



ROBOT PALLETISING SYSTEMS



CELEBRATING 25 YEARS IN BUSINESS

Robot Palletising Systems

Introducing the latest technology in robotic automation. High-speed pallet stacking with precision and reliability with consistent quality.

Through our devotion to develop reliable and robust palletising systems we approached ABB. Together we discovered a shared commitment in providing quality robotic systems and support packages to our customers.

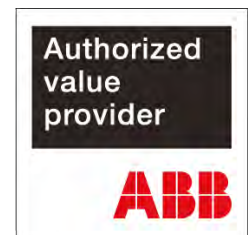
Robots are the most flexible method of automated product handling, offering speeds of over 1200 cycles per hour. We understand that it is important to deliver systems to our customers that their packing operators are confident to run. Therefore our engineers have developed Easy Teach, an innovative programme specifically for ABB robots, making them far more user friendly when switching between various products and pallet stacks.

At RMGroup we offer new and used systems to suit customer specifications. For extra peace of mind, we can support our robot palletising systems with planned preventative maintenance schedules, 24hr emergency response packages and spares service to prevent any down time. All robot palletising systems are fully tested in our factory and come with a minimum of 6 month warranty once installed.

"Sweat the assets not the people"

ABB Robot System Integrator

- Fully compliant with British standards
- Industry specific knowledge and experience
- Fast and flexible delivery
- Local presence in the market



Options & Features

- Bespoke programming and operator training
- Pallet magazines/Slip sheet applicators/Top sheets and pallet wrappers
- Full layout drawings following a no obligation site assessment
- Planned preventative maintenance schedules
- Emergency Response packages

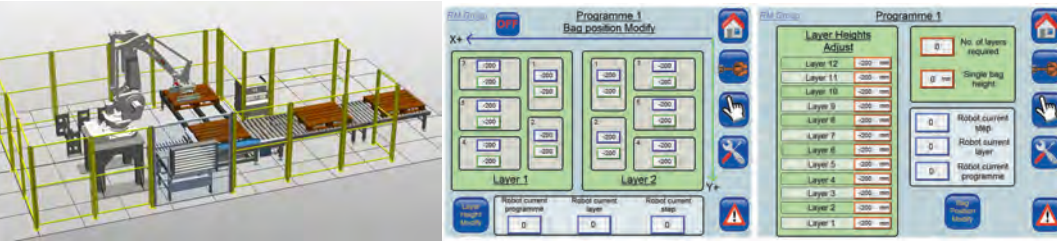


Robot Studio

Offline programming is the most effective method of ensuring maximum return on investment for your robot systems. Our engineers use ABB's latest simulation and offline programming software to create the programme for new palletising systems prior to installation on site.

The software enables our engineers to make changes to existing programmes offline which minimises production downtime. Programmes are altered and then dropped into the robot control panel on site.

Robot studio is built on the ABB virtual controller, an exact copy of the real software that runs your robot in production. This allows realistic simulations to be performed.



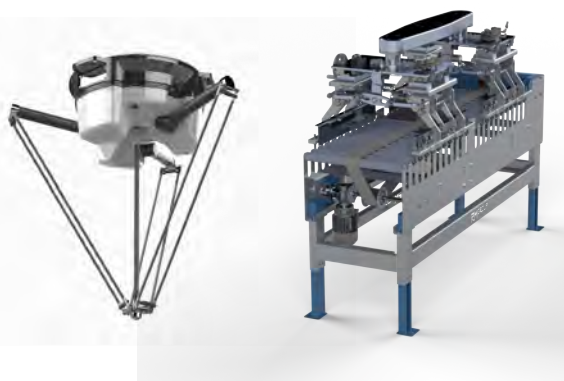
Easy Teach Bespoke Robot Programming

Developed in response to the need for a simple “operator” friendly interface platform, RMGroup software engineers have extracted the commonly required process controls from the complex robot programming pendant and made them available on a simple to use and understand touch screen display.

The main robot controller never needs to be touched by the operator as all modifying positions and general running of the robot can be accessed via the RMGroup HMI. Bag position values can be altered whilst the robot is running and the new position is updated and saved immediately and automatically.

The number of layers required on a pallet is input on the HMI and can be changed while the machine is running

Layer heights are calculated automatically from the bag height value. As bag heights can often vary in the production process, a simple procedure on the HMI allows quick manual adjustment, thereby retaining clean accurate placement on higher layers.



