

ADVANTAGE

POULTRY PROCESSING



2008 – Volume 1

Robotic labour

A machine that replaces an entire human packing line, loads up to 240 portions a minute into fixed weight packs in a variety of sizes and formats day in, day out, without a break, is a real money maker.

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MEMBERS OF MAREL FOOD SYSTEMS

[aew delford](#) [carnitech](#) [marel](#) [scanvaegt](#)

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A machine that replaces an entire human packing line, loads up to 240 portions a minute of virtually any product and into fixed weight packs in a variety of sizes and formats day in, day out, without a break, is a real money maker. Surely, there isn't a single processor on the planet who would ignore the chance of employing such a machine to boost his production output, slash his costs and make the most of that increasingly scarce and expensive resource, labour.



Two Marel Food Systems companies – AEW Delford and Scanvaegt – are pioneering loading and batching technology with their IPL Batcher and RoboBatcher systems to provide the world's meat, fish and poultry processors with intelligent robot batching machines and systems that can achieve remarkable results.

Vital gripper technology*

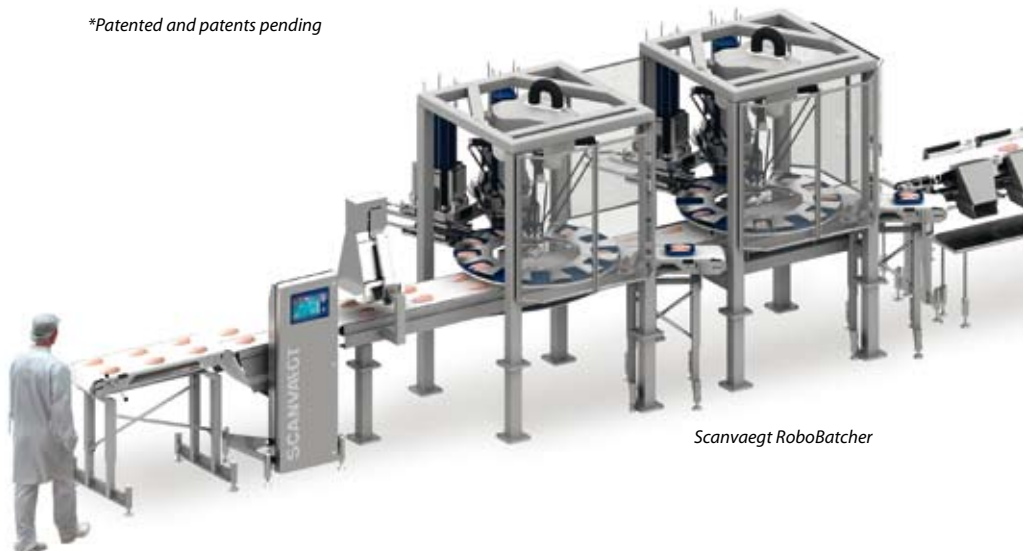
The picking and placing of products into trays with robotic arms is now well established across a number of industries, but in meat, fish and poultry processing, where floppy, sticky, wet, soft, natural – well, anything that's hard to handle – products are the norm, the concept is comparatively new. AEW Delford and Scanvaegt have made such huge advances in vital gripper technology that now, virtually any product – however delicate or vulnerable – can be lifted and placed at speed into a tray or thermoformer in a bewildering variety of configurations.

What does batching do and how does it work?

A robot batching system loads pre-formed trays or thermoformers with individual product portions to produce fixed weight packs. If required, more than one nominal pack weight can be produced at the same time depending on production requirements and the size of the incoming product. Continuously fed incoming product portions such as chicken breasts or steaks are individually weighed and the information is fed to a computer which then decides which tray or pack the portion is to be loaded into.

A vision system determines the size, position and orientation of the incoming prod-

**Patented and patents pending*



Scanvaegt RoboBatcher

labour

For further information please check
www.aewdelford.com or www.scanvaegt.com



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Virtually any product can be lifted and placed at speed into a tray or thermoformer in a bewildering variety of configurations.

uct then, at the appropriate point, the relevant robot head transfers the portion, whilst automatically orienting it, to the final pack to give the required pack style or presentation. Good examples of this are the nose to tail patterns required for chicken drumsticks or fish portions. Any portions that may be 'off spec' or not required for retail packs can pass by and automatically be diverted to a dedicated bulk or food service pack.

