

Flo-Mech Control, Automation & Software Systems

Control and Automation plays a major role in today's manufacturing processes. Without it, the output quality and volume of a manufacturing process would be nowhere near the consistently high levels we now see from world leading organisations.

With a never ending drive to increase output, quality and efficiency, gaining and keeping effective control of your process is more important than ever. This is why the control system should not be an after-thought, but an integral part of the process design from the outset.

From simple stand-alone Programmable Logic Controller (PLC) to full-scale Distributed Control Systems (DCS) with allied IT infrastructure, Flo-Mech can make sure that the control and monitoring solution for your process is the right one and is efficient, cost effective and reliable. In recognising the crucial impact of the control system, Flo-Mech now have a dedicated Control, Automation and Software specialist, Chris Ellis, to provide expertise to our customers in all areas of our business.

Successful process control begins with the accurate measurement of process data – you cannot control effectively if the points of measurement are less than ideal or missing entirely. Moreover, tracking and recording process data has become increasingly paramount in recent years due to legislative requirements and spiralling raw material costs. But key to process improvement as a whole is in using that data intelligently to provide further benefit by way

of analysis and reporting services – feeding the knowledge gained back into the process to make further refinements.

Capital projects and upgrades undertaken by Flo-Mech have implemented a variety of Control, Automation and Software systems utilising some of the latest available technologies. Furthermore, Flo-Mech has invested heavily in developing advanced control systems for specific applications and Chris will continue that drive for the benefit of our customers.

Flo-Mech can assist in developing an initial design concept, user requirement specification or systems to upgrade or enhance an existing installation. We can also design and implement complete systems for new equipment and processes from the ground up whether that be a small, large, simple or complex control and monitoring application.

No project is the same as another and the control system is no exception. Chris brings to Flo-Mech direct expertise in a wide



range of Control, Automation and Software technologies used in Food and Beverage processes in addition to allied industries including Chemical and Water & Wastewater treatment.

For more information on Flo-Mech's Control, Automation & Software Systems, please contact Chris Ellis on +44 (0) 1733 233166, +44 (0) 7715 059808 or email chrise@flo-mech.com



Message from Stuart Elderkin

Welcome to this autumn edition of Newsflo. 2011 is continuing to be an excellent year for the company. Our current project volume is strong and high enquiry potentials make for a bright end of year. I would like to thank our customers old and new for their business – Flo-Mech will continue to provide a quality service to ensure the successful completion of your projects.

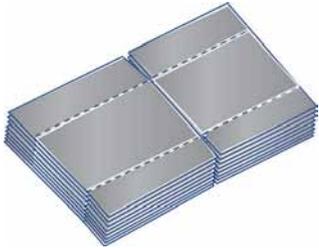
In my previous message I highlighted our expansion through a new second office being built, work continues on this and our target date for occupancy is March 2012. Flo-Mech now also has controls and software capability – with the employment of Chris Ellis. This will complement our service and projects department, and give us in house support for controls and software applications. Finally thanks to all who visited our stand at Snackex 2011, Barcelona in June.

Yours, Stuart



Flo-Mech Appointed UK Business Partner for Pattyn Packing Lines

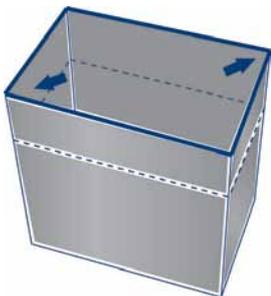
Experts in Bag Inserting Technology



Flo-Mech are pleased to announce the official UK partnership with Pattyn Packing Lines. Founded in 1952, the Belgian based family company is an international leader in case lining solutions.

More than 30 years of know-how & experience

Taking advantage of more than 30 years of experience Pattyn Packing Lines guarantees the very best handling, filling and packing of almost any bulk product into poly bag lined boxes, trays or other containers. According to the customers needs Pattyn Packing Lines integrates stand alone machines or complete automated lines from case erecting, bagmaking and inserting, filling, to bag and case closing.



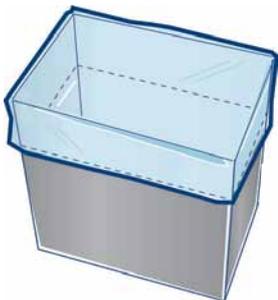
With their headquarters in Belgium, subsidiary office in North America, Bakery Division in France and worldwide network of exclusive business partners they assist to achieve their customers' business goals and support more than 600 industrial companies worldwide.

Service & Solution provider

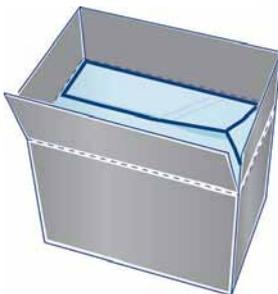
Flo-Mech and Pattyn Packing Lines are committed to you during every stage of the project, from the analysis of your requirements, project management to the after-sales service. With the complete range of services and local support we assure the continuity of your packaging solution.

Find out more about the brand new and super compact bagmaker inserter ZIM-11

- Tired of inserting bags by hand?
- Even at low speed?
- Do you want a small but intelligent solution?



ZIM-11



Take a virtual tour at pattyn.com or experience the brand new ZIM-11 bagmaker inserter live...



...at PPMA 2011

Visit Pattyn Packing Lines at PPMA

27th - 29th September,
NEC, Birmingham **Stand C77**

Daily free demonstrations of the ZIM-11.

...during the ZIM Road Show 2011

Flo-Mech Sales Manager, Steve Lovell will be taking part in the ZIM Road Show from 3rd - 13th October.

We would also like to visit you to demonstrate the ZIM-11.

