

## Wilkin & Sons Ltd choose RoboQbo for smooth operating

Premium preserves manufacturer, Wilkin & Sons Ltd. of Tiptree, Essex, has installed a 120 litre RoboQbo cut-cook-cool vessel from Holmach.

Targeting a range of products from smooth caramel to rich chocolate spreads meant that the Qbo's high speed homogeniser was ideal, even being able to refine chocolate chunks into fine pastes. An 80kg batch, produced in less time than any alternative technology available, meant the Qbo was a natural choice.

Robert Parker, Head of Technical at Wilkin, commented: "We set out to find technology that could give us a bespoke product, combining a heated jacket, with both vacuum and indirect cooling. Holmach did trials for us at their test kitchen and then again on site here at Tiptree. We were very impressed with the results and also the flexibility and fast change over between products."

Roboqbo's unique cut-cook-cool vessels are the latest in a new generation of food preparation vessels. The ability to refine product to below 20 microns, to cook or cool under pressure or vacuum and rapidly change over using the inbuilt CIP system has meant a rapid take up by companies looking to produce high quality small batch products.



Machines sizes range from an 8kg batch, ideal for confectionery, NPD and trial work, to 350kg batches with a typical recipe production time of 15-20 minutes, including a 5 minute hold at 85°C.

Recent applications include systems for Marzipan and Ganache, Chilli sauce and jam, pasteurised hummus and tahini paste from whole sesame seed, sticky barbeque sauces, fruit reductions and peanut butter.

Recently a client wanted to produce fresh beetroot and mint dips for a leading retailer and the Qbo was able to cook and cool the beetroot, homogenise the cooked beetroot and mint under vacuum to create a vibrant and nutritious superfood.

For more information, go to Holmach's website at [www.holmach.co.uk](http://www.holmach.co.uk) or telephone on 01780 749097



## Cauli Rice builds up a head of steam with Lagarde

One of the UK's biggest success stories in 2015, Cauli Rice, a range of flavourful gluten free alternatives to rice, based on kibbled cauliflower is being produced on a Lagarde 4 basket retort.

Gem Misa, founder of the patented product said "I tried a number of different retort processes and suppliers to get the ultimate quality I wanted but found that only the Lagarde Steam/Air process produced the right product with a "just steamed" flavour, Holmach was instrumental in getting our retort process right."

Holmach was able to provide trial facilities that proved the process and allowed initial samples to be made for presentation and testing purposes.

The product has now been launched across most of the high street retailers and further afield.

Lagarde's patented steam/air retorts are able to process product to high accuracy and to handle delicate laminates without damage. The brightly coloured packaging of the Cauli Rice packs needs to be free of any wrinkling or creasing following processing and as the flavours are delicate, the Lagarde control accuracy to +/-0.2°C and 15mbar mean repeatable quality as well.



Other recent Lagarde applications in the UK include meat cooking for "street food" and "food to go", baby food in pouches and premium pet food in plastic pots.

# G's put a lid on it to get out of a pickle

G's Fresh Marketing has installed a NIKO filling group for the handling of beetroot and other pickles into a new range of pasteurisable PET jars.

Comprising of a volumetric pocket filler with vibration, designed to handle whole, shredded and sliced product, a spice filler for capers, peppercorns and seeds and a vacuum filler linked to a capper, the line is designed to gently fill delicate and difficult products without damage and to ensure the brine is filled into the container without spillage. The line runs at over 100 jars per minute.

Commenting on the choice of equipment, Graham Forber, Managing Director of G's said: "We approached Holmach and NIKO for the filling line for their depth of experience and knowledge in handling pickle products. We were aware that many of the UK's food producers use NIKO equipment because of their specialisation

in this area. The line performed from the start and we have been very happy with the support we have received from both companies."

NIKO, based in Germany, are world leaders in Pickle handling from fillers and briners to tunnel pasteurisers and glass handling solutions. Recent installations in the UK include air rinsers for shaped glass and plastic jars, as well as fillers for beetroot, shredded cabbage and pickled onions.

Speeds are available from 30 to 350 jars per minute with quick changeover between sizes and types of container.



## New Additions for RoboQbo

RoboQbo have announced three exciting technical developments for the Qbo – Universal Processing System. Capable of vacuum and/or pressure cooking, these machines can cool, mix, concentrate and refine food, all in a single cycle.

The efficiency of the processing technology means that the organoleptic properties of raw materials are preserved brilliantly, with huge energy savings. Manufacturers can store recipes electronically via the touch screen controls, meaning that fast and consistent results can be guaranteed every time.



