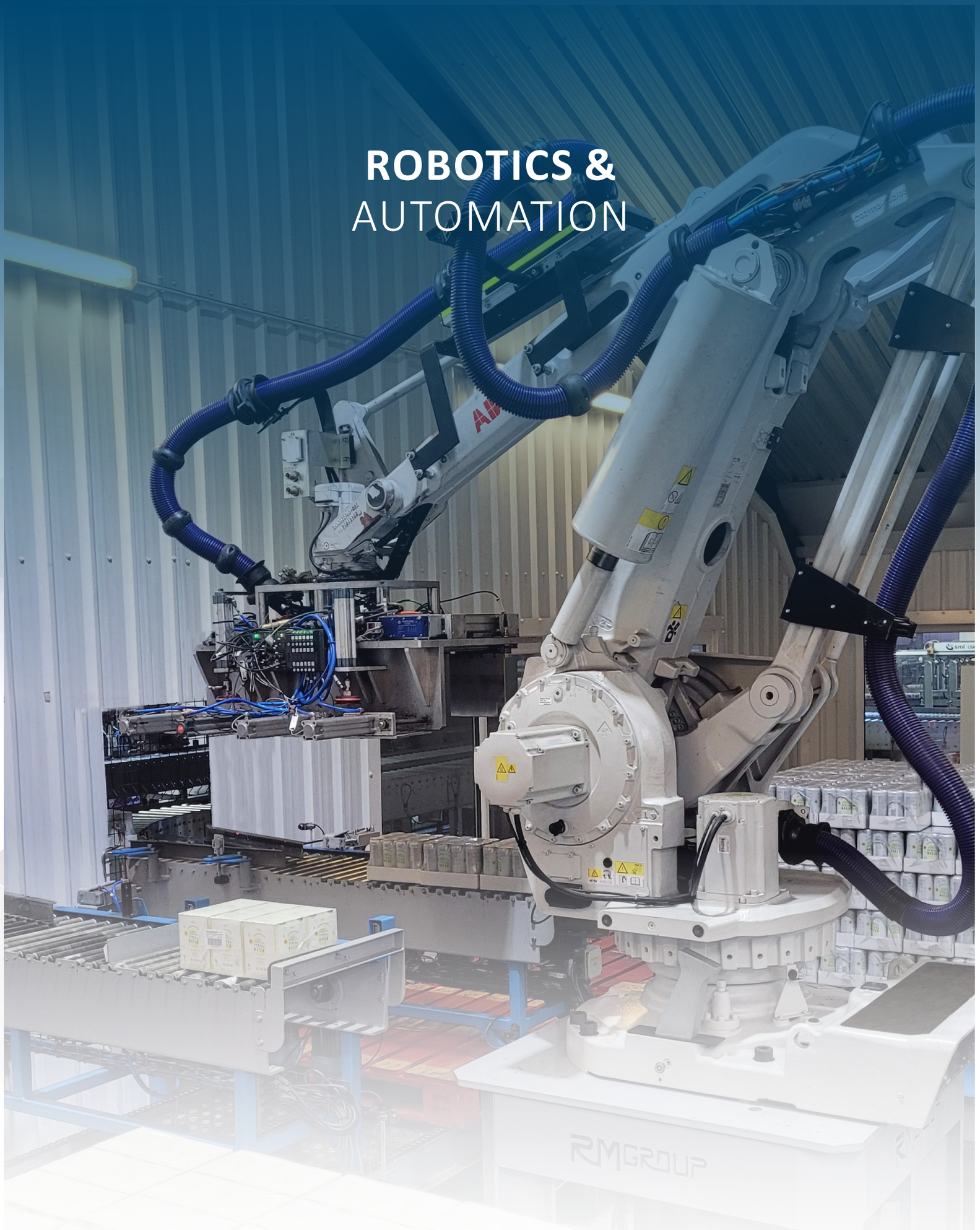
ROBOTICS &
AUTOMATION



RMGROUP

PACKAGING MACHINERY & ROBOTIC AUTOMATION

rmgroupuk.com

FROM THE BEGINNING

RMGroup was founded in 1995 after leading a successful contract packaging operation for British Sugar. Commitment to that contract with timely execution of bagging campaigns led to industry recognition. Reputation began to grow with the team of highly skilled engineers, which led to the supply of packaging machinery including robotic automation to end users.

Today RMGroup design, manufacture and supply a wide range of automatic packaging machinery and robotic systems. To do this we have a team of field engineers based around the UK to support installation and service schedules.

Together with our partners we work in continuity to ensure a well-executed project is delivered to the customer with their exacting expectations in mind.

ROBOTIC AUTOMATION PRODUCTS & APPLICATIONS

- Robotic Pick & Place
- Robot Palletising
- Combined Case Filling & Palletising
- Flexpicker/Delta Robots
- Jug & Container Palletising
- Sheet & Board Stacking
- De Stacking
- Tubs, Buckets & Drums
- Automated Guided Vehicles (AGV) & Autonomous Mobile Robots (AMR)

ABOUT US

"Since our birth we have continually expanded our capabilities. We have focused on listening to our client's needs, responding with solutions, creating innovative concepts and delivering bespoke systems on time and within budget. That is what makes us successful"

EDWARD REES
OWNER / CHAIRMAN

ACCREDITATIONS & MEMBERSHIPS

A3 ROBOTICS | BARA
Certified Robot Integrator 2021-2023

Avetta

bsi.

ABB VALUE PROVIDER

Alcumus SafeContractor

OUR JOURNEY

1995

REES CONTRACT MAINTENANCE FOUNDED

Contract packaging specialists. Edward and his team serviced the industry by maintaining existing manufacturers equipment.