Simple controls

The robot batchers have straightforward, easy to use controls that enable operators to switch

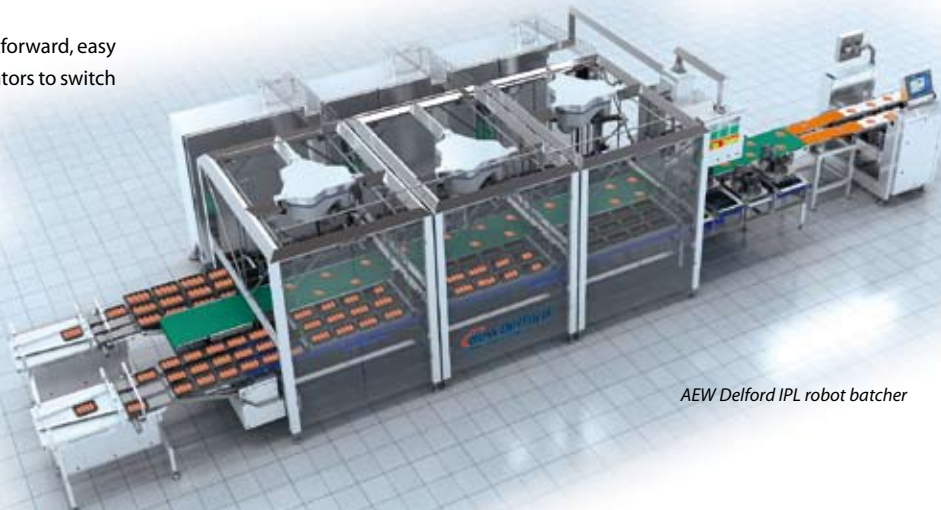
between products with a minimum of disruption. This is so essential in today's 'fast response to order' environment.

Tailor a system precisely to your needs

If, having read this article, you decide robot batching could be for you, you may be wondering what size and type of system you need and who you should approach. There is a range of systems to choose from with 1, 2 or 3 head

units that provide typical outputs from 100 up to 240 portions/min depending on product type and production outputs. The flexibility of the systems means they can be easily configured to your production requirements and factory layout.

So, if you want labour that works all day without a break, never goes sick, never takes holidays and always reports for duty on time, call us.



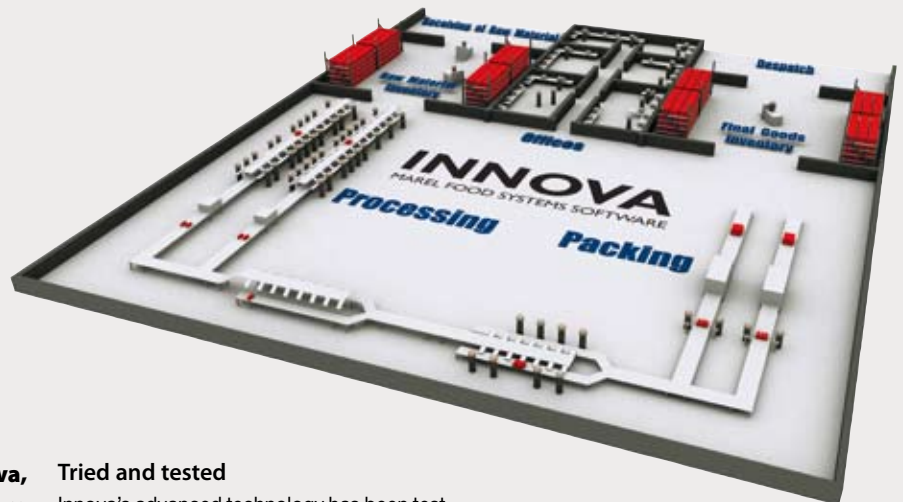
AEW Delford IPL robot batcher

Marel Food Systems introduces Innova

– a new intelligent management production software

Innova has given us the insight we need into our production. More importantly, all the data is in one place, saving us valuable time.

Hermann Stefánsson, Production Manager,
Skinney-Pinganes hf



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Marel Food Systems launches Innova, a revolutionary new software designed for intelligent production control. The technology is built on the extensive software development experience of Marel Food Systems' four global brands AEW Delford, Carnitech, Marel and Scanvaegt. This groundbreaking new product is the next generation of software from the company.

Designed to be compatible with all Marel Food Systems machinery Innova brings production management to a whole new level by reducing the time that the factory manager spends actively monitoring the production process. This provides them with better information for management.

One integrated solution

Innova controls and monitors every step of the production process. It allows for full coverage of general business processes on the factory floor, in one integrated solution. This includes the reception of raw materials through to the dispatch of the finished product. It ensures that data is at hand at any given point in time during the production cycle. Furthermore, there is a built in traceability mechanism on all levels, ensuring that all product information is registered throughout the whole production process, making it easier for recall if needed.

Tried and tested

Innova's advanced technology has been tested in factories in Iceland with great results. The first company to implement the software was Skinney-Pinganes hf. Hermann Stefánsson, the production manager, is pleased with the outcome of the installation. "We now have better control of our inventory, production capacity and utilization", says Stefánsson.

