

Autumn Issue - May, 2013

**THIS ISSUE:**

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- New Robopac Range Wrap-up
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**High Aussie dollar & weak Japan yen keeps robots at best value!**

The high Aussie dollar certainly causes pain in export areas as well as in companies competing against cheaper imports. However, this environment is **rewarding investment as never before**. Using this time to advance your production & reduce costs for the future reaps great rewards, especially before the exchange balance swings back the other way!

Call our team on **1300 552 333** to explore your site's automation potential for the fastest Return-On-Investment or simply **reply** to this email. Robots have always been great value but there's never been a better time to buy or upgrade.



Yaskawa Motoman & OTC Daihen robots are now at the best value in 20 years!

**Automation helps keep local industry glued together...**

A leading automobile manufacturer has partnered with **RA** to automate the gluing of vehicle windshields, side & roof hatch windows in a robotic solution for one of their Australian manufacturing sites.



Above: Robo-gluing of roof-hatch. Inset: Pair of ready-glued side windows  
 The solution is set to improve consistency and quality in production while reducing human error - saving production time, product defects ...and saving glue too! Staff will be redeployed around this repetitive, heated-glue-fumed task area - a win for health & safety conditions.

**...Equipment in Focus:**

The solution features the **Motoman MH80** Materials Handling Robot with an 80kg payload and a big 2,061mm reach.

**Key benefits -**

- Fast, flexible and reliable.
- Ideal for a variety of applications, multi-purpose robot.
- Sleek design that requires minimal installation space.

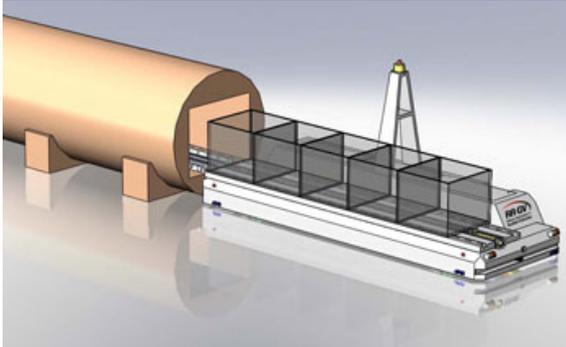


**RA's** custom-designed Gluing Tool Unit (for the robot's end-of-arm) features twin applicator nozzles for consistent glue-beading required in 2 different sizes.

The robot's three gluing work-stations (one for each window type) are all encapsulated in a space-optimised safety cell featuring light-curtains and interlocks.

**AGV solution works a treat for local confectioner...**

**RA's** Automatic Guided Vehicles (**RAGVs**) will soon be helping another manufacturer to cook up one of Australia's favourite confectionery treats...

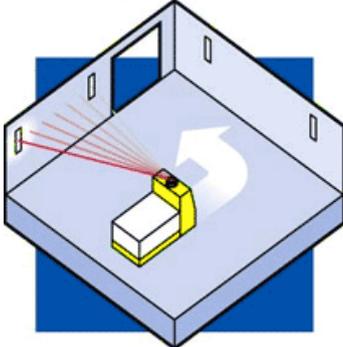


Above: Simulation showing concept of vehicle delivery to retort ovens.  
 Prompted by our client's challenge, **RA** custom-designed a fixture allowing the **RAGVs** to reach deep into ovens to position and pick-up trays of confectionery. After cooking, the **RAGVs** deliver the trays to the cooling room.

The solution also features a complete Process Control system by **RA** which includes interfacing with the existing ovens and the client's Production Management System, providing real-time status, control and traceability.

**...Equipment in Focus:**

The solution features a flexible **RAGV** base-model vehicle with customised fixtures to carry and deposit the client's trays of confectionery into the ovens.



Laser Navigation has been chosen for this **RAGV** fleet as it allows for easy flexibility in path alterations (through software only) while maintaining positional accuracy via continuous laser measurements from the vehicle to wall reflectors.

