

## DYNAMIC MANUFACTURING SOLUTIONS LTD NUCLEAR EXPERIENCE

Dynamic Manufacturing Solutions Ltd (DMS Nuclear) through their employees demonstrate a wealth of experience within the Nuclear Decommissioning market.

A selection of previous projects undertaken by our staff include:

### WOMAD EAST

Removal of active sludge from storage tanks and filling of stainless steel drums at Winfrith Dorset. Complete Control System including design, draughting, build of PLC and MCC panels, control sequence descriptions, testing at works, site test and commissioning. System included drum import via double shield doors, drum filling and mixing stations, drum transporters, capping/grouting stations, drum lidding, gamma monitoring, drum rework / maintenance and drum export.



### Sellafield Local Sludge Treatment Plant

Undertook production of outline equipment specifications, MHD's, MFD's, and DPD's relating to the transfer of product drums through the encapsulation line, including all conveyors, transfer devices, shield and containment doors.

### Waste Retrieval Machines Berkley

Hydraulic manipulators with a reach of over 15 metres, used to remove low level nuclear waste from active vaults. Sensors include angle potentiometers, linear wire pull potentiometers, pressure and inductive proximity switches. The machine was controlled via joysticks from an Operator Desk. Allen Bradley PLC for analogue and digital I/O and hardwired interlock circuits.

### Sellafield Treatment Plant

Undertook production of outline equipment specifications, MHD's, MFD's, and DPD's relating to the encapsulation cave, including shield doors, box lidding machines, grout filling machines, transfer bogies, decontamination stations, monitoring areas, curing areas and holding areas.





#### **AWE**

Undertook review of decommissioning strategy of glove box decommissioning to improve waste strategy and implement new technology to the process thus providing extensive savings in time cost and dose.



#### **AWE**

Design and supply of specialist equipment as part of rekits project Aquarius, that included RF Glove Port Bag Welders, canning and vacuum leak detecting systems and glove box drill safety systems. All to support operations.

#### **Sellafield HANO Cell**

Undertook the tie down of an eight floor cell using aerosol technology to reduce the contamination from C5 to C2.

#### **Hunterston A Fuel Pond Fuel Rod Loading Machine BNFL**

Fully automated tri axis positioning system for loading 5 metre long fuel rods into a 25x25 array storage magazine. The system utilised Control Techniques brushless AC servo drive system. Accuracy and repeatability to within 0.05mm. Absolute encoder interface. MINT programming and RS485 interface to Allen Bradley PLC.

#### **Fuel Rod Loading Machine BNFL**

Fully automated tri axis positioning system for loading 5 metre long fuel rods into a 25x25 array storage magazine. The system utilised Control Techniques brushless AC servo drive system. Accuracy and repeatability to within 0.05mm. Absolute

encoder interface. MINT programming and RS485 interface to Allen Bradley PLC.

The concept for removal and grouting of Aluminium fuel skips using Nitric Acid and high density resin coatings.



#### **DRSL Dounreay Beach Particles**

Specified and provided the Type A containers for the transport of the fuel fragments found on the sea bed and associated beaches.

#### **Iglinnia Nuclear Power Plant**

Undertook the writing of the decommissioning strategy for the Unit 1 turbine hall.