ATKINS

Member of the SNC-Lavalin Group

Mobile, Autonomous Sort and Segregation

Our Team

- Part of the UK's High Value Manufacturing Catapult,
- Expertise in robotics and automation.
- Vision system, object recognition and grasping.

- Robotics and automation solutions for industry.
- Designed and manufactured the main MASS rig; modular frames, robot, PLC, mock sells and interfaces.

- Radiometrics specialists.
- Radiometric system specification and calculations to enable representative demonstration.

- World leading design, engineering and project management consultancy.
- Lead project delivery and expertise in nuclear decommissioning to guide the final solution.
- We're building a growing portfolio of successful active demonstrators, including:

Skip Size Reduction Facility

Alpha Active Demonstrator

Scan the QR codes, or click, to view video's of our AD's

Key features of MASS

Autonomous and safe with machine learning and assurance.

Resilient and capable using an industrial robot with high reach and payload

Modular and can be configured to suit site specific challenges

Utilises COTS technology that is reliable and easy to maintain

Easy to relocate with forklift-ready pallet sized cells

Independent vision system enabling parallel tasks for increased throughput
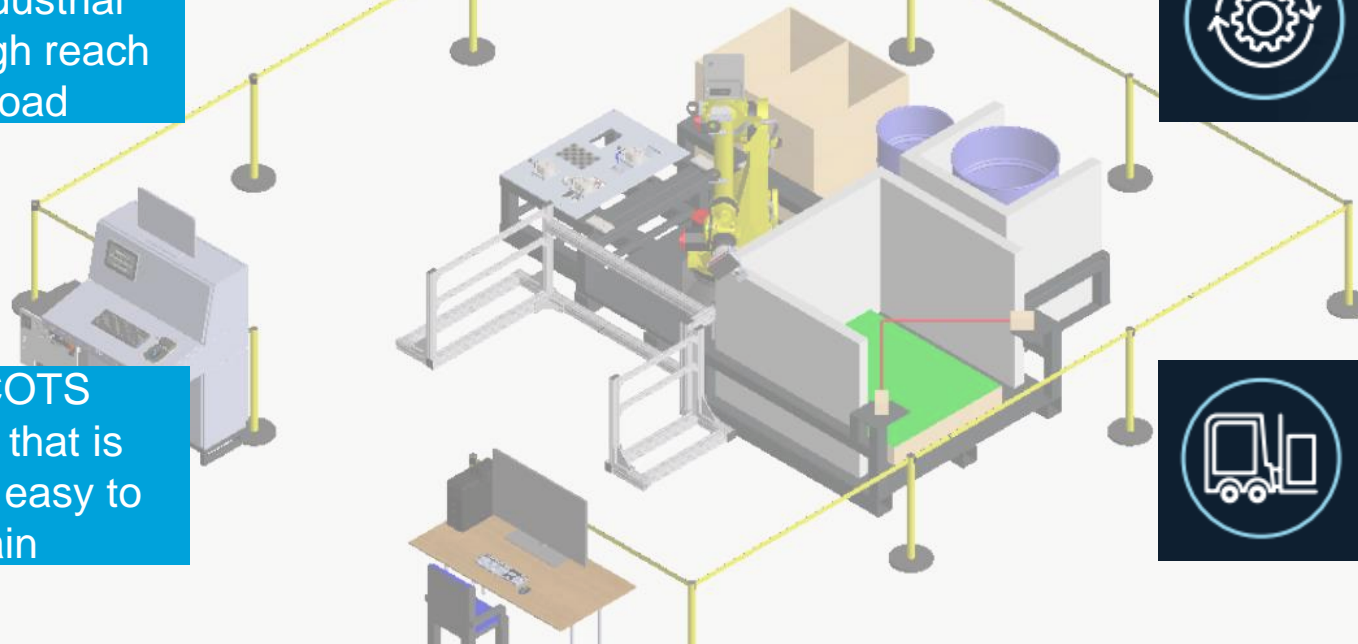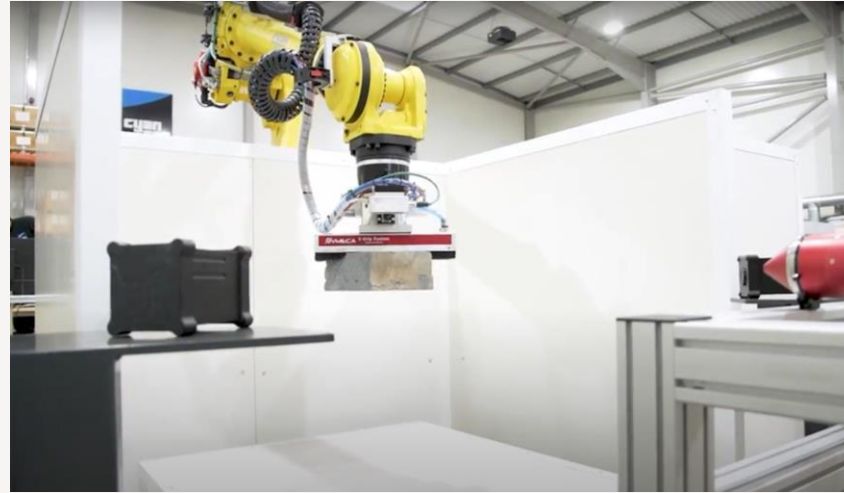
Main Steps