2006

RMGROUP FORMED

Rees Machinery Group Ltd specialise in the supply, manufacture and installation of Packaging Machinery and Robotic Automation.

2015

RMFABRICATIONS FACTORY RELOCATION

State of the art in house manufacturing department established to cut, fold, fabricate and paint products. External and internal services supplied.

2021

RMGROUP US LLC

Our US subsidiary incorporated in Delaware to provide contract packing services and support export activity as distribution arm for RMGroup UK.

2023

RM GROUP AUSTRALIA

RM Group expands into Australia to provide sales and support in new territories. Enlarging RM Groups portfolio.

MEET THE TEAM

Rosie Davies
Group Director

Edward Pugh
Sales Director

Tom Rees
Technical Director

With a combined knowledge of over 100 years, we have the experience to guide you through any solution you need. With over 70 dedicated members of staff we are able to design, supply and support the demand for automated packaging and robotic systems that are affordable, efficient and robust.

- DESIGN
- PROJECT MANAGEMENT
- CONTROL SYSTEMS
- INSTALLATIONS
- SALES
- SERVICE
- COMPLIANCE

SAFETY AND COMPLIANCE DEPARTMENT

The safety and compliance department consists of two dedicated compliance officers. They ensure that all systems (standard and bespoke) are built to global standards, and come complete with operational manuals, risk assessments, training documentation and sign off.

In collaboration with design and technical engineers, the compliance team drive to achieve the upmost safety standard using the latest innovative products.

Industry specific accreditations

Performance and safety integrity level assessments

F.M.E.A (Failure Mode and Effects Analysis)

Limits of use analysis

Full project risk assessments

F.A.T / S.A.T (Factory/Site Acceptance Testing)

PLANNED PREVENTATIVE MAINTENANCE

PARTS & SERVICE

RMGroup's service team have compiled a series of preventative measures for our customers to put in place following on from the commissioning period of their new equipment.

Our highly skilled mechanical, electrical and controls engineers are strategically based around the UK to offer the best possible support and response times. This support is further enhanced with innovative technology providing remote access to our systems, and a dedicated support hotline creates the driving force behind our industry leading customer care.

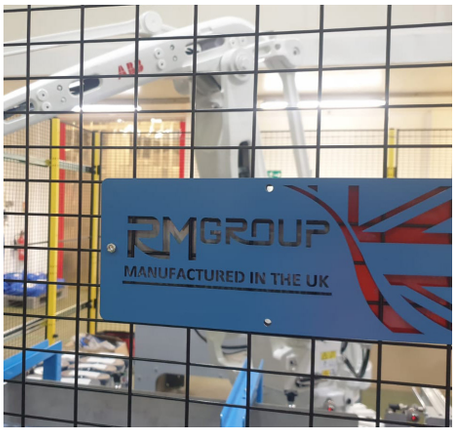
Preventative maintenance carried out by one of our dedicated service team is essential in allowing you to minimise the risk of equipment failure and expensive production downtime. If you are looking for a UK automation company with the best level of service and maintenance, contact a member of the service department today.

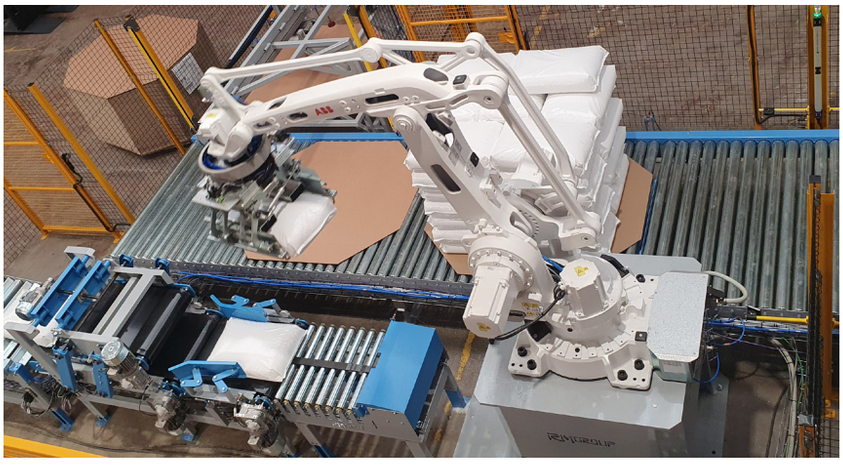
AFTERSALES SUPPORT

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

UK & OVERSEAS COVERAGE

RMGroup have highly trained mechanical, electrical and control systems engineers across the UK and the US. This allows us to respond rapidly to any service or support requirements with a site visit, or remotely via our eWON system – an internet based, remote access tool. This allows us to diagnose, respond and repair any breakdown or problem that may affect the customer and minimise expensive downtime. This peace of mind is key in delivery of effective customer service.


RMGROUP
MANUFACTURED IN THE UK




Micafil
RMGROUP

ROBOT PALLETISING

Robot palletising systems are supplied from stock and to budget, providing a rapid return on investment. Palletising robots provide a flexible method of pallet loading, built to suit your current operation. Choose from many palletising cell configurations to suit your operation.

PALLETISING SYSTEMS

Fully automated palletising systems incorporating ABB Robot palletisers with various conveying as well as pallet accumulation, pallet magazines, pallet wrapping and slip sheet applicators.

Our automated systems use the latest technology in robotics to ensure efficiency and reliability; the systems are capable of drastically improving the efficiency of any production line. All of our systems are designed with your needs in mind to suit your product type and designed to operate in the most intricate and complex spaces.

All of our robots are housed inside cells that include the latest safety features that meet International and domestic standards.