Solid system for the future

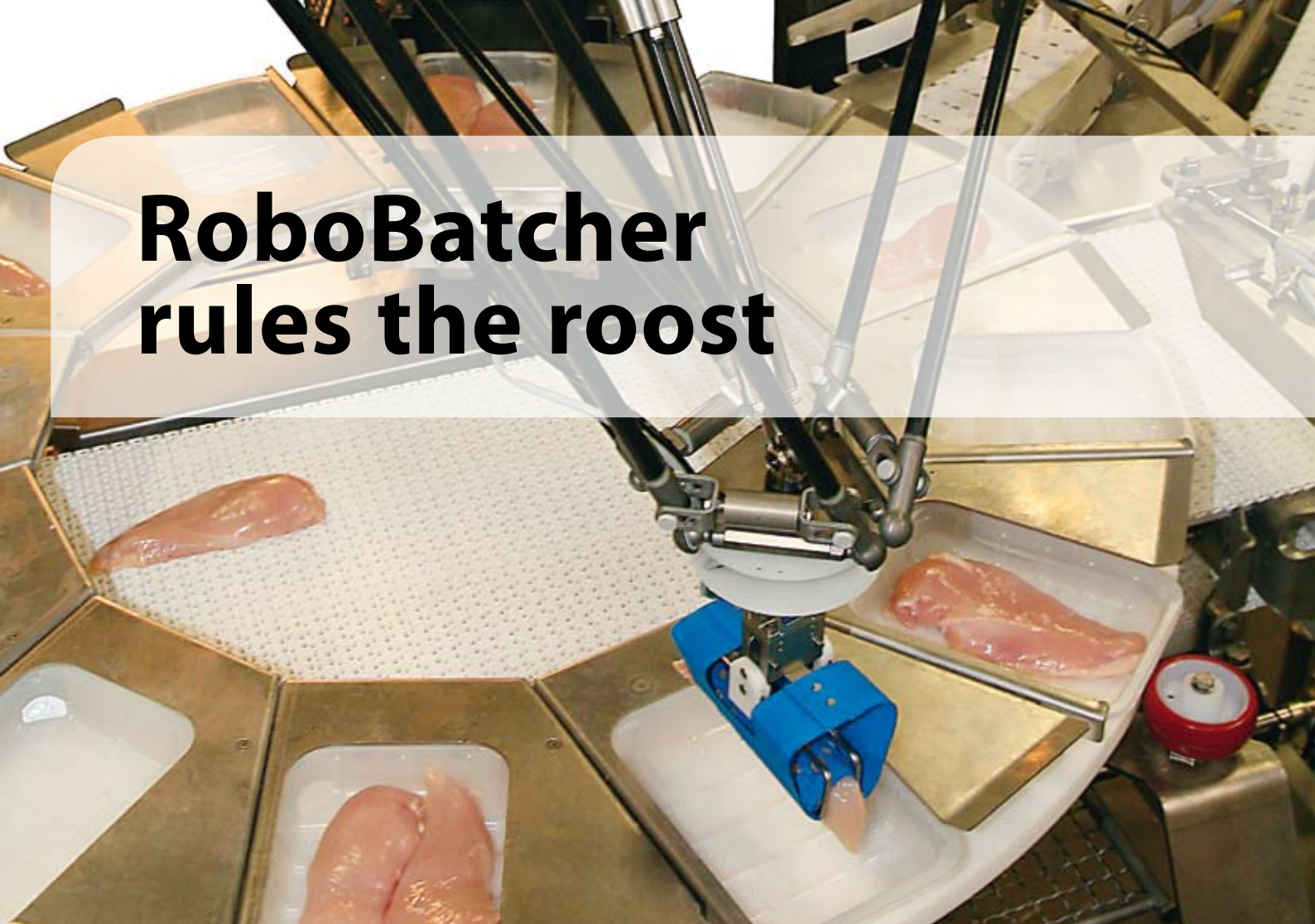
Marel Food Systems is continuously developing its technology to better suit customers

and their needs. Thanks to Innova's modular design, new programs are easily added to existing systems and new modules are developed to adapt to new requirements in food systems technology.

Customers operating the previous versions will continue to receive full support and service from the respective brands while consultancy and service for Innova is readily available at all service locations around the world.



RoboBatcher rules the roost



Robotic tray packing and styling of products is proving to be the solution for the ever increasing shortage of labour. Scanvaegt's RoboBatcher is one such system – and it has the potential to rule the roost!

'Moy Park in Anwick, UK is an unusual company. Walking into the poultry production facility is like walking into a development center at one of the world's top manufacturers of food processing equipment. Innovative machinery are all around you and the latest to be implemented is Scanvaegt's RoboBatcher.

Huge reduction in the need for labour

The tell-tale sign that there is something new at work here is the amount of people involved in making the fixed-weight packs of chicken fillets – there are very few.

"On a normal high volume batching processing line where we make fixed-weight packs we need 10-12 people. With the Scanvaegt RoboBatcher we expect the number of people required to make the same amount of trays per minute to go down to 2-3 people once the system is fully integrated – which will dramati-

cally reduce our need for operators," explains a Moy Park spokesperson.