Identification and Grasping

- Imaging
- Object labelling
- 3D fused image
- Identify grasp and gripper
- Object weight, volume and surface area measured

Monitoring and Classification

- Shielded area
- Radiological monitoring (dose, spectrum, neutron)
- Chemical analysis
- Object sentencing

Waste Container Loading

- Shielding for higher dose waste
- Container packing algorithm
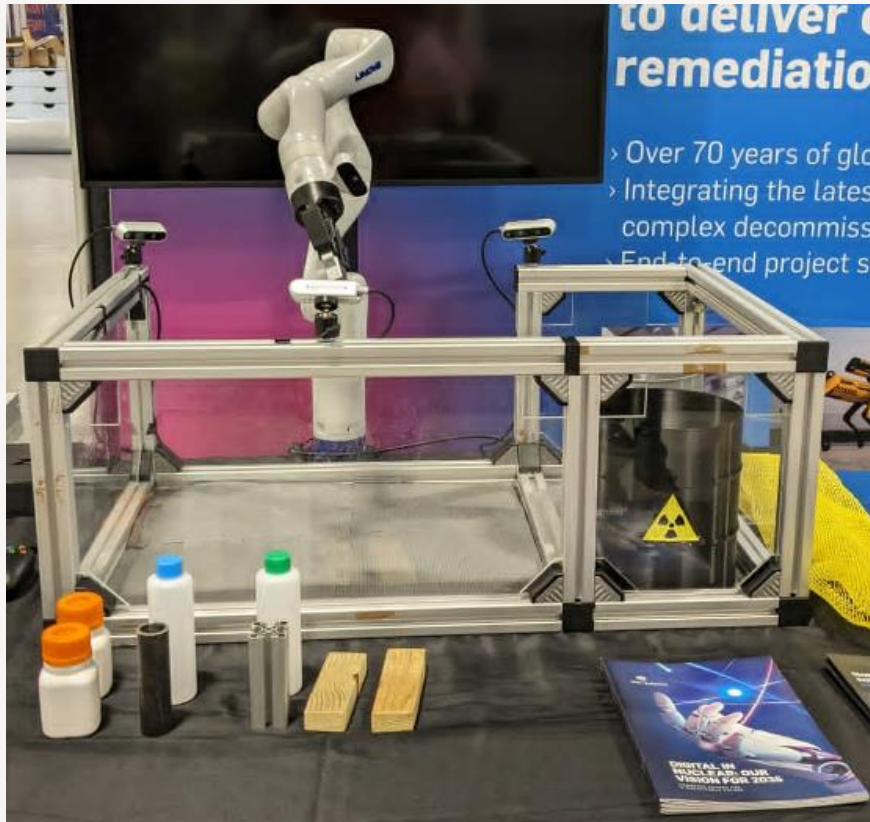- Waste records for object and container

Click the link below to see our MASS video demonstration

https://bcove.video/3KjyUQP

Visit our stand

- See our table-top MASS demo, **miniMASS**

- Let's talk about your challenges and how our technology portfolio could help

Platforms and vehicles to deploy robotics into hazardous areas	**Cameras and scanners** to aid operators and autonomous robots
COBOTS, containment solutions & tool control to improve safety	**Control** for intuitive teleoperation
Digital twins for rehearsing, and pre-programming robot routines	**Object recognition and grasping AI** for autonomous operations
Industrial robots and automation for material handling	**Laser cutting modules** for size reduction
Drones & Quadrupeds (SPOT) for remote surveys & operations	**Reality capture and BIM** for SL approved virtual site access

Scan the QR code, or click, to view our SPOT video demonstration

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Contacts

MARK WICKENS

ROBOTICS PROGRAMME DIRECTOR

Mark has over 30 years of experience in the nuclear industry and has been developing robotics for remote waste retrieval since the 1990s'. Most recently, Mark has project managed the Atkins portfolio of robotics projects.

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ROBERT MARWOOD

ROBOTICS TECHNICAL DIRECTOR

Robert has over 13 years experience of delivering complex nuclear decommissioning projects at Sellafield Limited. Since joining Atkins he has led the engineering teams for the Atkins portfolio of robotics projects.

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