Advantages of using RMG-HMI V2. . .

- HMI Training from RMGroup engineers provided
- No prior knowledge of programming a robot required
- Reduces costly production downtime
- Allows operators to make programme changes safely – without having to use the robot teach pendant
- Provides operators more confidence to make their own programme changes without assistance from RMGroup engineers
- RMG-HMI V2 collates accurate production figures that can be exported via USB

Customers have the option to include the following items to complement the system:

- Product accumulation and buffering
- Bag flattener – recommended for a presentable pallet stack
- Check weigher and metal detection
- Additional programming options - 3 empty pallet stack
- Integrated turntable pallet wrapper to limit FLT movements



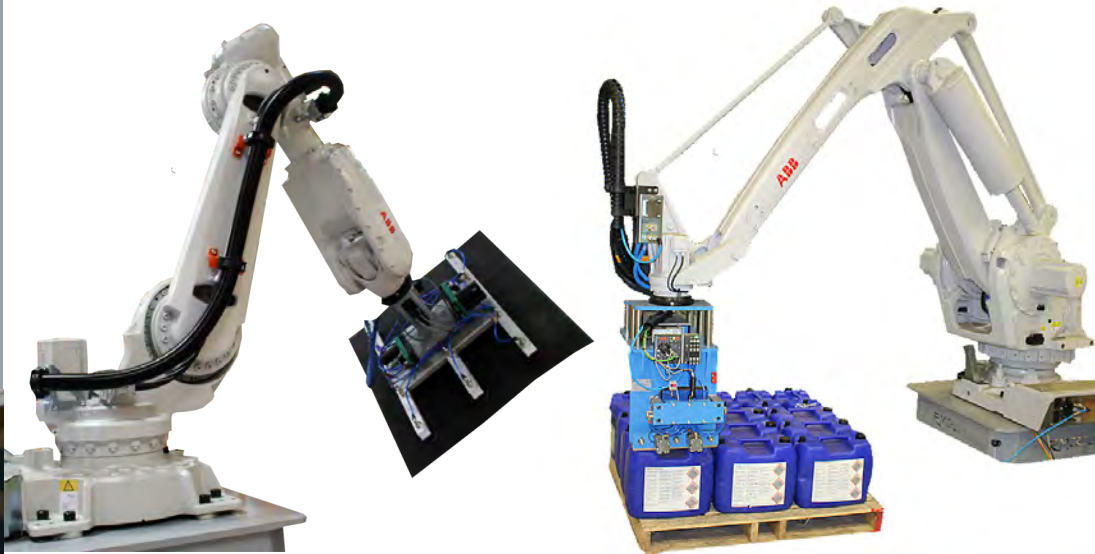
On-the-floor palletising systems can be upgraded to include pallet magazines and pallet conveyors at a later date to meet increased production demands.



On-the-floor palletising systems

RMGroup provide the perfect solution to those looking to further automate their packaging systems. The 1-on-floor palletising system serves as a budget starter system for lower production throughputs.

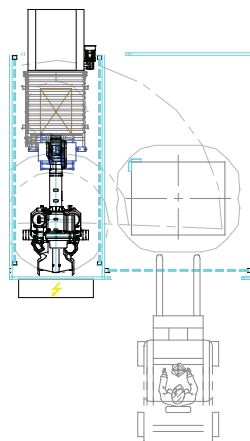
As standard the system includes new or used ABB robot palletising system with gripper head, pick-up conveyor and pallet loading section. Our palletising cells are provided with the latest safety systems that meet British Standards. Safety cells include fixed guarding, Fortress interlocked operator door and light barriers. A set of beacons are also provided to indicate to operators when a pallet is full and needs removing.



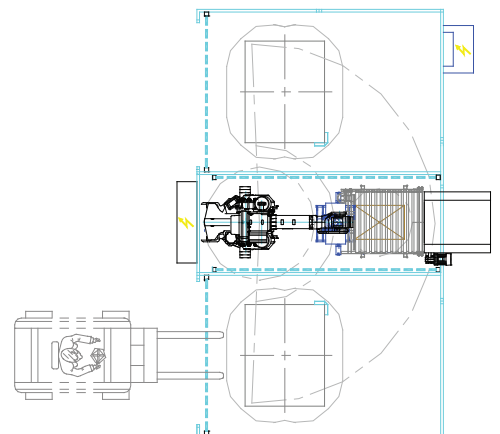
Principle Of Operation:

An empty pallet is placed onto the pallet loading section by an operator. Product is transferred into the palletising cell via bag handling conveyors. Retro reflective sensors detect the item in position on the pick-up conveyor and the robot arm glides into position to pick up. Product is then stacked on the pallet. Once a pallet is full, all bag handling conveyors stop and the robot waits for the pallet to be removed by an operator before it begins the next cycle.