200 picks per minute loaded in predefined style

The RoboBatcher system at Moy Park consists of two robot units. Each robot is capable of picking and placing 100 items per minute. Scan-Vision camera technology ensures that the robot knows the exact length, width, height and orientation of the products which are then gently placed in the trays according to a predefined pattern. With fully automated in and outfeed of trays the only operators required on the system are for the final styling and quality control of the products.

Unique batching capability

A patented circular disc separator system holding 12 trays gives the RoboBatcher excellent possibilities for making fixed weight batches with low giveaway. In addition the vision system also enables the RoboBatcher line to separate products which needs to meet other criteria than weight alone, for instance prod-

Scanvaegt RoboBatcher batches to fixed weight and loads products in predefined patterns directly into trays without any need for manual intervention.

ucts measuring above 110 mm in length with a maximum height of 25 mm and weighing between 110-120 grams.

"With the RoboBatcher we are able to meet a number of issues poultry processors worldwide faces. The superior batching ability of the system secures a very low giveaway. The speed and flexibility of the line maintains a high throughput with a possibility of handling different product specifications. And with automatic tray loading we have come up with a solution to the perhaps most crucial issue of all at the moment – shortage of labour," says Scanvaegt's General Manager for Poultry Solutions Sven Baekhoej Jensen.



Made to order



Fillet production revamped at German Borgmeier Frischgeflügel with Marel Food Systems weighing and portioning technology

The Borgmeier family business in Delbrück, Germany, slaughters and processes up to 130,000 chickens per day. As part of a major scheme to expand the existing slaughter and cutting operations, the filleting unit has been completely redesigned.

Optimizing logistics

The objective was to re-design the filleting unit completely, taking into account all fillet products – butterflies, fillets and inner fillets. Various plan proposals were developed in close collaboration between Borgmeier, Marel Food Systems and the Dutch poultry processing machine manufacturer Stork.

“It was important to us to come up with a plan that guarantees optimal logistics for product, packing and personnel, while maintaining full flexibility, and least one with which we can also meet our customers’ needs in the future,” says chief executive Heiner Borgmeier.

Efficient production

The filleting of all butterflies and fillets is performed on Stork filleting machines after which they are trimmed on a Marel Trimline and batched on a Marel CheckBin grader into trays or bulk packages. All tray packages are placed on a central packing belt and conveyed

‘inline’ to a Sealpack tray sealing machine. Inner fillets are produced similarly to butterflies and fillets for bulk packages. From the CheckBin grader a constant quantity of inner fillets is automatically supplied to a Marel IPM3 X300 LaserEye intelligent portioning machine for cutting into nuggets. This ensures constant utilisation of the cutting line.

“The project has been a success for us, thanks to the smooth collaboration between Marel Food Systems and Stork,” says Heiner Borgmeier “Everything worked out well, from planning to implementation.”

Data visualisation with Marel Software

All production data is registered and visualised with the powerful Marel Production Software, and adjustments to the Marel sorting or portioning machines are carried out centrally. The sorting process can be controlled and monitored by means of a graphic display on the screen. Detailed production reports can be requested and printed at any time. This enables a real-time recording of production data, such as initial weight of the raw material, throughput rate, yield, tolerance compliance, comparisons, etc.



Thomas Heidenescher (Marel Food Systems, Germany) and chief executive Heiner Borgmeier.

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The Marel CheckBin grader is an intelligent grader with weighing in the bin. Each collecting bin includes a precision scale that constantly monitors the batch weight and sends confirmations or corrections to the main computer. This reduces the giveaway considerably.

Boneless trim

– for a robust bottom line



New SensorX Poultry Trim Inspection System offers increased labour efficiency and improves trim quality with automatic bone detection

Yet another step has been taken in labour efficient production with the design of Marel's SensorX automatic poultry trim inspection system. Poultry plants currently require extensive manual labour to inspect trim for bones, making the process both tedious and inefficient. The new Marel system requires only two operators – a sure labour saver that delivers better quality than manual bone inspection can ever achieve.

More valuable products

The system can be controlled by Innova, the new Marel Food Systems Software that monitors and tracks all aspects of the production. Innova provides a better overview of raw material from suppliers and makes the process easier to monitor and control.

Remarkable labour savings

Designed to improve product quality through minimizing bone content, the SensorX trim inspection system consists of an automatic infeed, the SensorX detection unit, a reject device and a buffer belt. The entire process is controlled by two employees who only need to

attend to it in approximately 20 minute intervals, freeing them to work on other aspects of production in the interim. One oversees the infeed and the other takes care of bone removal from bone-in batches.

An efficient process

Poultry trim is fed into the system from tubs – one tub at a time – and is scanned for bone content with the SensorX bone detection unit. The SensorX automatically identifies bones and other foreign objects in trim at 2 lbs (1 kg) per second using X-ray computer vision.

