



The Environment

With ever increasing energy costs, there is a growing emphasis within manufacturing industries to lower energy bills and reduce carbon footprint; a robot can assist with this. There is no minimum requirement for lighting or heating for the working environment of the robot, enabling a reduction in energy bills. Through a higher finish of product and improved quality control, reworks can be reduced and greater yields achieved by moderating the amount of waste produced as a result of poor quality or inconsistent finishing.



Throughput

Operating at high speeds, robots pose no risk of errors through tiredness, distraction and repetition of tedious tasks. Inherent accuracy and repeatability means you can achieve a high quality finish for every product to the standard required by your clients.

Robots can be left running over night and during weekends with little supervision. True 24 hour production can be achieved, if required, to increase output levels to meet client deadlines, therefore boosting competitiveness. This increased flexibility will bring economic benefits.



Hygiene and Safety

For hygienic food production, every effort needs to be made to reduce contamination. Built to a wash down and clean room specification, hygienic wash down procedures and quick changeover times have been an integral part of the design process. Guarding is designed to comply with the latest health and safety guidelines.

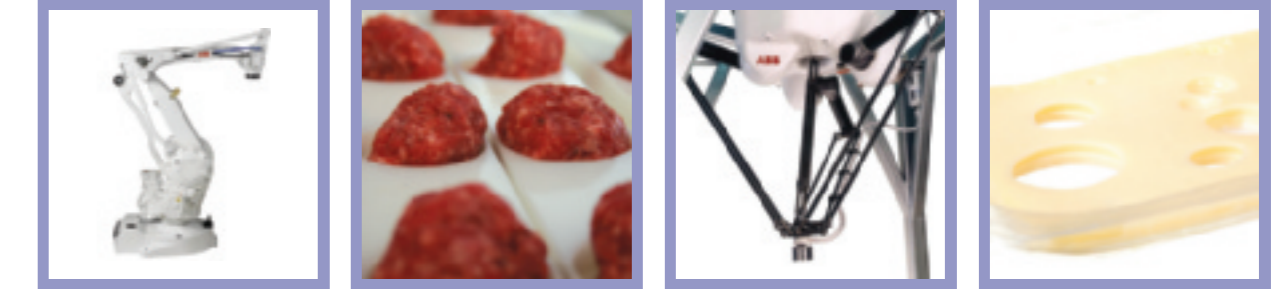


Service and Support

Newtech is committed to first class support and provides full manuals on equipment and training for operatives and engineers.

Well known and respected in the food industry, we have provided a continuous professional level of technical support to all of our customers for over 25 years.

Newtech's technical support staff are trained and fully conversant with the equipment and are available to carryout regular servicing. A 24 hour callout for breakdowns is provided and a comprehensive range of spare parts is maintained to support machine installations.



robotic solutions



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Newtech and Robotics

Newtech have been involved with product handling and placement for over 25 years. Our capabilities have been particularly enhanced through the development of our ultrasonic food cutting systems. It has been a natural progression to pursue automation through robotics as this allows six directional movement compared with the 3 directional movement typically allowed by linear drives. Our pursuit of robotic solutions led us to ABB who are the world leader in robotics, and we were pleased to be appointed as a Channel Partner by them.

Our initial focus has been on the product handling aspects of food production and packaging as the food industry is one that we know well. However, our abilities can readily be applied to other industries which often involve products which are easier to handle than many food products. We are happy to explore complex and sophisticated handling systems which might integrate various processes or machines to provide cost effective application solutions.

Newtech are ISO 9001 certified.



Why Automate?

Labour intensive, repetitive tasks, characteristic of the food industry, are expensive. Historically the industry had no solution other than to employ manual staff to carry out tasks which were often unpleasant, arduous or health threatening. Installing a robotic handling system need not be expensive and complicated, and the benefits that they bring to an organisation can far outweigh the capital outlay. Automation can:

- Dramatically increase productivity
- Reduce operating costs through energy and labour savings
- Improve product quality and consistency
- Eliminate expensive errors
- Avoid RSI claims
- Increase throughput

Many costs within an organisation are driven by numbers of people employed, in particular semi fixed indirect costs. Even fixed costs can be related to head count owing to the need for changing facilities, car parking, payroll costs, employers' insurance etc.

