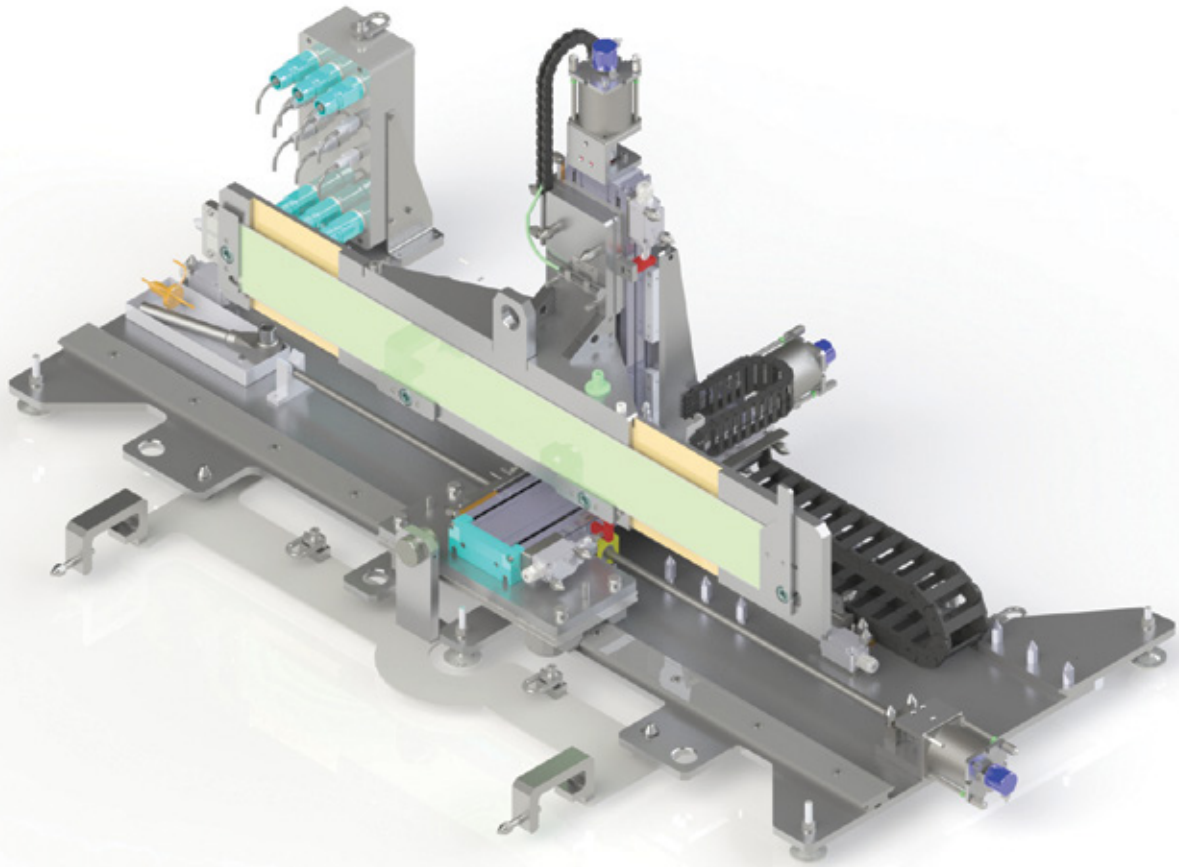


cyclife aquila nuclear
EDF GROUP

Gamma Scanner Sample Handling Rig & Control System

Client: National Nuclear Laboratory (NNL)

Remote Handling

Aims and objectives

There were two main aims in designing a new gamma scanner sample handling rig. Firstly, to integrate the detector system at the cave face without impeding operation of Master Slave Manipulators or other cave face operations. The second was to eliminate background noise from the high dose cave inventory.

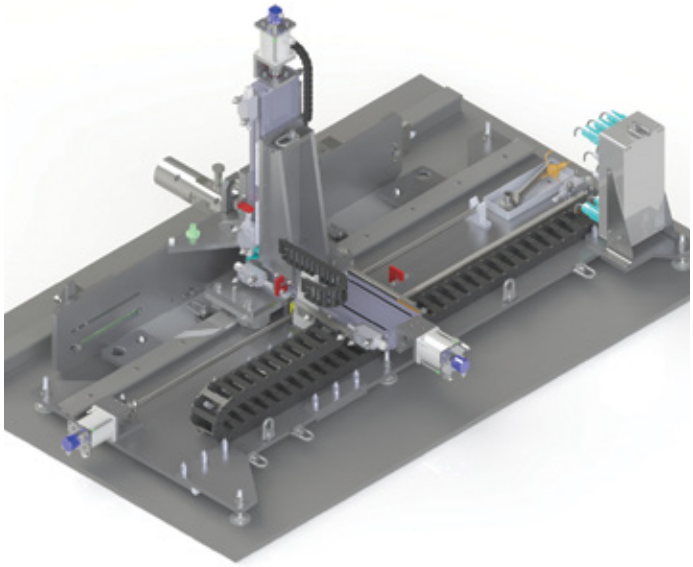
01

Project overview

The scope of work for Aquila, included a site survey, scheme design, detailed design, manufacture, testing and delivery of a Sample Handling Rig and Control System which integrates with the NNL designed, gamma scanner service plug.

During scheme and detail design, areas addressed which were fundamental to the operational functionality of the system included

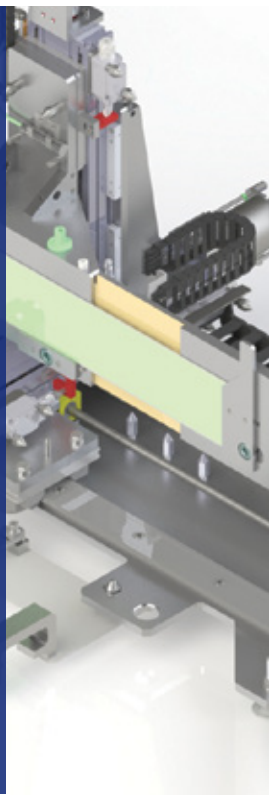
- Articulation requirement for XY and Z movement
- Component loading in cell
- Accommodate a range of component sizes and weights
- Clamping arrangements for use with Master Slave Manipulators
- Posting in/out cell arrangements
- Drive motor selection for XY and Z movement together with methodology for replacement



02

Summary

During the tender process Aquila designed a system in 3D solid works to meet the functional specification. This not only allowed us to de-risk the design from a functional aspect but also enabled accurate estimating so that we could provide a fixed price solution



Contact us

T: +44 (0) 1962 717 000
E: info@cyclifeaquila.com

www.cyclifeaquila.com