Once the tub material has been processed, the material containing bones is routed directly back to the SensorX and scanned a second time for bone content. The primary purpose of this is to separate boneless material from bone-in material, resulting in even less raw material that needs to be handled for bone removal.

2000 lbs bone-free in under 20 minutes

The processing from each tub, approx. 2000 lbs, typically takes 18-20 minutes and the second

scanning from the buffer belt only adds 20-30 seconds to the process. By running the material twice through the system processors may reduce the amount of meat with each bone detection down to 0.5 lbs (200 g). The material that is still rejected for bone content from this second round, is routed to a trim table where an operator searches manually for bones and removes them.

Using the SensorX Trim Inspection system results in improved product quality, more accurate trim inspection and last but not least labour efficiency – all working together to improve the bottom line.

Read also article on page 12 about AlaTrade and their SensorX bone analysis system.



Jim Collums, Debone and Portion Control Plant Manager

Les Salisbury, Vice President of Production

Taking out the

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The new fully automated processing facility at Ok Foods, Arkansas, brings portion control to new levels with equipment from Carnitech, Marel and Scanvaegt.

Les Salisbury, Vice President of Production at OK Foods, Fort Smith, has been around long enough to see some drastic changes occur in poultry processing. During his time at OK Foods in Arkansas he has implemented a series of new production methods to the operation but when faced with the challenge of increasing efficiency on all levels his team was up against a more radical changeover than ever before. This time around the entire plant was gutted within 24 hours and a completely new processing system installed from start to finish – all in a record nine days. Marel met up with Les Salisbury, Jim Collums, Debone and Portion Control Plant Manger and Steve Harris, Assistant Plant Manager to hear about the performance of the new set-up.

“We had been given the challenge to come up with a way to increase labour efficiency and improve the debone and portioning process,” explains Salisbury. “I had been working on gradually moving our tenders onto an automatic

tender cutting line and I also wanted to incorporate vision systems into our QC procedures. In the end we made the decision to optimize the entire production and design a completely new facility.”

A single source supplier

Many different suppliers were involved and Marel Food Systems came in to enhance the infeed, tender and breast portioning and the quality assurance systems. A Carnitech singulation system, Scanvaegt ScanFeeder infeed systems, ScanVision graders and ScanPortioner B22 portion cutters and Marel TSM templates slicing machines and QVision, all dedicated to increase labour efficiency.

“We probably could not have done this project if we had not had a single supplier in Marel Food Systems for units from Marel, Scanvaegt and Carnitech,” says Salisbury, “We’ve built a history with Marel and I trust the equipment.”

Automated consistency

With 28 different types of equipment installed the entire plant is now fully automated and controlled by the efficient MPS production software for real-time monitoring of the entire process. Some of the major benefits to emerge

after the launch include more accuracy, better yield and increased number of higher priced items as well consistent quality control.

“We now have very accurate equipment controlling the quality of our products,” says Salisbury. “This is much better than manual handling. It puts us in a place where we can use statistical process control and really respond that way, rather than just to each individual situation. It puts us in that ballgame where you are using a scientific process to control the production.”

“Our software system allows us to directly monitor all processes,” says Steve Harris, Assistant Plant Manager. “Production information is fed into several different databases and we have direct access to that. There is a lot of information available online that gives us better control over different variables.”

Automation eliminates human error

“We went from having three Marel TSM template slicing machines to having nine on the portioning part,” explains Harris. “Before we did everything by hand except maybe 25% and now we are doing a 100% on the machines. Before we had our measurements, weight and templates all done by hand. We have taken out a lot



Steve Harris, Assistant Plant Manager

Guesswork



of the guesswork and human error with the new set-up."

Maintaining very tight specs

OK Foods produces fillets and tenders to very tight specs. Fillets have to meet a +/- 3 to 5 grams specification and even tighter on tenders. "We have a tight control over what goes in and what comes out with the new system," says Salisbury. "The control is in our hands and the feedback we get out of the Marel MPS system allows us to monitor this and thus acts like an early warning system for the production."

A singulation system, ScanVision grader, Scan-Portioner B22, TSM Template Slicing Machine and QVision quality control work together to create a seamless process for a more consistent product. The system provides tight weight control of fillets and tenders that are sliced on the B22 and the TSM, enabling the company to better meet the further processing plants' specifications for weight, length, width and thickness.

The singulator from Carnitech feeds butterflies into the portioning process. "It has absolutely been a positive deal," says Collums, Debone and Portion Control Plant Manger. "The Carnitech singulator is an excellent singulation

system. It is probably the most straightforward equipment we have installed. No problems, no hiccups. Just flawless!"

The QVision's quality monitoring of fillets after they have been sliced eliminates the variations inherent in manual processing. QVision provides consistency in the measurement of the different quality attributes of the grader resulting in more usable product and more product making it to the higher price range.