One-on-the floor

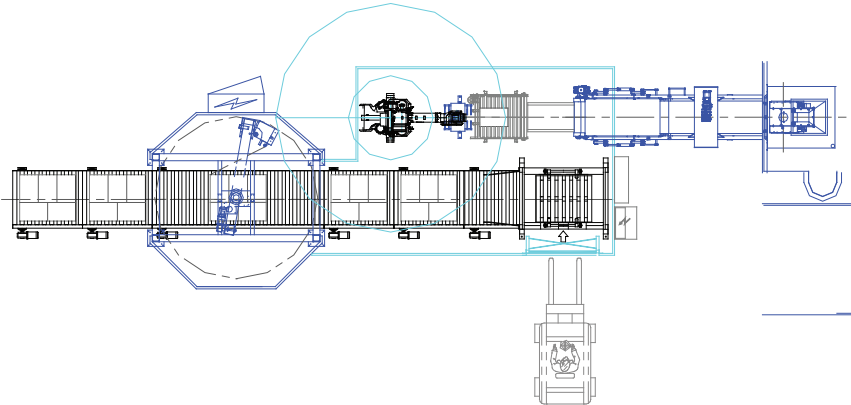


Two-on-the floor



3 Full Pallet Accumulation

Minimise 'pallet take off time' with 3 full pallet accumulation systems. This layout minimalises FLT movements The cell will accumulate three full pallets before an FLT operator is required. Systems can include a pallet magazine for automatic placement of pallets. Alternatively customers can choose to also feed empty pallets manually onto the 3 pallet accumulation system. All robot cells are fully compliant and include fixed and light guarding to prohibit entry to the robot. Fixed mesh guards are installed to prevent physical entry from the pallet exit point and through the pallet magazine. Fortress interlock switches on operator doors ensure the highest level of safety in line with current British Standards.



Full turnkey solutions and beyond...

In addition to our set piece 1, 2 and 3 position palletising systems, RMGroup design and supply turnkey solutions tailored to our customer needs. From raw product to end of line, we can incorporate;

- PACKING
- DATA TRACKING
- PRODUCT IDENTIFICATION
- PALLET & PRODUCT LABEL APPLICATION
- INKJET PRINTING
- INTERFACE WITH SAP
- LABELLING
- PALLET WRAPPING/STRETCH HOODING

Include the following features:

- Pallet Magazines - to hold up to 15 empty pallets
- Pre-Palletising - Slip sheet applicators
- Post-Palletising - Top sheet applicators
- Automated Pallet Hooders
- Pallet wrapping - Automated rotary arm pallet wrapping for up to 60 pallets an hour



To find out more about our systems please contact a member of our sales team who would be happy to conduct a no obligation assessment of your site.

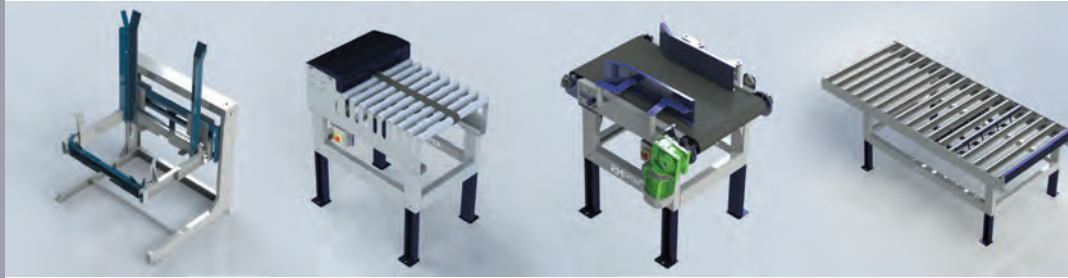


Products available for your palletising system:

- Transfer/Pacing Conveyor
- Pick-up conveyors
- Robot base
- Gripper heads
- Pallet Magazines
- Top sheet applicators
- Powered pallet
- Gravity conveying.