### NEW REFINING SYSTEM

Smooth refining down to 20 Microns is now simple with the patented Bilia spherical system. Protecting delicate foodstuffs with precise temperature controls, the use of vacuum processes to produce high-quality foodstuffs preserves distinct flavours in foodstuffs such as nut pastes for ice cream, confectionary or chocolate. This simple system is also ideal for quick changeover between products.



### NEW WHIP TOOL

Responding to the growing market for gourmet marshmallows, RoboQbo's AeroQbo incorporates air, modified atmosphere and CO<sub>2</sub> into the product mix during processing. Being well suited to foods that have a soft and foamy consistency, this new whip tool creates foodstuffs that are uniformly amalgamated with perfect aeration thanks to its design. Sweet applications for the AeroQbo extend to products like mousse, ganache and meringue, amongst other sugary delights.

# SPOTLIGHT

## Insects over steak

The food industry is buzzing over a new trend that could completely change our primary source of protein. If you haven't yet tried insects, it could be happening sooner than you think.

Protein is essential to help maintain healthy bones and muscles. Mintel research has found that protein is a consumers most trusted nutrient. In four key global markets, Mintel found that consumers are turning to protein as a trusted weight loss aid. A significant number of those surveyed had increased their protein intake in 2014 compared to 2013.

The food industry has discovered an easy and sustainable way to get more protein into our diets. But are consumers ready to embrace it?

Introducing insects to your diet doesn't necessarily mean snacking on worms and grasshoppers. Insect flours have useful applications in baked goods where extra protein is necessary or desired; they can be processed into a product that is versatile, high in nutrients and, most importantly for most consumers, does not resemble an insect at all.

Insect flours can also be used in the up and coming trend for 3D food printing, where they can be used and modified to add much needed protein in specialty foods. What is really shaking up the food industry is that insects may offer a better and more sustainable source of protein than their bovine rivals.

Once we have overcome the primary hurdle of using insects in food (our reluctance to try it), we can start to reap the numerous benefits.



As well as being a versatile product, insects are also an extremely sustainable source of nutrients. They offer an excellent alternative to cattle, which require large amounts of feed, land and water. The common British water boatman, for example, contains four times more iron than beef and certain African caterpillars contain more protein than can be found in the same quantity of chicken.

Insects also have a higher efficiency of conversion. As they are cold blooded, they do not require energy to maintain their body temperatures and so can use more for growth. More efficient use of feed for growth means overall less is needed.

Overall, the effect is that we can use less land for growing feed and for keeping insects and we have a sustainable source of nutrients. In a marketplace that demands sustainable food sources, it is easy to see why using insects might take off!

**Insect flours and powders can be heat treated and toasted by our Revtech system to remove pathogenic bacteria, larvae and eggs, as well as adding flavour.**



## Locking in goodness



Everyone knows the importance of getting your 'five-a-day' but people are still finding it hard to achieve due to rising food costs. Responding to a growing need for maximum retention of nutritional goodness and organoleptic properties, CFT has launched an Advanced Vacuum Seamer that is specially designed to pack products without preserving liquids.

Only 25% of the UK population are achieving the current five-a-day target of fruit and vegetables, according to research done by the British Heart Foundation. 42% of respondents said they couldn't because fresh fruit and vegetables are too expensive.



### MEET LIZ RICHARDSON

**We were delighted to welcome Liz to the Holmach family in February 2016. She heads up technical sales for us and although is based at our head office in Stamford, she will spend most of her days on the road all over the United Kingdom and Ireland, and doing process development work with our partners in Holland and Italy.**

With this in mind, advances in processing tinned shelf staples including vegetables and fruit is essential. To be able to offer consumers the best nutritional benefits possible with a processed product and give greater variety of vegetables than is currently available, coupled with greater shelf lives, would be a massive step forward.

As CFT's UK agent, Holmach's MD, Chris Holland commented that this technology, "gives a product that respects the organoleptic properties of the original foodstuff whilst still avoiding oxidation and therefore the degradation of these flavours."



Packing vegetables such as beans, corn or peas under vacuum using the steamer before vacuum cooking has the advantage of locking goodness into the product rather than it escaping into the surrounding preserving liquid.

CFT's Advanced Vacuum Seamer is a must for manufacturers looking to provide top quality, nutritional, long-life fruit and vegetable options for consumers.

Liz brings with her over 25 years of experience in the food industry having worked for some big hitters, including Dairy Crest, Milk Link, First Milk and Bakkavor.

The wealth of her experience is largely within ingredients sales, so she has an in-depth understanding of what manufacturers and end users really want and need.