## Boarding now! Airport design for palletising project...

Previewed in our last **RA Newswire**, this revolutionary palletiser design has now been realised for one of our leading food-packaging clients in Australia.



Above: Robot in robo-fork-lift mode and 3 of the 7 pallet positions beyond.

**RA's** design for this solution allows products from seven different lines to converge upon one high-performance palletising robot which, informed by a vision system, takes each type of box to any one of seven pallets and stacks them in their individual palletising patterns.

When any pallet is full, the robot changes over its vacuum gripper for a set of forks via an automatic tool-changing station and becomes a **robo-fork-lift**, lifting the full pallet and transferring it to an infeed conveyor for the next stretch-wrapping process. The robot then grabs an empty pallet from a magazine, replaces it into the vacated pallet position and continues palletising. That's one hard-working robot!



Above: Like an airport, the planes (or pallets) are positioned around the gates (or robot) to pick-up the payload from a central in-feed.

### ...Equipment in Focus:

The solution features the mighty **Motoman MPL800** 'Master Palletising' robot which has a payload of 800kg and a huge reach of 3,159mm!

#### Key benefits -

- Compact design allows maximum performance using minimal floor space.
- Palletises full truck-height loads.
- An increased durability of the hose package by routing cable wiring internally.
- Hollow wrist with through-arm cabling reduces interference, maintenance and allows easier programming.



## Motoman launches new Bio-Medical robot...

The new **MH3BM** (BioMedical) robot from **Motoman** is designed with applications such as specimen processing, drug dispensing and medical research in mind. It features a special coating and stainless steel fasteners that permit cleaning with hydrogen peroxide. The wrist of the robot is IP67 rated, while the body is IP65 rated. Its ISO 5 (class 100) rating also makes the **MH3BM** robot compatible with clean room applications outside the biomedical market, such as assembly, packaging and small parts handling. Maximising available workspace, the robot's footprint boasts a compact base width of only 200mm and utilities are routed through the bottom of the robot and allow 360° base rotation!

This robot offers an 804mm reach and a 3kg payload. The robot has brakes on all axes and can be floor-, wall- or ceiling-mounted for layout flexibility. The built-in collision avoidance features with multiple robot control permit two robots to be used together to optimise productivity.

This model is compatible with the similarly compact **Motoman FS100** controller - featuring open software architecture, enabling software customisation in widely accepted environments such as C or C++.



The Motoman MH3BM Robot

## Wrapping up the new HELIX range from ROBOPAC...

**Helix** is a complete range of Fully Automatic Pallet Stretch Wrapping Machines from **ROBOPAC** - the world's largest manufacturer. In simple terms, the range breaks down like this\*:

- **Helix 1** - Entry level wrapper for needs up to 50 pallets per hour (p/h)
- **Helix 3** - up to 65 p/p/h
- **Helix 4** - up to 85 p/p/h
- **Helix 4/2** - Dual-carriage model for up to 170 p/p/h!

A suite of options are available with each, including:

- Your choice of 5 pre-stretch carriage designs for optimal film usage.
- Top Sheet Applicator



The Helix 1



The Helix 3  
(with Top Platen option)

- Top Pressure Platen
- Film 'Roping' Device
- Your choice of 3 film 'Clamp-Cut-Weld' devices for the required film finish!

\*Depending on your line speed, top sheet needs and the total film revolutions required.



The Helix 4  
(with Top-Sheet Applicator option)



The Helix 4 / 2 - Dual Carriage model

**New application videos to inspire...**

There's nothing like SEEING something work to realise how great it could work for YOU. The latest of RA's application videos can always be found on [www.YouTube.com](http://www.YouTube.com) so check in and "follow" us to stay in the loop...  
(Direct link [www.youtube.com/user/RoboticAutomationPL](http://www.youtube.com/user/RoboticAutomationPL))



**Are you missing out?**

Have you had an audit of your site's automation potential? RA consults for many clients with either a quick, no-cost appraisal or a detailed R&D service. Our team is always happy to advise you.  
Call **1300 552 333** to enquire or simply [reply](#) to this email.

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