Bespoke Palletising Systems Manufactured by RMGroup

All associated conveying for our robotic systems are designed and manufactured in house in order to offer a fully comprehensive system that compliments your palletising need. In order to remain the leading supplier in bespoke palletising systems we recognised the need to produce our own bag handling and conveying systems to ensure ultimate continuity.



Remote access services

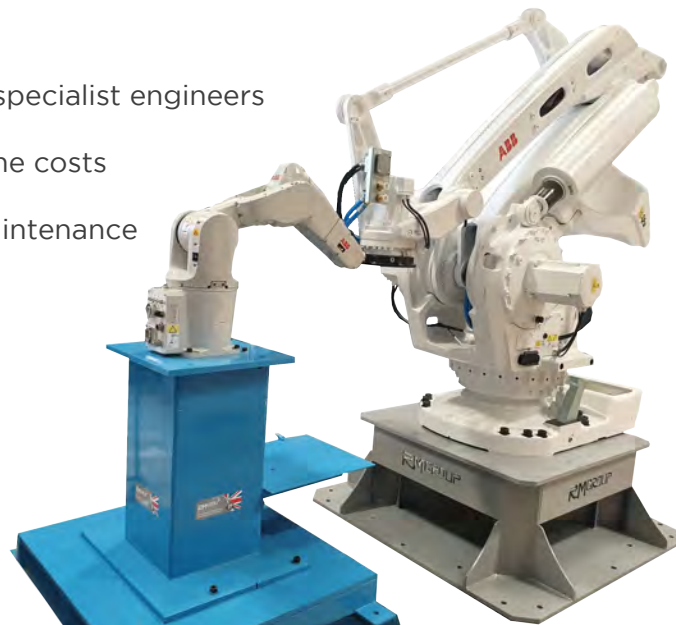
At RMGroup we realise the importance of minimising downtime for our customers which is why we offer remote access services to all customers.

Hardware fitted inside robot control panels enables our engineers to log-in remotely in order to carry out preventative maintenance, fault find or change programmes. To the customer, the access allows production managers to log in and monitor productivity on a daily basis. The technology is often used in conjunction with a CCTV system, giving customers a good insight to activity on the production floor.

The remote access service is used in conjunction with an annual service plan. Dedicated RMGroup engineers are available in order to support customers through any changes to programmes or assist with fault finding. Please contact the Service Manager in order to enquire further about these services.

Advantages

- Timely response from specialist engineers
- Reduced travel and time costs
- Hints for predictive maintenance
- Remote diagnostics



Aftersales Service & Support

RMGroup aim to offer the highest standard of service & support to ensure the efficiency and reliability of our equipment. RM Groups dedicated service team has engineers based across the UK to ensure the best possible support can be given in the quickest possible time. On top of this, all our systems can be installed with remote access technology, allowing any issues to be diagnosed remotely within minutes and in most cases solved. This also allows us to make recommendations and assist customers in the early days of operating the RM equipment, which ensures a smooth handover. Critical parts are also stocked in the UK to ensure next day availability, with some parts available same day.

Warranty

All new equipment supplied by RMGroup is covered by 12 months warranty. Used equipment is supported by 6 months warranty. This covers any repair or replacement of defective parts from the date of installation. Increased warranty periods can also be offered.



Response Package

RMGroup can offer guaranteed breakdown response as part of our Service & Support packages. This ensures you will have an engineer on site within an allotted time, making certain expensive downtime is kept to a minimum. Out of hours remote support is also available up to 24 hours a day, meaning an engineer will be on hand to offer support over the telephone, or via our remote connection tool, which offers complete access to all systems.

Spares Packages

RMGroup endeavour to hold all consumable spares for your systems in stock. Spares can be sent on an overnight delivery and can arrive with customers before 9am the following day.

For every new system installed, a recommended spares list is provided, ensuring you have everything you need for day to day running of the equipment.

Planned Preventive Maintenance

Scheduled maintenance carried out by our dedicated service team is essential in maximizing machinery performance equipment failure and expensive production downtime.

- Scheduled Preventative Maintenance
- Maintenance reporting
- Out of hours technical support
- Recommendations for optimising performance, longevity and safety
- Advice on programming, fault-finding and other related work
- Service & Support plans can be tailored to suit the customers requirements, including guaranteed breakdown response, out of hours support and visits per year

As standard, all systems are installed by our engineers who stay on site until operators are comfortable to manage systems alone. Any additional training can be provided at a later date





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