RMGroup has been the largest ABB robot system integrator for the past 3/4 years and dominates the palletising and general industry market. As for bag filling systems, we are one of the largest privately owned manufacturers.

SCAN SMART CODE FOR MORE INFORMATION

1-ON-THE-FLOOR

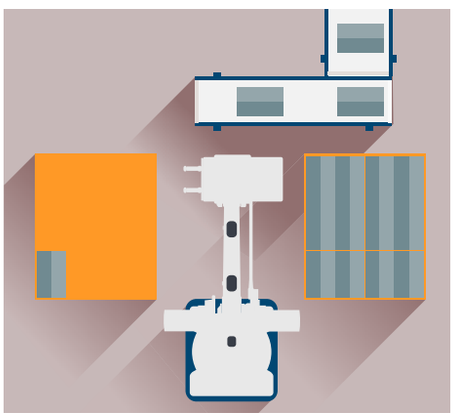
A 1-on-the-floor design is the smallest and simplest design. The pallet is placed between guides within the cell, directly onto the floor. The guides provide a fixed and known datum for the pallet, making interaction with the robot very precise and repeatable. A feed conveyor transport cases into the cell, with the overall operation as we've already shown. 1-on-the-floor designs can be very compact, with external guarding dimensions well under 3 x 3 metres.

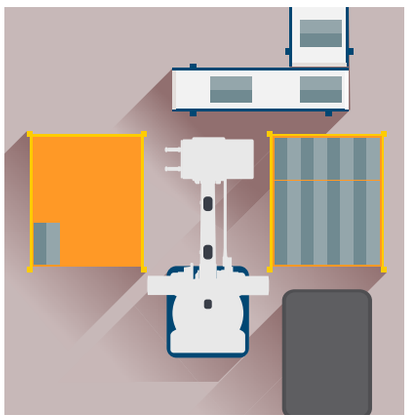
2-ON-THE-FLOOR

The 2-on-the-floor design is an evolution of the 1-on-the-floor. It effectively duplicates a pallet position, usually on the opposite side of the robot. This configuration can enable palletisation to continue to a second pallet, without having to wait for a changeover. Whilst the robot may need to stop or pause when the first load is retrieved and an empty pallet deposited, it can continue to work until the cell is entered. With a 1-on-the-floor system, there is no chance to continue to operate.

AGV/AMR

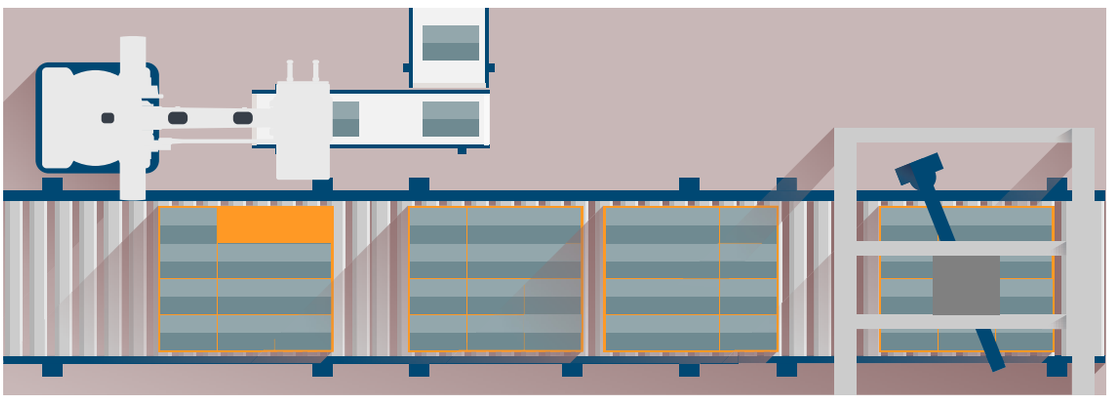
Utilising an AGV/AMR to handle loads and empty pallets may require a specific stand for the palletisation locations. Some of the advantages of utilising an AMR to service a palletising cell are that it is less likely to require a robot stop when the AMR is within the cell (assuming 2-on-the-floor), assurance of collection & collection time and repeatability of pallet or load positioning.





SECONDARY PROCESSES

We can also integrate secondary processes such as labelling & load protection/ stabilisation within our palletising systems. This can be done inside the cell or as part of a contiguous line, linked with our accumulating pallet conveyor. Load protection & stabilisation can be completed with an RM Group wrapper or stretch-hooder such as the RM3000 or Power Flex T1.

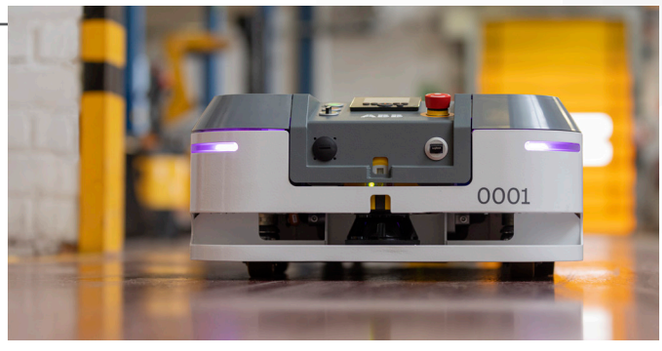


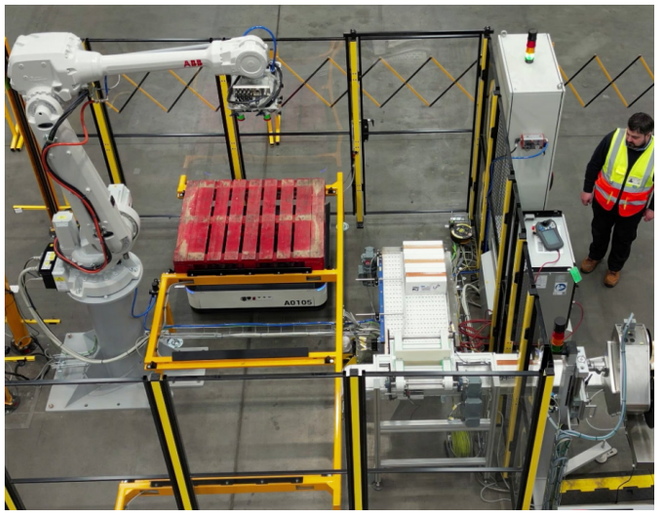
AUTOMATED GUIDED VEHICLES & AUTONOMOUS MOBILE ROBOTS

