Valve housing
- Remote operator station for monitoring with camera feedback
- Electrolyte consumption: 20-25 l / cleaning run
- Adjustable technological parameters (current, contact force)
- Cleaning heads and their manipulation is adopted by design to the geometry to be cleaned.
- The 'deco factor' of the equipment is 1-2 order of magnitude better than that of the manual techniques.

The MGV cover upper part can be cleaned by manual devices that incorporate the same or similar technologies as the automated equipment



The automation approach applied in this equipment has been successfully used in other automated cleaning devices and manipulators in restricted areas.

For further information or demonstrations please call Mark Petrik at +36 23 382 853