This makes her ideally placed to help our clients make choices as to which manufacturing techniques and processes best suit their needs. Liz would love to hear from you, you can drop her a line at [Liz@Holmach.co.uk](mailto:Liz@Holmach.co.uk)

# FOOD ON HEALTH

## Are your pathogens going nuts?

Another great source of protein and other nutritional benefits are nuts and seeds. With FoodManufacturer.co.uk, reporting that food recalls were up by 83% in 2015, and just recently there have been recalls on pistachio kernels and cashews. So the opportunity to totally illuminate entero-bacteria such as E. Coli, Listeria and Salmonella is essential.

Using unique patented spiral vibratory technology, Revtech's units pasteurise, toast and roast grains, cereals, seeds or nuts. Decontamination is achieved using the Joule effect, comprising a combination of dry radiant heat with a steam cycle to sterilise the product. Gently handling food as it under goes treatment, Revtech processes nuts such as brazils, almonds and walnuts without chipping or damage to their final appearance.

Most recently, a unit has been installed in Australia to pasteurise almonds, processing 7 tonnes of product per hour with a validated 5 log reduction

in microbial growth from an Australian lab. There is also a validation protocol available from Campden BRI in the UK.

Requiring only small amounts of steam means that the process ensures excellent preservation of organoleptic properties and, as it operates at atmospheric pressure, no visible difference between treated and untreated product. Very low power consumption per ton processed, brings additional cost benefits. The machine also has a reduced cleaning time of 30 minutes to 1 hour for allergens, negligible maintenance costs and requires only one operator to run an entire unit.



### MEET DARREN INGRAM

**Darren joined the team at the beginning of 2016 as After Sales Engineer.**

He has a wealth of experience in engineering, including time with Bakkavor, and in electrical and mechanical maintenance. His role will be as first point of contact at the office for spare parts enquiries and fielding support requests and technical assistance. This is a vital position, given Holmach's increase in business over the last few years.

His background with specialist food and engineering companies is an ideal fit for Holmach, adding strength to our spare parts and office based technical support team. He has both electrical, electronics and mechanical engineering skills so should be able to answer anything! He lives 10 mins from Holmach head office in Stamford, Lincolnshire. Along with his partner Lorraine, he has 4 children, all still at school. Darren would love to hear from you, drop him a line at [Darren@Holmach.co.uk](mailto:Darren@Holmach.co.uk)



# Sustainability driving Lagarde

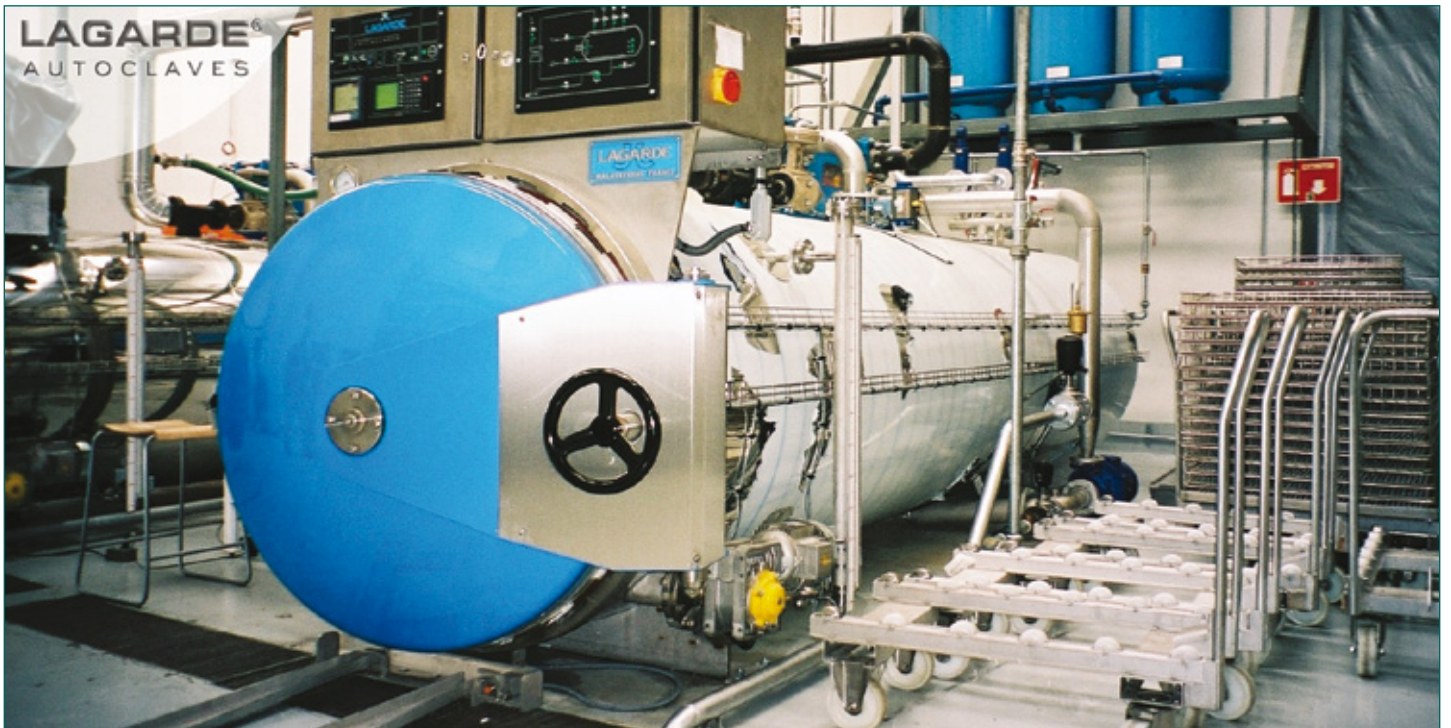
Focusing on a lower cost per retorting cycle and reducing its environmental impact has paid large dividends to Lagarde's customers. Sustainability has been a focus for the company since 2008, with the first sustainable development unit built in 2010. For nearly twenty years Holmach has promoted Lagarde to the national market, leading to an 80% market share in batch autoclaves. The versatility of Lagarde's technology coupled with the different methods of process has led the manufacturer to build the most energy efficient units available today.