As a value provider for ABB Mobile Robotics Partners Network, RMGroup has an in-depth understanding of automation and good technical knowledge. On this basis we are able to integrate Automated Guided Vehicles (AGVs) and Autonomous Mobile Robots (AMRs) with other systems to fully optimise customer's material flows.

RMGroup's industrial robotic offering extends to AGVs and AMRs in our extensive product portfolio of packaging machinery and robotic automation solutions.

Our partner for AGV and AMR mobile robot technology is ABB. The ABB Mobile Robotics range covers the majority of material handling tasks, optimizing productivity and resource use across pallet handling, towing and platform movement streamline production processes and cut operational costs. As specialists in the most demanding industries, including automotive, food & beverage, cosmetics, pharmaceuticals, retail and aeronautics among others, our strategic mission is helping their customers be more competitive, flexible and efficient.





AGVS & AMRS ARE BEST SUITED TO FOLLOWING INDUSTRIES:

Automotive, e-commerce and retail, pharmaceutical and cosmetics, manufacturing, metals and machinery, logistics and aerospace.

DIGITAL TRANSFORMATION

EXPERIENCE

CONNECTIVITY

SAFETY

Reception – warehouse – shipment, intralogistics, outdoor applications, picking, full kitting, assembly line material delivery – end of line, robot cells, assembly lines and special (heavy loads & custom solutions)

SPECIFICATIONS

Applications	Picking, Logistics, Kitting, Assembly, Robotics
Products handled	Pallets, Trolleys, Crates, Boxes, custom loads
Navigation & Localisation	Magnetic/laser/QR/SLAM/Dual Navigation
Batteries	Li-ion, Gel, Lead acid
Charging systems	Manual/Auto, Online

SCAN SMART CODE FOR MORE INFORMATION

FLEXIBLE BATTERY TECHNOLOGIES WITH AUTOMATIC OR MANUAL CHARGING REGIMES

RANGE OF LOCALISATION TECHNOLOGIES SLAM TO MAGNETIC

INTRALOGISTICS PICKING KITTING ASSEMBLE

ROBOTIC PICK AND PLACE

Robotic Pick & Place Cell – for consistent quality, high production throughputs and safe working processes for all industries. Pick and place bags, containers, cartons, boxes, trays and more with our modular flexible robotic end of line case packing solution.

ROBOTIC PICK & PLACE CELL RMGPCC-1200

Robotic pick and place cells are increasingly becoming the application of choice for all industries requiring consistent quality, high production throughputs and safe working processes. Robotic handling systems can be integrated with a fast installation and a small footprint.

Pick and place cells speed up the process of picking parts up and placing them in new locations, increasing production rates and ensuring high levels of quality.

The cells can be integrated to complement automated systems already in place, utilising much of the current equipment and the same floor space.

The RMGPPC-1200 has a very small footprint ensuring a cost effective, safe and high-speed solution.

Cells can include product identification and may involve an integrated vision system registering the product on the infeed conveyor. Robot end of arm tooling is designed in-house by experienced design engineers to suit each solution individually and could incorporate vacuum, clamps, fingers, pins depending on the nature of the product.

UP TO 40 PICKS PER MINUTE

12KG MAXIMUM PAYLOAD

SMALL FOOTPRINT

COST EFFECTIVE

"This was the first equipment we have sourced from RMGroup and, given our time constraints, they fully met our brief. The pick and place cell rapidly improved our efficiencies and outputs by 40%, helping to reduce labour costs and allowing us to be more competitive for our flowpack range of products. Our working relationship with RMGroup was very good during a challenging period time wise, and although we have no immediate plans for further installations, any future expansion plans will certainly entail cooperation with RMGroup

Andy Phippen,
Director at Allied Hygiene

RMGPPC - 1200

SPECIFICATION

Production speed	Up to 40 picks per minute*
Payload	Max 12kg
Cell dimensions	3300 (l) x 1400 (w) x 2100 (h)
Controller	IRC5
Power	3 phase 10 amp

SCAN SMART CODE FOR MORE INFORMATION

DELTA ROBOTS

High-speed state-of-the-art material handling robots suitable for many industries including food, beverage, cosmetic and pharmaceutical. The flexpicker family includes variants with payloads of 1 kg, 3 kg, 6 kg, and 8 kg and reaches of 1130 mm and 1600 mm

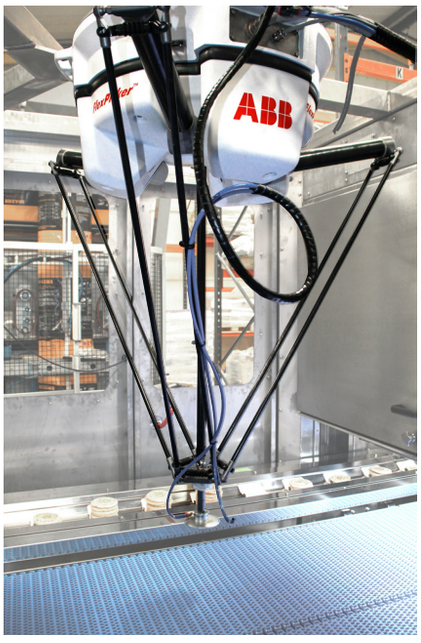


ABB FLEXPICKER

Robotic Flex Pickers are the leaders in state-of-the-art high speed picking and packing technology. Compared to conventional robot automation, the pick and place systems offer much greater flexibility in a compact footprint while maintaining accuracy and high payloads.

