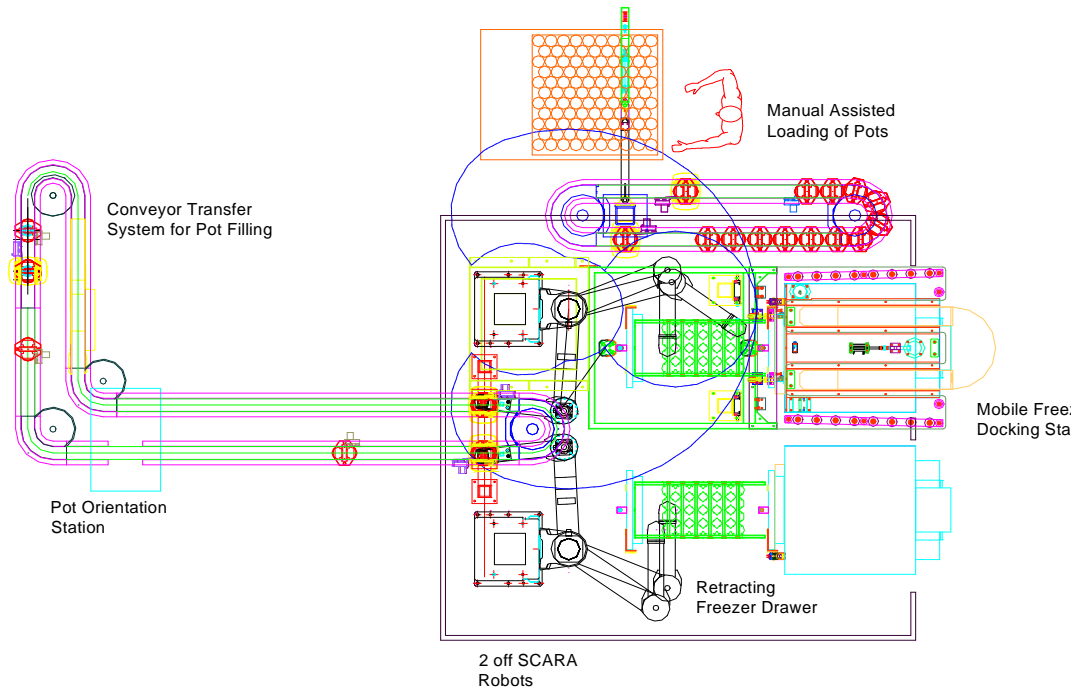




# Medical Handling System

*Radiopharmaceutical Drug within a Vial, housed in a Lead Pot*



The special purpose automatic system was designed and manufactured for the automated handling of lead pots that contained radioactive vials. **TQC Medical** were involved from feasibility study through process validation exercises and then into the full engineering of the automation system to result in a fully accepted facility.

The radioactive drug needed to be chilled to below  $-23^{\circ}\text{C}$  within a short space of time. Due to the temperature and the radioactivity of the product it was important that during the process the product was away from human contact.

The storage of the product was remote to the production area, which needed **TQC** to develop a specially designed mobile freezer system. **TQC** provided full project management facilities integrating robots, conveyor systems, pallet docking stations, mobile freezers, control system etc all within a GAMP 4 compliant project.

**TQC Medical**

A Division of TQC Ltd  
Hooton Street  
Nottingham NG3 2NJ

[www.tqcmedical.com](http://www.tqcmedical.com)

Tel: +44 (0) 115 9503561  
Fax: +44 (0) 115 9484642  
Email: [sales@tqc.co.uk](mailto:sales@tqc.co.uk)

© TQC Ltd





## Medical Handling System

*Radiopharmaceutical Drug within a Vial, housed in a Lead Pot*



The system process involves docking of an empty mobile freezer unit, this is then filled with empty pots. The pots are then chilled to the storage temperature.

Once the freezer is full of empty pots, the robot can open the mobile freezer drawers, and sequentially unload each pot and place the pot onto a transfer conveyor. After pot filling, a second robot loads a second mobile freezer with the pots in a reverse operation.

This complete process is carried out to tight timescales to ensure the product is swiftly chilled and the low temperature is maintained.

- Fully Automated Production Facility for the Medical Industry
- GAMP 4 Compliant Project
- Clean Room Environment
- Automated Heavy Lead Pot Handling
- Comms for MIS
- Radioactive Product at Low Temperature
- Toshiba SCARA robotic handling
- Robot Payload 14Kg
- Product Storage at below  $-23^{\circ}\text{C}$
- Flexlink conveyor system
- Touch Screen HMI terminal with Allen Bradley SLC5/04 PLC and Controlnet Flex I/O
- Barcode reading & product tracking and colour recognition



### TQC Medical

A Division of TQC Ltd  
Hooton Street  
Nottingham NG3 2NJ

[www.tqcmedical.com](http://www.tqcmedical.com)

Tel: +44 (0) 115 9503561  
Fax: +44 (0) 115 9484642  
Email: [sales@tqc.co.uk](mailto:sales@tqc.co.uk)

© TQC Ltd