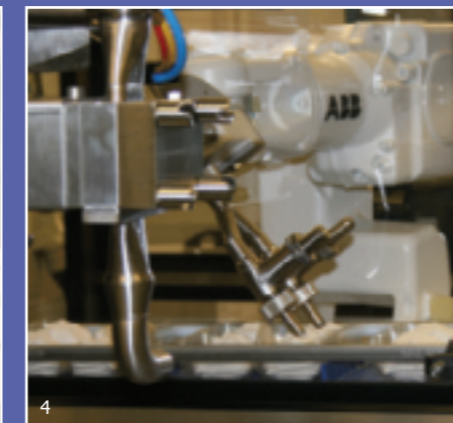
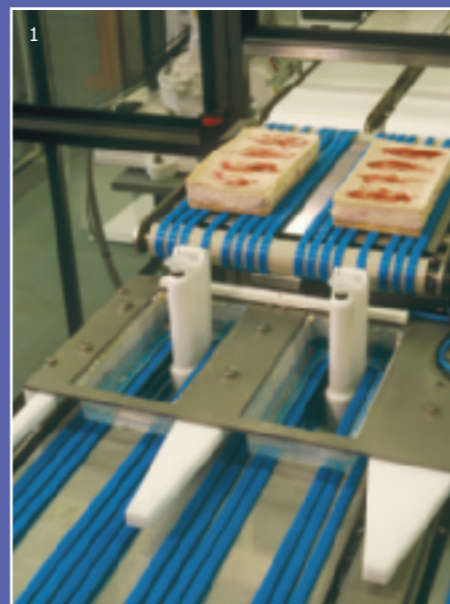
Robotic solutions can ease the pressure on labour recruitment and retention, especially where low interest jobs are concerned or working environments are dusty, hot or hazardous.



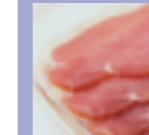
Applications

Newtech has been involved in successful solutions involving a variety of different applications, including:

- Collation and packaging of meatballs
- Dosing of cream products
- De-potting and cutting bakery products
- Cheese cutting and portioning
- Processing Pate
- Slicing of pies and quiche



1. De-potting station; 2. Advanced Gripper Technology; 3. Robotic Ultrasonic Cutting System; 4. Robotic Depositing



Machine Build

Newtech are able to provide bespoke handling systems incorporating ABB robotics as a cost effective solution for production.

User friendly and efficient programming formats provide the user with the ability to cater for ever changing production requirements.

All ancillary equipment is manufactured from superior quality components, providing extended, untroubled use, low maintenance, low running costs and excellent reliability. As Newtech design and manufacture the robot systems, space saving in high value manufacturing areas can be taken into account.

Although machines are broadly based on model types, customer requirements can be uniquely incorporated and can include:

- Customisation of infeed and outfeed conveyors
- Software links to other equipment
- In-built modems for external access and networking
- Laser scanning or digital imaging of products
- Pre-scale and check weigh integration
- Project management for line integration
- Radio-frequency identification (RFID) This is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. Newtech utilise the technology for user access control and change part identification.

With process monitoring as a standard feature, a robot system can assist with supporting advanced traceability schemes. Fast, accurate infeed and outfeed conveyor tracking ensures products are in the optimum position for picking.

For handling systems, new proven gripping technologies are available to ensure the maximum efficiency of a robot's functionality. Bespoke grippers can also be designed for your particular application. Along with palletising and package handling, we specialise in the positive placement of products in to packaging.



Model Range

ABB produce a large range of robots to suit most applications. Any of the model range can be integrated into a system solution involving integration with other motion control activities or can be programmed to be used on a stand-alone basis.

Wash down robots which are IP65 rated are available for the food industry.