Features include outstanding motion control, short cycle times and precision accuracy. Flexpicker cells can operate in either narrow or wide windows with very tight tolerances.

RMGroup has developed high speed handling solutions for an array of products including those for the food production market, dramatically and reliably increasing production handling capability and maintaining very high quality standards.

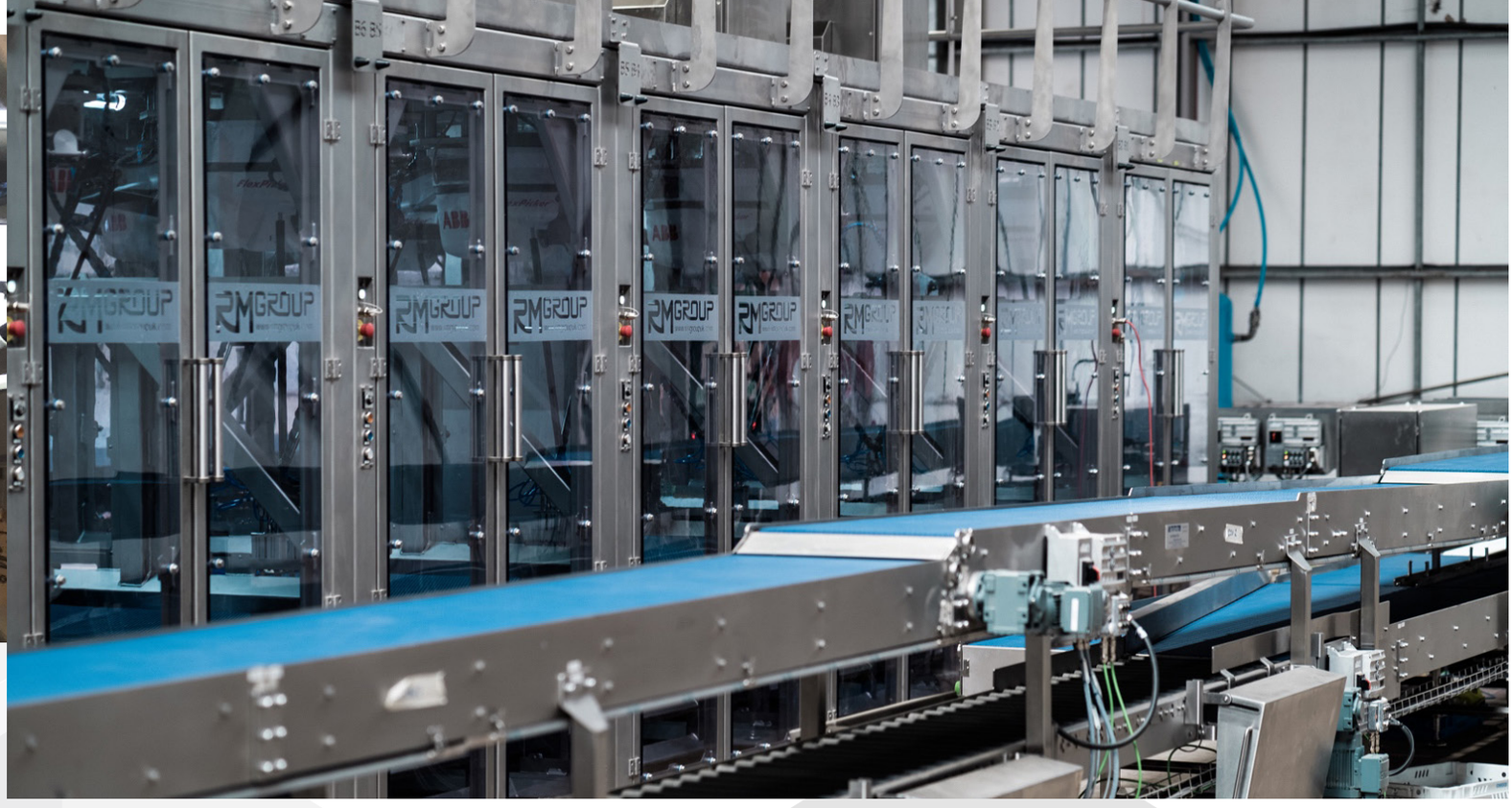
ABB Robotics Flex-Pickers, known for their speed capability and accuracy can also incorporate ABB's high resolution vision systems, which not only take advantage of the Flex-Picker's accuracy, but provide a high degree of quality inspection for shape and colour, providing even more enhanced quality control for your products.