Lagarde uses three basic mediums for the processing of food and pharmaceutical products according to type: steam and air technology, hot water over-spray, and full water immersion.

In the United Kingdom & Eire, Holmach and Lagarde has installed systems on products ranging from baby foods to cook-in-sauces

and mussels, as well as pet foods, soups, pasta products and ready meals.

Some of the latest installations have included a complete robotized retorting plant for pet food, ready meals in doy-pack style pouches or Polypropylene trays, and aluminium foil for army rations.



## Would you like Mayo with that?

When high quality product manufacturer The Yorkshire Rapeseed Oil Company decided to move into mayonnaise, they turned to Holmach for a manufacturing solution.

Established in 2008, the Yorkshire Rapeseed Oil Company started out selling their naturally flavoured Cold Pressed Yorkshire Rapeseed Oil in one size at farmer's markets in the region. The popularity of their home-pressed extra virgin oil led to rapid sales growth, but without the technology to support an expanding range.

Installing a 15 litre RoboQbo vessel has allowed the family-run company to actually increase their production, thanks to the machine's efficiency, with a higher final product quality. Capable of both vacuum and pressure cooking, the technology cooks, cools, emulsifies, mixes and reduces in just one cycle. Different mixing blades and attachments make processing a wide range of foodstuffs within one appliance with vastly reduced cooking times easy, taking only two minutes to set mayonnaise.

Inspired by the desire to make locally processed oil and support British producers,



Adam Palmer with his Qbo.

the Yorkshire Rapeseed Oil Company now collaborates with the Chilli Jam Man on the devilishly hot "Jamonnaise."

Initially, the two companies struggled to process this chilli jam mayonnaise, as neither had the right equipment to ensure the right quality or pack this product. Vacuum processing and cooling simultaneously with RoboQbo's technology help maintain a strong emulsion that gave perfect results for their new product. Given its wide variety of functions, this machine is ideal for NPD work in various settings.

Since 2011, Yorkshire Rapeseed Oil's range has increased considerably to include blended dressings, vinaigrettes and mayonnaises, which are all processed by the 15 litre RoboQbo machine.

Adam Palmer, Director of Yorkshire Rapeseed Oil and recently appointed member of the board for Deliciously Yorkshire, had this to say about the machine:

"We've been very pleased with the performance of our RoboQbo vessel, which has exceeded all our expectations. In terms of making the Jamonnaise", things have definitely improved without the vapours from an open machine. The training and service provided by Holmach throughout have been second to none."




# TERLOTHERM making anything but baby steps for Kerry Foods

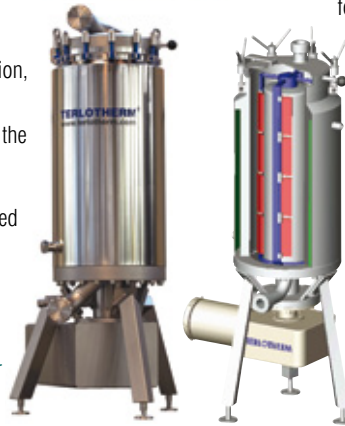
Increasing demands from the East for UK & Ireland sourced baby and milk powders has led Kerry Foods to increase their production and add a new high lactose product to its portfolio.

