

BNL ALARA CENTER**Processes and Practices Related to Occupational Dose****ID: 1****REMOTE HANDLING MACHINES FOR BWR CONTROL ROD DRIVES****Keywords:** REMOTE CRD HANDLING MACHINE; CONTROL ROD DRIVES; REMOTE TOOL & DEVICES; REMOTE MAINTENANCE**Description:**

Hitachi offers a remote handling machine which provides remote, semi-automatic means of positioning CRDs, loosening or unloosening multi-bolts, and transferring CRDs from the reactor pedestal area. The device also provides for reactor water drainoff without splashing, which would reduce contamination of nearby equipment and personnel.

The machine can be operated by two people; one at the control console in a low-radiation area, and another inside the pedestal area as needed. Hitachi claims labor savings of 50 to 60%, job time reductions from 20 to 25%, and about 80% dose savings.

Toshiba offers a similar device. They claim 68% labor saving, 60% dose saving, and 25% reduction in job time. Remote handling machines for control rod drives have improved efficiency and reduced dose associated with CRD changeout at Japanese BWRs.

References and Selected Abstracts:

Being compiled.