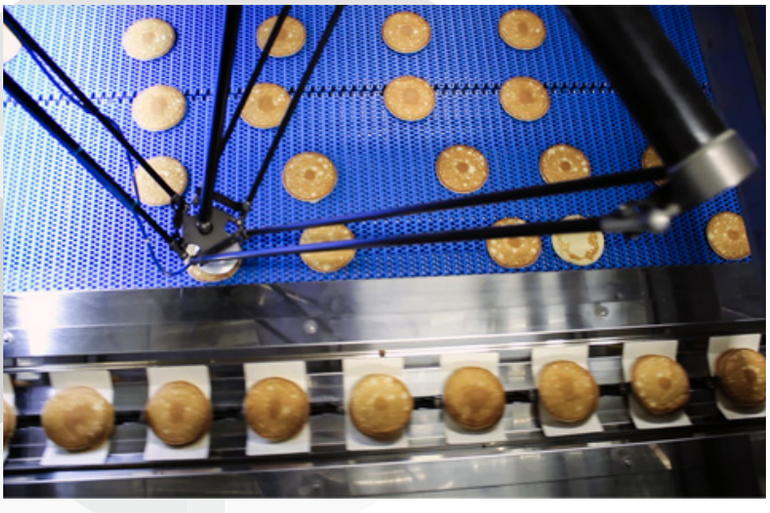
Integrated with any existing and new packaging systems, flow wrapper infeed conveyors and other applications and easy to use HMI touch screens.

SCAN SMART CODE FOR MORE INFORMATION

SPECIFICATION

Production speed	Up to 1200 picks per minute*
Payload	Max 8 kg
Working Reach	Max 1600 mm
IP Rating	Option of P69K
Operating software	Pickmaster
Controller	OmniCore C30





"From the outset, RMGroup inspired confidence. Supported by ABB, they demonstrated a high level of expertise and technical ability. We were kept fully advised and involved with trials at the design and development stage. The door to the RM Group factory was always open during manufacture.

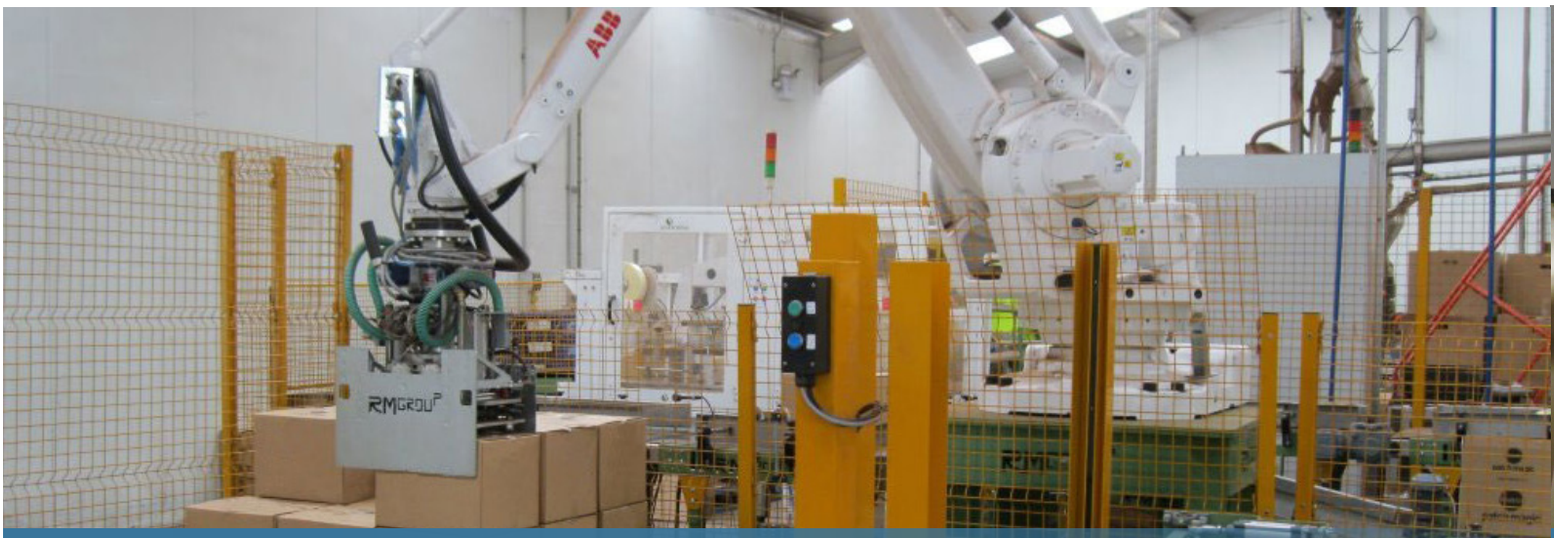
"The system was installed very efficiently with minimal disruption to our day to day operation. System performance is every bit keeping pace, we have been able to improve quality and consistency for our customer, enabling us to meet peek demands.

Christien Jones
Project Director, Village Bakery

VISIT WWW.RMGROUPUK.COM FOR MORE INFORMATION

1200 PICKS PER MINUTE

MAX 8KG PAYLOAD



COMBINED CASE FILLING AND PALLETISING

RMGroup are able to design, manufacture and install a range of bespoke robotic systems. Case filling and palletising has become a speciality, with many reference sites in various industries. Our in-house design and manufacturing allow us to supply an all encompassing solution for multiple products.

BESPOKE CASE FILLING AND PALLETISING

We are able to offer diverse systems that have a unique tooling that lend themselves for case filling for multiple products.

