Safety and integrity maintained through delivery of shielding, sealing, drive and locking mechanisms

We have undertaken a number of projects over the years requiring the development, design, manufacture, refurbishment and installation of fit-for-purpose doors and hatches.

High Active Cells

In order to develop methodologies for active substances a national research and development centre was developed at Sellafield. We have been involved in a number of stand-alone packages within the high active area, one of which was a 32Te Sliding Shield Door shown here being handled in our facility in Chorley.

Border security X-ray protection

Other than nuclear we also operate in a number of other sectors including that of border crossing security.

We have developed with our clients a number of different systems for X-raying cargo from air or sea freight housed in transport

containers or freight vehicles (lorries). These systems typically process the cargo at relative high speed in a production type process in order that the significant volumes can be processed.

Part of our supply for these systems is shielded housings and doors which we must ensure are electrically interlocked with the X-ray system.

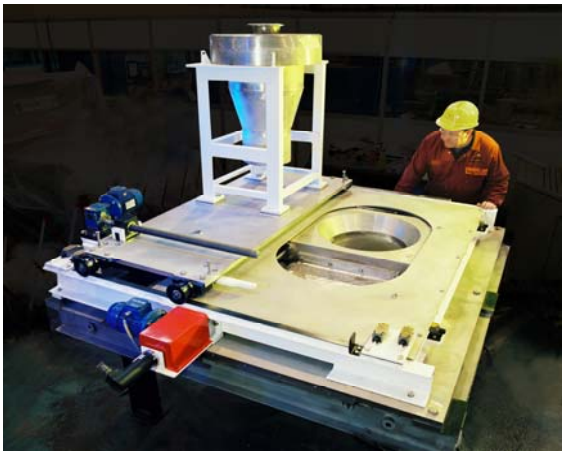
Doors and Hatches Experience

Submarines

As well as vertically standing doors we have supplied a number of horizontal sliding hatches which operate with a high level of accuracy and integrity. The system shown here was designed to the highest standards to enable the safe defueling of submarines.

REF - Revised Export Facility for High Active Waste Sellafield

We carried out the design and supply of in-cell plant and equipment which included a significant number of personnel and equipment access doors and hatches.



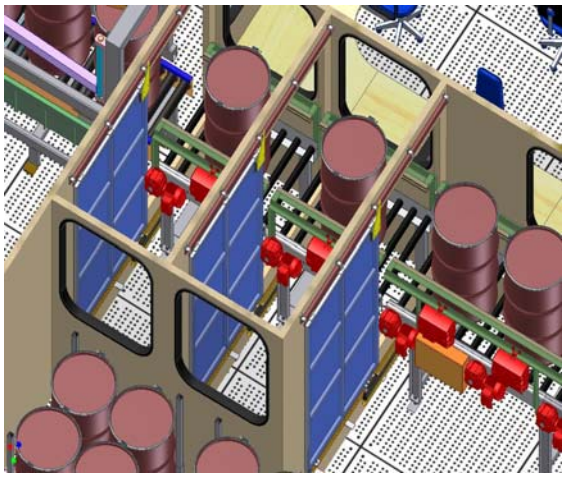
B41Silo Seal & Shield Door

The current option identified for the retrieval of waste from a silo at Sellafield involves cutting penetrations into the silo walls for equipment deployment and waste retrieval. NIS carried out work to prove the ability to keep the silo inert in general operation and fault seismic conditions. The current concept for silo sealing is to provide a door arrangement.

Doors and Hatches Experience

Treatment Plant Doors

Part of the process for this decommissioning project is the segregation of drums to allow containment to be maintained when the drum contents are exposed. The doors are designed to allow various interlocking routines with other parts of the process and to prevent crushing of the drum when it passes through the system.



Containment Doors

In order that personnel are not exposed to the effects of radiation a Safety Interlock Level design process has been completed by NIS.