Increased primary product yield

"All fillets go through the Scanvaegt vision grader as they enter the portioning process. Using the vision grader ensures that 85% that comes out of the TSM is a usable primary product," says Salisbury. "Otherwise you probably are in the 70's, especially with the customers that have the very tight specs. With ScanVision we are also able to have a home for anything that is outside our primary +/- 3 to 5 grams. The product that is over or under is still a good product but just does not meet that particular customer specs."

"The vision graders monitor what goes into the TSMs, bringing its standard deviation down a lot lower than the average 6 on all aspects like length, width, thickness and weight. The prod-

uct from the TSM is then double checked with the QVision to make sure that what we put in that particular gate meets the tight spec. This process is far more accurate than anything involving manual handling."

Reduced trim on fillets and tenders

According to Collums, the radical changeover has more than improved the production process. It has taken the company to the next level of portion control with less trim and increased yield. "The new system has reduced our trim on the fillets," says Collums. "With the TSM splitting the meat, our fillets are better utilized. The percent of sized fillets we have sent to our further processing plants in comparison to the butterflies has gone up."

"The ScanFeeder has also brought great labour efficiency," explains Collums. "It allows us to size to the machine whereas before we had the whole range of tenders going to the portion cutters. That has created some efficiencies from a trim standpoint. We've been able to reduce our trim as well with the B22's. Before we would take a tender and cut across the top but now we can get two tenders out of that one where before we just got one. So it has reduced our trim significantly on our portioning tenders."

Cool batch – cool



With the capacity to process 72 tons of IQF chicken every hour Astral Foods in South Africa has perfected its production. The key to success has been a CEO who is a visionary, a clear business philosophy and an effective processing system where Stork takes care of cut-up and Scanvaegt's IQF CoolBatcher system takes care of the rest.

Astral Foods is South Africa's largest broiler meat producer both when it comes to individually quick frozen (IQF) and fresh chicken and is the second largest in total in South Africa with a market share of approximately 22 %.

A visionary by profession

CEO Mike Kingston spearheads the company. Back in the mid nineties he and his top management team were the first chicken producers to introduce multi batching and automatic weighing of IQF chicken in South Africa. This was done at the company's County Fair plant at Hocroft in the Western Cape.

"We saw that the market for IQF chicken was increasing in South Africa and began a process of optimizing our production method to cope with this higher demand," says Mike Kingston and continues: "My vision was to commission processing systems that could

hinging business

We saw that the market for IQF chicken was increasing and began a process of optimizing our production method to cope with this higher demand.

Mike Kingston, CEO



Scanvaegt's CoolBatcher concept

double our production without having to put in more operators. With the processing system now installed at our three plants we have achieved that dream."

County Fair's COO Gerrit Visser elaborates: "In 1996, County Fair was processing some 600 000 chickens a week, with a staff of just over 700 at the abattoir. Ten years later, our headcount is virtually the same, but we now process 1,2 million chickens a week – primarily as a result of productivity improvements as well as the employment of world-class automation, processing equipment and operating systems."

Perfect partnership with Stork and Scanvaegt

The integrated full scale chicken operation of Astral Foods produces a total of 3,7 million birds per week in four plants. Besides the Coun-

ty Fair plant at Hocroft Astral also has another County Fair plant in the Western Cape and two plants in Gauteng and Mpumalanga under the name EarlyBird.

"Our business philosophy is to work through and with our employees to achieve results. The management team at all Astral Food companies spends at least 75 % of their time in the production facilities to ensure production efficiency. Through their knowledge and through a perfect partnership with Stork and Scanvaegt – and not least between the two companies – we have been able to perfect our production giving us the results we want," Mr Kingston explains.

Scanvaegt IQF CoolBatcher concept

The base of the IQF CoolBatcher system is a triple automatic infeed system that interfaces with a spiral freezer, ensuring that indi-

vidual poultry parts (wing, split breast, thigh and drum) are singulated and sent to the Scan-Batcher product recognition and weighing unit. From here, the weighed items go to the specially designed separator for batching and packing. The capacity of the processing line is 6 tons per hour.

"We have chosen and will continue to choose Scanvaegt because they have proved to us time and time again that they deliver the processing results we aim for. Also, Scanvaegt has custom built our processing lines to suit our exact needs and are giving us the ever important after sales service that is crucial for any processor," Mike Kingston concludes.



Did you know?

South Africa's per capita consumption of poultry meat has increased 14% over the past six years from 19.74 kg in 2000 to 21.41 kg in 2006. This is still well below the 30 kg in Western Europe and 40 kg in North America.

Translucent profits with Marel SensorX

American poultry processor, AlaTrade improves bone analysis with extensive x-ray systems for custom produced fillets.