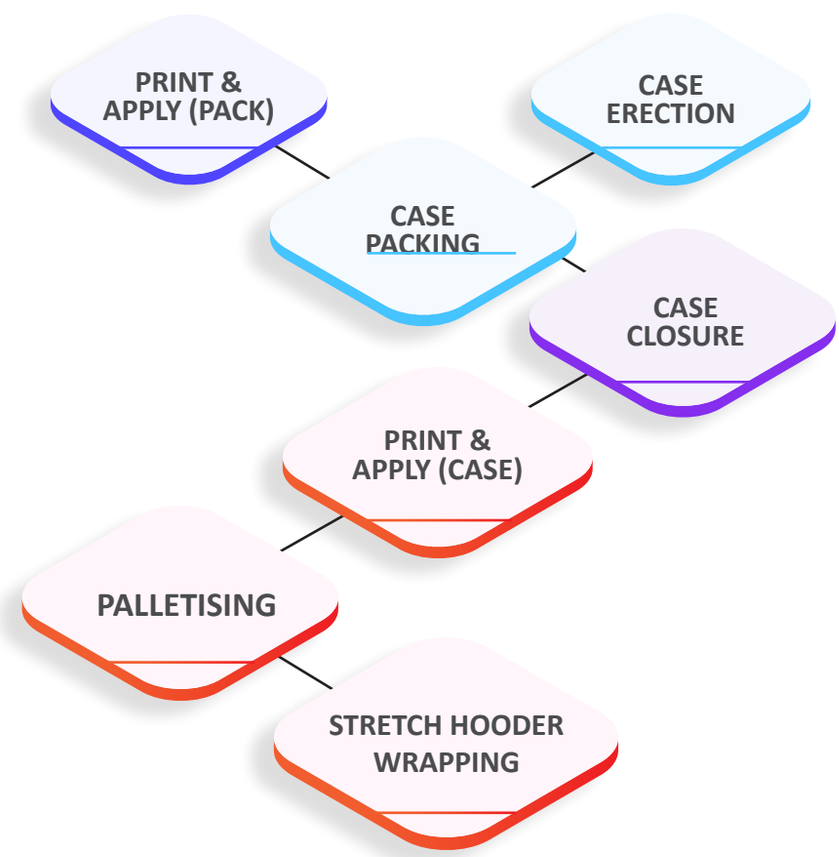
Typically, product is received on an accumulation conveyor from upstream. Then, depending on the format required, the system will collate product before feeding them to the pickup conveyor. The robot will then pick up the collated containers and load them into a pre-opened box. Once loaded a full box is automatically indexed away and replaced with an empty one. Integrations include a case erector and closer following the case filling process.

Changing between packing formats is carried out via a user-friendly touch screen interface.

Once the case is closed it proceeds into the palletising cell, by way of metal detection, labelling or check weigh equipment if required.

> “The service we receive from RM Group is always second to none, Radnor Hills continue to be impressed with RMGroups ability to adapt and react to our requirements a suggest solutions to our needs. Service is always prompt and the relationships between the teams is fantastic. The whole team are extremely knowledgeable and helpful. Jack who looks after us with online technical support is always happy to go above and beyond to provide us with the level of service that I have not seen before”.

Dave Pope
Operations Director Radnor Hills



JUG AND CONTAINER PALLETISING

We deliver the latest solutions in Jug and container palletising using robotic automation. Combined with RM Easy Teach 2, RMGroup are able to provide unique palletising systems with easy to configure programme to ensure effortless change of pallet configurations when consumer demand changes.

BESPOKE JUG AND CONTAINER PALLETISING

Jug palletising suitably lends itself to robotic automation. In a fast paced production environment our Robotic palletising cells deliver presentable pallets to millimeter precision every cycle.

RM's in house design team are able to engineer end of arm tools that are unique to each application. Adequately picking and placing product whilst achieving speed and maintaining consistency.

Compliment the robot system with the integration of pallet magazine, pallet accumulation, slip sheet application, layer sheets (often applied using the same end of arm tool), Stretch wrapper or hooder. All of which are supplied by RMGroup to provide an all-encompassing solution to production needs.

> "I would recommend RMGroup in the future. The solution that was provided was of a high manufacturing standard.
>
> Everyone from the design, installation and commissioning teams had high safety and work area standards. They also worked very well with our engineers and production teams.
>
> **Nicole Hamilton**
> British Sugar

BESPOKE TUBS, BUCKETS AND DRUMS ROBOT

At RMGroup we are able to deliver innovative systems that are capable of processing a variety of products. Handling of tubs, buckets and drums becomes effortless for an industrial robot. The versatility of a robotic solution will add value to your production process, increase capacity and improve quality.

“As part of a general line upgrade, we asked RMGroup to propose a solution to automate our bucket palletising and pallet wrapping process. Working within a very tight footprint, RMGroup patiently worked with us to identify a feasible layout.

RM Group demonstrated a high level of professionalism and process knowledge, working closely with ourselves and other integrators, resulting in a successful, operator friendly system, performing reliably and fully to our specification”

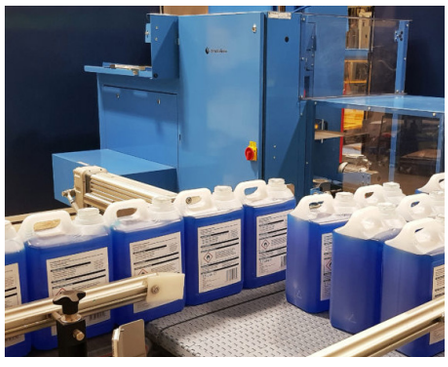
Carl Gordan
Operations Manager, SIKA

In the oil, Energy and Lubricants sector, systems have been developed for pails, buckets and drums (up to 45 Gallons) . Each one carrying varying product throughputs, dimensions and weight.

RM’s in house design team are able to engineer end of arm tools that are unique to each application. Adequately picking and placing product whilst achieving speed and maintaining consistency.

Given the nature of product, and delivery requirement to consumer markets, pallet presentation is key. The robot must operate to tight tolerances to ensure the stability of the completed stack.

In order to provide a finished pallet, our team configure systems with the integration of slip sheet application, layer sheets, wrapping or hooding.



