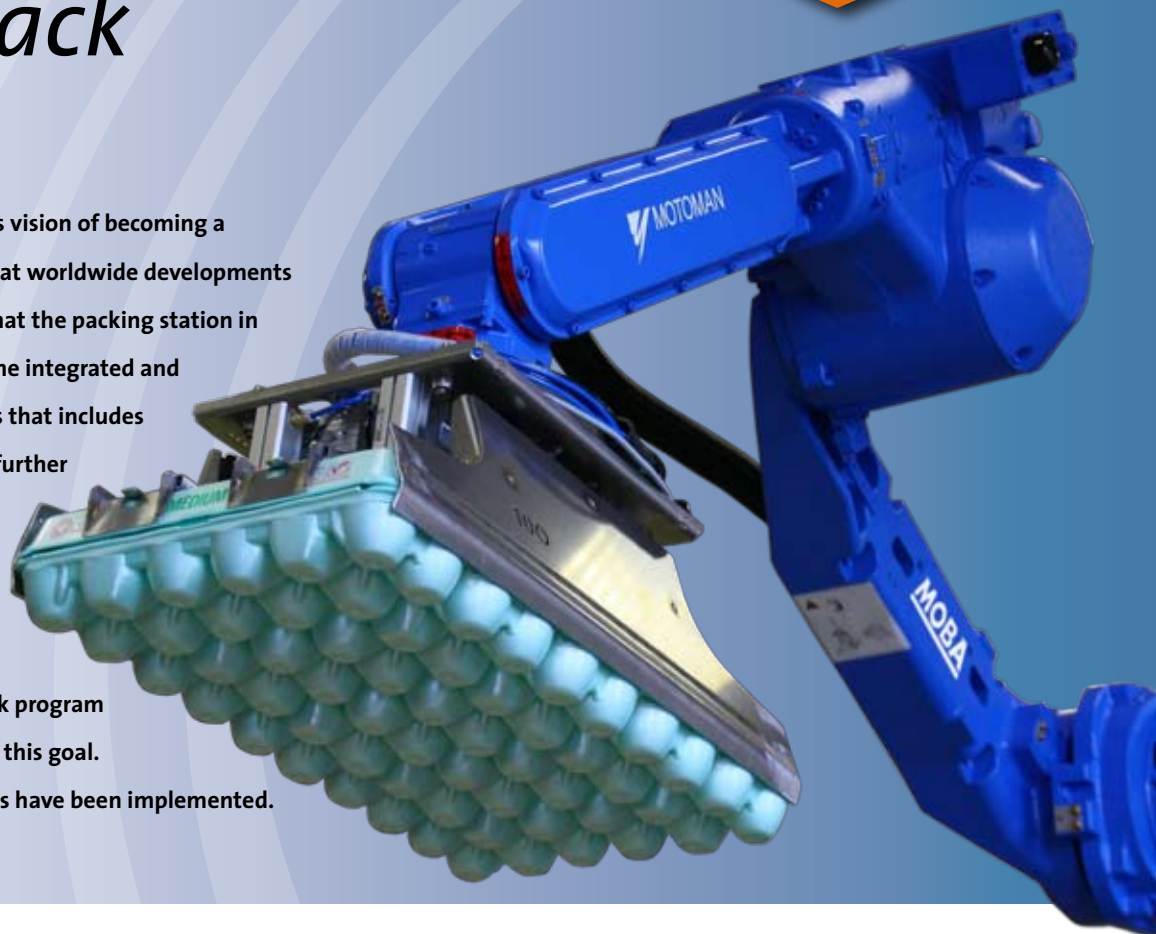


MOBA ROBOTICS

*The logical next step
in Autopack*

Many years ago Moba launched its vision of becoming a "Total Solution Provider". Looking at worldwide developments in the food industry, we realised that the packing station in the ultimate future will become one integrated and fully automated process. A process that includes the egg grader itself, but also the further automation of consumer packs into cases, crates, onto pallets and displays, including all administration and traceability. In 2001 Moba started the Autopack program with a dedicated team, for exactly this goal. Since then many Autopack projects have been implemented.



LATEST NEWS: NEW MOBA FARMPACKER

150 cases per hour
54.000 eggs per hour

Visit us at hall 7
booth A008

Robots

Although robots exist for many decades, the price performance ratio was not matching the requirements in our egg industry for large scale applications. For that reason we developed our series of dedicated case packers and display loaders. These systems perform very well in high

volume operations and there will always be situations where these systems are preferable. The use of spherical robots opens up another market segment however, aiming for lower capacities combined with more flexibility. Unlike some integrators, we aim for standard solutions with full flexibility, using new robots for maximum reliability and serviceability. In short:

the real break-through in a complete series of solutions has yet to come. Since spherical robots have developed rapidly as far as reliability and price-performance ratios are concerned, Moba carefully started a project for wide applications of robotics in the egg industry.