AlaTrade, an Alabama based company that performs custom processing, recently installed four of Marel's SensorX and four dual lane custom graders.

Increased accuracy

1 2

The company's main function is the deboning and portioning of chicken fillets and tenders. AlaTrade successfully installed six Marel custom graders in 2004, capable of providing accurate sizing above 90% accuracy at +/- 1 gram. Because of the success of the graders the company contacted Marel Food Systems for a solution that would enable them to achieve 95% or higher bone detection.

"After introducing our new SensorX system, we were pleased to work with AlaTrade on their new Phenix City plant," says Skúli Sigurdsson, the head consultant for the SensorX in Iceland. "We feel that AlaTrade is the perfect company to showcase the full potential of the SensorX and this partnership has been aluable for both Marel and AlaTrade".

Automatic bone detection

The Marel SensorX Bone Analysis System met AlaTrade's requirements and has been operating with great success since installation. The system automatically detects bones in chicken fillets using X-ray vision. The bones that

are detected in the fillets are highlighted on a high resolution display for easy removal. This process delivers more consistent bone content analysis than any manual checking and improves the QC procedures with detailed reports and accurate bone locations. This sophisticated and efficient solution increases the level of knowledge of the production process and therefore delivers a safer, more valuable product.

Consistent data improves processing

AlaTrade's President, John Pittard, is pleased with the quick start-up and the seamless production flow of the SensorX. "Bone detection has been close to 100% in all tests by both in-house and customer QA folks."

Increased efficiency

Greg Cagle, Territory Sales Manager for Marel Food Systems USA worked closely with AlaTrade on the project. "It was a pleasure to work with the professionals at AlaTrade," says Cagle. "The installation went well and I am pleased to see the increased efficiency we were able to



Photo left to right: Dale Carroll – Vice President of Operations, John Pittard – President, Davis Lee – Owner and Greg Cagle (Marel Food Systems USA).

deliver to AlaTrade in their bone analysis and QC monitoring with the SensorX."

Complete bone detection system

Total quality and security solutions are available with the Sensor X, such as the QC Station, that directs the fillets to different gates or workstations, based on the bone content. The SensorX also fits into the most current processing lines without having to incorporate major changes. The system is an effective tool for monitoring and enhancing the deboning process whilst also providing valuable information to the processor for further improvements.



Read also the article "Boneless Trim – for a Robust Bottom Line" on page 7.





Firm legs yield results in Brazil

Crust-freezing of product surface, prior to cutting of deboned chicken legs into fixed weight portions, has found favour with Brazilian kakugiri producers.

The contact freezing technique of Dantech's newly launched crust freezer has been adopted by the Brazilian poultry processing industry. Nine freezers have so far been supplied to leading processors as integrated parts of Scanvaegt Kakugiri Systems, and more orders are lining up as smaller companies are now beginning to follow suit.

Product stabilisation

No more, no less! Reaching the exact target weight requested by their Japanese customers is paramount to the producers of kakugiri. The finished cuts need to be exactly the same size and shape in order to have the right appeal to Japanese retailers. By pre-freezing the surface of the boneless, skin-on chicken legs from which the cuts are made, the product is stabilised and high-accuracy portion cutting facilitated.

Yielding the finest results

The boneless legs, trimmed into a more or less square configuration, are run continuously



through the freezing zone and frozen to a depth of 1mm in around one minute. Pre-frozen on the skin side to -40°C , a firm product surface is achieved and integrity maintained during portion cutting. Henrik Ziegler, managing director at Dantech, is very pleased with the introduction of their brand name into the Brazilian market, materialising from the synergies within Marel Food Systems: "Our crust freezer is an essential part of the Scanvaegt system in order for kakugiri producers to yield the finest results in terms of end product integrity and correct weight tolerance," he says.

A door opener

Henrik Ziegler sees great potential for IQF equipment in Brazil with its booming economy and its position to become one of the world's

Our crust freezer is an essential part of the Scanvaegt kakugiri system, yielding fine results in terms of end product integration and correct weight tolerance.

Henrik Ziegler, Managing Director at Dantech

largest suppliers of poultry. "The supply of a standard machine like this may well prove to be a door opener on the South American continent. In recent years, the Brazilian food industry has seen a growing trend towards further processed high value products and in this field we obviously have a lot to offer. With customers like Perdigao and Seara Alimentos, who are amongst the biggest producers of high quality poultry and pork meat products in the country, the prospects are certainly good," says Ziegler.

A service partner that focuses on your results

Marel Food Systems' mission is to be the best-in-class organisation that expands and adapts in step with our customers' changing requirements. This mission is based on the strength of our product range and a continual dialogue with our customers to make sure we really do understand their changing needs.

Our organisation provides professional service solutions to the food processing industry worldwide. We have more than 300 trained and certified field service engineers, directly employed in over 30 countries across six continents. With more than 1,000 on-site interactions with customers every day, we have built up a unique insight into our customers' different production environments and processes,

and have compiled unparalleled practical know-how about how best to tackle the demands and challenges our customers face.