It became clear during production that their current SSHE technology was not up to job. The most concerning process issues occurred while treating the high lactose product.

Kerry Foods were only able to meet half their target for full production, with maximum flow rates of around 4,000 litres an hour. By the end of a shift there was a noticeable deterioration in quality resulting from the Maillard reaction, with the high lactose good thickening and browning.

When Holmach were consulted for a solution to this problem, we suggested the installation of a Terlotherm, by Terlet. Having previously fitted these machines in the company's factories in Malaysia, there was already a precedent and knowledge within Kerry Foods to support this installation. The Terlotherm offered three key advantages in comparison to the previous SSHE, making it the ideal solution for this application.

-  Using a Terlotherm doubled the efficiency of heat exchange, with the same factory footprint
-  The pressure drop on the product side of the Terlotherm is less than 1 bar
-  Access for cleaning is much simpler, as the machine's mechanical seal does not need to be disturbed.



As installation is very straightforward with the Terlotherm, Kerry's Charlieville plant undertook it themselves successfully. They have since met their target of 8,000 litres an hour for full production, with no signs of a Maillard reaction taking place in the product.

Installing Terlet's machinery has allowed Kerry Foods to meet their customer demands and produce a high quality product with minimal disruption to their existing plant and equipment. In addition to the process advantages listed the demands on the product pumps have been reduced and the product also flows at a lower average pressure through the system. Being especially strong in the dairy industry, the Terlotherm also has applications for products such as cream, soft cheese and crème fraiche.



## Holmach's Viewpoint



The team share their thoughts on what emerging food trends to look out for:

**Chris Holland:** "In our business the focus is about energy savings and waste reduction. Many retailers won't admit the level of food waste they have on short shelf life chilled products. Despite being signed up to reduction initiatives such as WRAPS.

Gentle pasteurisation without necessarily extra cooking can simply extend shelf life without compromising quality to allow an extra 10-15 days of life. This means that not only is the distribution and sales process optimised but the consumer has more time to eat the product when it gets home.

And of course, 3D food printing is one to watch. I'm really keen to see how this will revolutionise the industry."



(l-r) Liz Richardson, Darren Ingram, Niki Holland, Chris Holland, Paul Jordan

**Niki Holland:** "According to the Office for National Statistics, the UK current account deficit hit a record high during the final quarter of 2015. This has caused Sterling exchange rates to fall even further against the Euro spooking investors in Sterling.

Looking at capital machinery purchase during 2016/17 therefore, if overall the Pound is set to struggle further against the Euro, with some analysts predicting falls of over 10% compared to current rates, we strongly suggest that in order to secure a competitive rate for machinery purchases in the year ahead, companies look to buying a forward contract now for their machinery if they need to buy Euros."

**Liz Richardson:** "Everyday I hear manufacturers talk about 'traffic lights' and their goals on reducing salt and sugar in products. The machines we work with at Holmach are already helping manufacturers with this. Roboqbo for example, can help to reduce the sugar content for jams and preserves without sacrificing flavour and nutrients. I see this type of machine and the benefits it can bring, being the focus of development kitchens across the UK and the rest of Europe."

**Paul Jordan:** "Assessing our impact on the environment and reducing our carbon footprint is a huge focus across the world. And there have been some great environmentally friendly advances in the machinery used in the food industry.

Our Lagarde retort is a great example of this. It is used for producing products ranging from baby foods to cook-in-sauces and mussels, as well as pet foods, soups, pasta products and ready meals. With some additional systems installed it can recover energy from cooling water to be used as office heating or recycled in order to reheat water for the machine wash down. One of our clients has actually installed a water recovery tank to allow grey water to be reused rather than wasted needlessly. This machine is also highly energy efficient.

I believe the focus on this type of energy reduction and water recycling is only going to be more sort after over the next few years."

**Darren Ingram:** "As you know, product recalls can be highly brand damaging. There has been a lot of bad press in 2016 about recalls on nuts but consumers are looking to increase their protein intake and add healthier fats to their diets.

I think we are about to see a real push on improved production techniques for nuts. Luckily for us, we have the Revtech system for sterilising and toasting nuts and seeds. It is also ideal for cereals, herbs, spices, pulses and gums. I predict, plenty more Revtech installations over the coming year."



For further details on any of the stories in this issue of HOLMACH please contact us either by Telephone +44 (0)1780 749097 by Fax +44 (0)1780 749098 or by email [info@holmach.co.uk](mailto:info@holmach.co.uk) Why not visit our website [www.holmach.co.uk](http://www.holmach.co.uk)