Contact us today
about the
Bespoke Sheet and Board
Stacking/De-Stacking
SALES@RMGROUPUK.COM
+44 (0) 1686 948003

SHEET AND BOARD STACKING/DE-STACKING

Where there is a requirement to stack to collate product for strapping, wrapping or hooding why not use an industrial robot to produce consignments that are consistently formed to the finest tolerances. RMGroup also provide bespoke robotic solutions for de-stacking.

SHEET AND BOARD STACKING/DE-STACKING

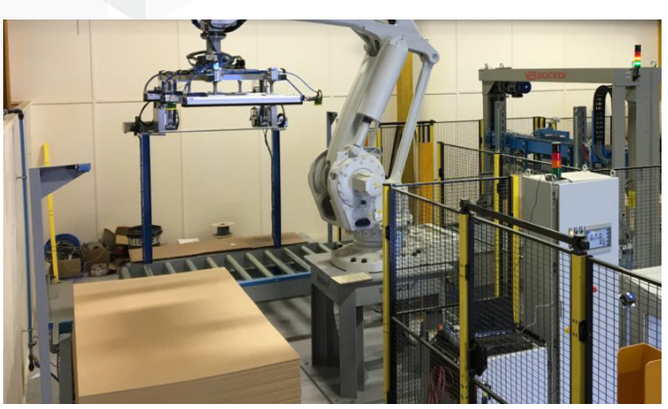
The task of stacking or de-stacking is notoriously labour intensive, which causes H&S implications, speed, lack of production efficiency and quality issues. Product is generally bulky and overweight, and as a result, the industrial Robot lends itself well to this application.

End of Arm tooling is designed specifically to product requirement. The model robot is selected based on speed and payload in order to meet customer specifications. In certain applications Safe move maybe required to enable collaborative working zones.

As with all Robotic cells, fixed and light guarding with interlocked gates provide the upmost safety to the latest industrial standards. Integrate label applicators, and strapping or hooding machinery for a fully automated system.

Operator friendly HMI enable future program modifications with ease. Without the need for in-house expertise.

> “During the pre-building and testing at the RMGroup facility we were kept informed on the projects progress and found them very willing to accommodate modifications we requested during the testing and installation process. We now have a successful, operator friendly system, performing reliably and fully to our specification.”
>
> **SCA Timber**
> RM Group Client



ROBOT STUDIO

PROGRAMMING & VIRTUAL COMMISSIONING

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.

3D MODELLING

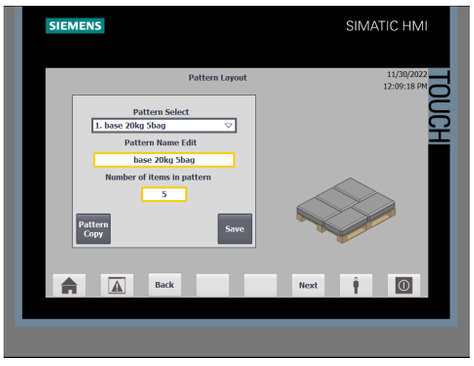
RMGroup's design team specialise in the development of innovative products and technology through a blend of design creativity and engineering excellence. We have a highly experienced team who understand the market and customers' needs. The drawing team design all products through the comprehensive Solidworks 3D modelling software, which allows us to develop solutions and use impressive simulation to ensure our products meet the required user specifications.

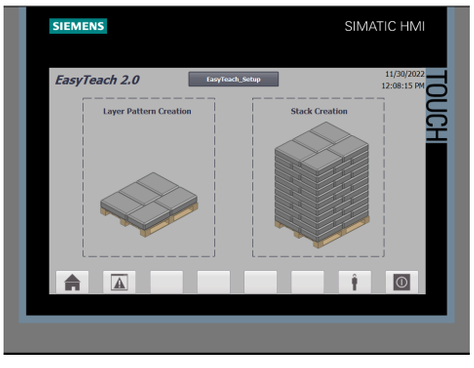
EASY TEACH ROBOT PROGRAMMING

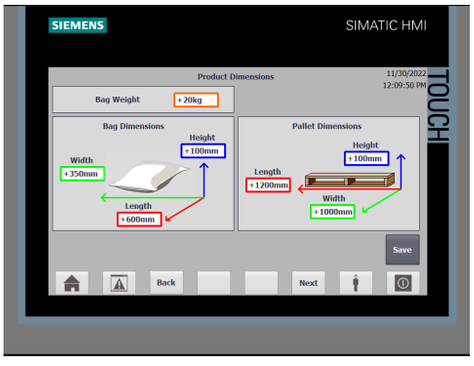
Developed in response to the need for a simple “operator” friendly interface platform, RMGroup software engineers extract the commonly required process controls from the complex robot programming pendant and make them available on a simple to use and understand touch screendisplay.

Easy Teach accessible functions can be tailored to suit individual automation systems. Below are sample screen shots from a simple palletising system.

- No interactions via main robot controller required by operator as all modifying positions and general running of the system can be accessed via the operator HMI.
- Position values can be altered whilst the robot is running and the new position is updated and saved immediately and automatically.







REMOTE ACCESS VIA EWON

At RMGroup we realise the importance of connectivity.

Hardware fitted inside control panels have allowed our engineers to carry out preventative remote access maintenance, fault finding and programme changes remotely This has saved uncountable hours of downtime for our customers by eliminating engineer call-out charges. We are able to supply connection to the internet in any environment no matter how remote due to the flexibility of the routers we use which provide secure connections via Hard Wired installations, WI-FI or 3G.

The aforementioned remote access service is available as part of an annual support plan. Dedicated RMGroup engineers are available in order to support customers through any problems by fault finding or to assist with required changes to programmes. Please contact our Service Manager in order to enquire further about our remote access maintenance services.

PACKAGING MACHINERY & ROBOTIC AUTOMATION

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