Read more on the next page >



Long term commitment: Our service makes the difference

To create the best possible solutions for the egg industry, Moba teamed up with Motoman, a Yaskawa subsidiary and global leading supplier of industrial robots. With a portfolio of more than 175 different types of robots, the best possible robots were selected for the tasks in our industry. This in itself is a revolution, since many bad robot experiences in the industry were caused by wrongly (over-) dimensioned systems, merely because only "fast runners" from the automobile industry where affordable.

Furthermore a partnership with a strong and global operating company was a must for us to meet our long term commitment to our customers. Securing availability of service and parts for many years is our highest priority: "Our service makes the difference".

Series

Moba developed a number of modular items such as pickup points, case alignment units,

pallet positions and transport conveyors in such a way that they can be configured in a modular way. This enables a wide variety of configurations that can be made. All units are mounted on a stainless steel frame or an anti-corrosive pedestal that enable easy cleaning of the floor. Also all peripheral units are designed to withstand intensive cleaning of the floor by water. From our multifunctional "toolbox" we created, for now, the following configurations in our new MR-series ("Moba Robotics"):

Case Packer MR 10

A robot system that can pack consumer packs into cases and crates. It can pick up consumer packs directly from a block of 2 Omnia packing lanes or can be connected to the grader via a conveyor system. This can be a relative simple system to improve the logistic layout or a multi-functional Contiflow system that connects multiple packing lanes to multiple robots in a flexible way. The MR 10 can of course be fed by an automatic case erector.

Display Loader MR 20

A robot system that packs consumer packs into- or onto display pallets and shippers. Because of the size of pallets or shippers, limited configurations directly behind the packing lanes are possible. Most configurations will be using a conveyor system to move the MR 20 away from the egg grader.

Case-Display-Combi MR 30

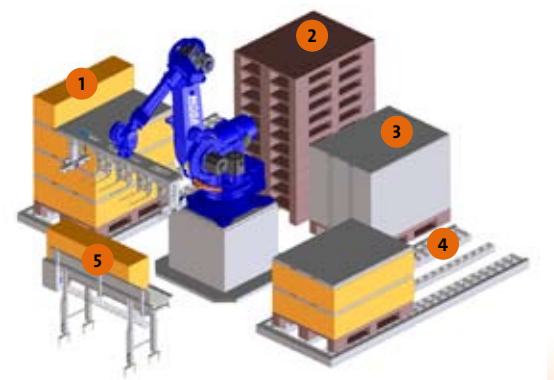
The MR 30 is in fact a smart combination of the MR 10 and MR 20. This brings ultimate flexibility to your packing station. At one moment it is able to pack consumer packs into cases or crates while the next moment you can use the same robot for filling displays. Because the size of the displays and thus the equipment to handle them is bigger than the width of a block of packing lanes, most configurations will benefit from being positioned away from the egg grader by means of (either simple or full flexible-) Contiflow.

Tray Palletiser MR 40

On farms eggs are frequently put on pallets for transport. The MR 40 will palletise all common used systems of both plastic and paper trays, using wooden pallets and normal interleaf sheets or special system sheets. Configurations with 1 or 2 fixed pallet positions can be created and also automatic pallet transport conveyors are available creating even more full pallet positions. Automatic handling of empty pallets and interleaf sheets is of course included. Weighing stations can be included if required. When palletising with cardboard interleaf sheets, each layer can be turned 90 degrees, so that



- 1 Pickup points at 2 Omnia packing lanes or via Contiflow
- 2 Loading position for cases/crates
- 3 Loading position for display pallets/shippers



- 1 Pallet position with or without automatic transport
- 2 Empty pallets
- 3 Interleaf sheets
- 4 Pallet position with or without automatic transport
- 5 Pickup point stacks



bottom and top cups of trays are exactly opposite for maximum stability. The capacity of the system is 108,000 eggs per hour.

Tray De-palletiser MR 50

In many situations eggs are transported to packing stations using a plastic tray system including specific pallets and interleaf plates. These pallets can be unstacked fully automatic

using the MR 50. This system is capable of loading all loaders for Omnia 170, 330 and 500 with a continuous preloader conveyor. It can keep up with even the Omnia 500, that is 180,000 eggs per hour.

Case Palletiser MR 60

Consumer packs can be put in cases or crates by human loading, by CP 10, CP 12, CP 30, MR 10

or MR 30 case packers. These cases can be stacked on pallets for transport to the retail or distribution centre. The MR 60 can automatically load various types of cases on maximum 3 pallet positions. Depending on the requirements 1 to 3 pickup points can be used, resulting in capacities up to 12 cases per minute.

First Omnia FT machines in Middle East

Mr. Kadi signs repeat order for two Omnia FT 330 machines

Kadi Agri & Poultry co. in Saudi Arabia owns various farms and plants in the region around Taif. They bought their first computerized grader, a Moba 5000, in 1999. Over the last decade the company can look back on an impressive expansion. By focussing on the absolute best egg quality and intensive marketing of this quality, the market share of Kadi Agri & Poultry rapidly increased. This success was not only limited to Saudi Arabia itself. The top quality eggs quickly found their way to surrounding countries resulting in a growing export.