Our international presence has taught us to appreciate the importance of due respect for regional and cultural differences. Our service products are arranged in a modular structure that gives you maximum flexibility in putting together a customer service and support package tailored to your exact requirements. We aim to achieve an in-depth, understanding of the challenges that face your business – both long-term and in your day-to-day processing operations. By doing this, we can develop a truly collaborative partnership where our services add significant value to your products and processes, and provide you with major benefits.

Local knowledge, global reach

- A service organisation with global reach, combined with local focus
- A customer-oriented organisation with 24/7 access to expert help
- Spare parts inventory and an efficient supply chain that spans six continents
- Knowledge of different production environments and processes
- Clear framework that assigns unambiguous roles and responsibilities
- Fast resolution of problems and greater management awareness
- Highly trained field service personnel whose skill sets are constantly updated



Did you know?

More than 75% of all unscheduled interruptions to food processing operations can be directly attributed to human error in the form of lack of familiarity with the processing equipment, incorrect operation, poor maintenance and carelessness.



Exhibitions winter and spring 2008 – Come see us

Exhibition Name		Dates	Place	Industry
Agromek 08	www.agromek.dk	15-19.01.2008	Herning, Denmark	
IPE 2008	www.ipe08.org	23-25.01.2008	Atlanta, USA	Poultry
Carnitech Salmon Show	www.carnitech.dk	30.01.2008	Noerresundby, Denmark	Fish
SPA/IBSS 2008	www.bostonseafood.com	24-26.02.2008	Boston, USA	Fish
Frozen'08	www.frozen.es	26-28.02.2008	Zaragoza, Spain	Frozen food
Foodexpo 2008	www.foodexpo.dk	2-5.03.2008	Herning, Denmark	
CFIA 2008	www.cfiaexpo.com	11-13.03.2008	Rennes, France	Poultry/ General Food
UkrMeatMilkProm		18-21.03.2008	Kiev, Ukraine	
AquaSur 2008	www.aqua-sur.cl	26-29.03.2008	Puerto Montt, Chile	Fish /Farmed
Foodex Meatex 2008	www.foodexmeatex.co.uk	06-09.04.2008	Birmingham, United Kingdom	Meat
Expoaviga	www.expoaviga.com	15-18.04.2008	Barcelona, Spain	Fish – meat
SPE 2008	www.europrocessing.com	22-24.04.2008	Brussels, Belgium	Fish
Interpack 2008	www.interpack.com	24-30.04.2008	Düsseldorf, Germany	Packing
VIV Europe 2008		27-29.05.2008	Moscow, Russia	Poultry
Acui 2008	www.acui.es	3-5.06.2008	Vigo, Spain	Fish

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StripCutter for fixed size poultry strips and dices

Highlights:

- Continuous cutting of fresh and frozen products
- With adjustable cutting blades minimum knife distance is 50 mm
- With fixed cutting blades minimum knife distance is 10 mm
- Moving roller grid ensuring no product movement during cutting process
- Fixed pointers for accurate product infeed position – laser or pins
- Continuous product flow – belt speed up to 30 m per minute
- Possible to cut more products in the same system configuration
- High operator safety as there are no open cutting areas
- Maximum product height is 76.2 mm (3 inch)

The cutting is done by several circular knife blades placed on one shaft. The distance between blades which equal portion size, may be changed depending on type of StripCutter.

To minimize waste it is important to position the product correct from the beginning – either by

using laser indication or stainless steel pointers at infeed – both are optional.

All cutting action is made safely under a cover with a safety switch. The knives and conveyor stop instantly when the cover is opened.

For further information please see www.scanvaegt.com



Acquisition of Stork Food Systems

Marel Food Systems is nearing completion of its acquisition of Stork's food systems division. The transaction closure is subject to clearance from anti-trust authorities – expected to come in late February 2008.

The acquisition of Stork Food Systems will be an important step towards achieving Marel Food Systems' target of becoming one of the leading global innovators of food processing equipment. The businesses of Marel Food Systems and Stork Food Systems are complementary, with no overlap in their product portfolios.



Dr. Hordur Arnarson,
President and CEO of Marel Food Systems

"The strong innovation capabilities of Stork Food Systems make it a perfect partner for Marel Food Systems," says Dr. Hordur Arnarson, President and CEO of Marel Food Systems. "Our good cooperation over the past decade has generated great respect for our colleagues at Stork Food Systems and shown us the potential for growth and success. We need

size, constant innovation and a global presence to succeed in our competitive industry. After the acquisition we will be better equipped to enter emerging markets such as Asia, Eastern Europe and South America. The step we have taken now will create an opportunity for us to optimize our production capacity and technological efficiency."



For further information please
see www.marelfoodsystems.com

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