To cope with this expansion, in 2003 the first Omnia 250 was installed. The various options of the Omnia technology matched perfectly with the quality driven marketing model. Since the installation, not only the technology but also the support and service of Moba were found to be satisfactory.

Now, in 2010, Kadi Agri & Poultry decided again on a major project that will more than triple the grading capacity of the company. For Mr. Kadi and his ideas about hygiene and egg handling there was only one logical way to go: Omnia FT. Via this project the very first Omnia FT machines will be introduced in the middle east. These machines include the hygienic infeed that can be foamed and high pressure cleaned, as well as the removable packer elements that can be sanitised externally. This gives Kadi Agri a jumpstart in intensifying the marketing approach as far as quality and food safety is concerned. Kadi Agri. & Poultry Co. is awarded with ISO 22000-2005

(food safety and management) besides ISO 9001 (food quality) and ISO 14001 (Environmental).



Rik Bosch Area Sales Manager Moba (right) and Mr. Kadi owner of Kadi Agri & Poultry (left)

During VIV-Europe, Moba organises factory visits with focus on Omnia and Moba Robotics

Moba has a lot of interesting things to share during VIV-Europe in Utrecht, The Netherlands, from April 20 to April 22. an Omnia 330, a Foodtec loader FL330, Moba Robotics, a Farmpacker, a Case packer and a Display loader will be shown. Since a booth only allows so many exhibits and also safety issues make full scale demonstrations difficult, we decided to repeat the successful formula of last VIV-Europe: Open House at our factory in Barneveld.

Read more on the next page >

Sensational breakthrough in high speed farm packing

Moba introduces a new farmpacker with a capacity of 150 cases per hour (54.000 eph). The new system will not only be made of stainless steel, but is constructed with high pressure cleanable units. These units can be removed for cleaning outside the packing room. This combines the best possible egg handling with an easy cleaning and maintenance program.

The production series of the new farmpacker is planned for the 4th quarter of this year.

Since Barneveld is only a half hour drive from Utrecht, we will invite our customers for a factory visit. During the visit, a full scale Omnia 500 will be operational and demonstrated with real egg production. Special focus will be on our Robotics program. Since we created a "toolbox" that enables almost infinite combinations to match your needs, presentations will be given about the overall concept and all thinkable applications. Also demo's will be given to show what Moba

Robotics can offer you. Our technical specialists are available for in depth discussions about your ideas and wishes.

Twice per day a shuttle bus can take you directly from our booth to the Moba factory and back. During this half day program there is of course room for a general factory tour and snacks and drinks are taken care of so you don't have to worry about anything. Just get aboard!

You can get your free entrance ticket to VIV-Europe via our website www.moba.nl

If you are interested in the factory visit, you can also pre-register on www.moba.nl

Dramatic change of Polish egg market in less than 2 decades

Borkowski: "Change from a closed market to export market offers great opportunities"

For a long time the Polish egg market was dictated by the communistic regime. When in 1990 the communistic period ended, almost instantly the Polish economy changed into a democratic and market oriented system.

This offered great opportunities to those entrepreneurs in the egg market that were willing to take risks and invest in modern production facilities. A great example is our valued customer Mr. Henryk Borkowski. Since 1985 he started his poultry production Fermi Drobiu Borkowski.

During the 1990's the egg market opened up. This allowed Polish companies to export their products to European countries. Borkowski saw this opportunity immediately and in 1992-1993 Borkowski started to invest even more, resulting in a production that grew up to 60.000 layers.

In 2004, Poland joined the European Union, making export even more interesting for successful Polish producers. Over the years between first export possibilities and today, Borkowski was able to grow to 5 farms with in total 4,500,000 layers. Last year an Omnia 330 XF was installed at the packing station next to the head office and family house. The Omnia 330 XF has a capacity of 120.000 eggs per hour and is built according to the latest standards in the egg industry.

Mr. Borkowski; "We have been using the Omnia 330 XF for a while now and it works perfectly. The

machine is very sophisticated and helps me run my packing station in a more efficient way. And even more important: I can count on 24/7 support via the Mopol agency and the Moba helpdesk and service team as backup.

Mr. Borkowski does not intend to stop here. Borkowski is now standardizing on housing systems with latest standards on animal welfare with regards to the 2012 EU cages legislation and also focusing on environmental friendly processes by reusing the manure in an own biogas plant. This approach will certainly give additional competitive advantages and Mr. Borkowski is confident that the Polish egg market and his company will continue to develop in this professional way. Fermi Drobiu Borkowski is directed by father Henryk Borkowski and son Igor Borkowski.

Events 2010

VIV Europe	20-04-2010	–	22-04-2010
Uk Stoneleigh	11-05-2010	–	12-05-2010
Avesui	11-05-2010	–	13-05-2010
Avicolas Procinos	22-06-2010	–	25-06-2010
Space	14-09-2010	–	17-09-2010
VIV China	21-09-2010	–	23-09-2010
Agroprodmash	11-10-2010	–	15-10-2010

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