If you would like more information, or to book an appointment on the ZIM Road Show, please contact Steve Lovell on +44 (0) 7710 156466 or e-mail stevel@flo-mech.com





Multi Stage Fryer The New Generation of Vacuum Fryers

Aspects such as health, convenience and proper nutritional balance clearly demand process innovations. In order to respond to these trends, BMA Florigo has reintroduced vacuum frying, which has been the subject of new applications in the potato, vegetable and fruit processing industries.

The unique aspect of vacuum frying is based on the fact that much lower temperatures can be applied during frying, so that it is easier to maintain natural colours and flavours. The system also has many other advantages eg the use of various types of oil (no oxidation risk) and the absence of frying vapour emission.

With the latest development of vacuum fryers, BMA's Multi Stage Vacuum Fryer combines the atmospheric and vacuum fryer in order to improve the control of colour, taste and texture factors compared to atmospheric frying. For potato crisps and sticks production, the colour, taste and texture are the most important factors affecting both the product marketability and production efficiency.

Therefore the control of mentioned factors with the latest technology has great advantages for the production of regular potato chips and also for organic chips resulting in less discolouration, nice texture



and better natural potato taste. To meet with the industrial requirement of capacities the Multi Stage Vacuum Fryer is developed for a capacity of 1500 kg/hr finished product.

Advanced Process Control

Multi Stage Frying is a delicate process and many circumstances influence the finished product. Therefore the Multi Stage Fryer is provided with a Standard Operating System for advanced process control for all parameters in the frying process, such as frying temperatures, oil flows, vacuum pressure etc.

Features and Advantages

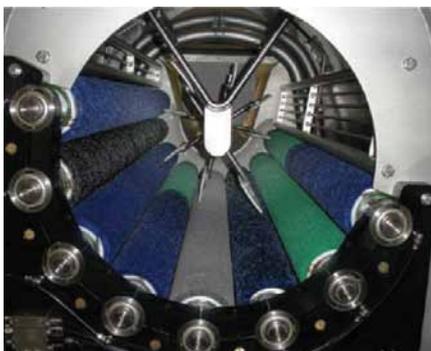
- Independence on reducing sugar content
- Improved natural potato taste of the product
- No blanching required
- Lower frying temperature better for frying-oil quality
- Consistent product quality throughout the year
- Less discolouration of the finished product
- Capacity of 1500 kg/hr finished product
- Fully automatic control of the process

For more information on the BMA Multi Stage Fryer and how it could add value to your operations, please contact Martyn Henson on +44 (0) 1733 233166 or +44 (0) 7860 574484 or email martynh@flo-mech.com



VANMARK® Vanmark Launch New Brush Set

Vanmark Equipment LLC recently launched a special brush set for its broad line of continuous peelers. The new brushes provide processors with the ability to mix and match the level of aggressiveness by adjoining individual segments on the same shaft with a new coupler.

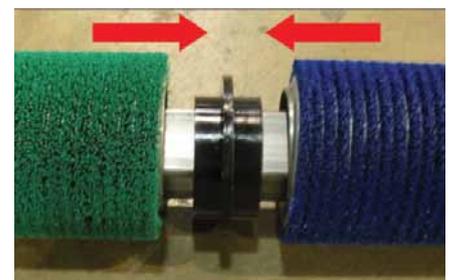


With this new brush set, products such as baby carrots can be continuously peeled and finished with one machine by adjoining an aggressive peeling infeed brush section with a less abrasive polishing outfeed section. As

a result, low volume processors can now produce finished products with one peeler using processes that have traditionally required two machines. The new brushes can be fitted to the shafts of most Vanmark peelers, and are available in a wide variety of configurations. As brushes wear, only worn sections need replacement. In addition, a special mid-machine gate can be fitted to provide additional control over different sections of any given machine. Processors using these new brushes have greatly benefited from the flexibility offered to accommodate difficult or unusual products.

Greater Brush Longevity

In addition to process flexibility, the new brush sets also provide for greater brush longevity and wear. When stiffer infeed sections are utilized to promote better peeling, the high wear infeed point degrades slower. The outfeed section, which has a steady transfer of product from the infeed end of the machine also wears at a slower rate. Much like rotating tyres on an



automobile, processors can cycle a segment from a higher wear infeed section to a lower wear outfeed end to achieve better overall utilization and even distribution of wear.

Since developing the food industry's first commercial continuous potato peeler in 1954, Creston, Iowa-based Vanmark Equipment LLC has become synonymous with the highest quality industrial peeling, washing and material handling systems in the industry.

For more information, please contact the Sales department on +44 (0) 1733 233166 or email enquiries@flo-mech.com



Some Recent Orders

4 x AlexanderSolia G 450	South East UK	PC50 Optyx 6155 Optical Inspection System	South Africa
Washing & Peeling Equipment	North East UK	Key Vibratory Conveyor	Ireland
Key Conveyors	East Anglia UK	Oil System	North East UK
2 x Flo Grades & 2 x Flo-Cut Sizer Halvers	Belgium	Optimisation Training	Midlands UK
Pellet Feed & Defatter Vibrators	Turkey	Energy Survey	Egypt
Flo-Flavour Plus System	South West UK	Project Management Support	South Korea
Design & Pre-Engineering Works	Scotland	Safety Plan Assistance	Midlands UK
Key Optical Sorter & Installation	East Anglia UK	Key Scale Feed Shaker	North East UK
PC50 Equipment	China	Key Scale Feed Shaker	Ireland



Cablevey Demonstration Unit

We are pleased to announce that we will have our very own Cablevey demonstration unit on show in our new R&D/demo lab, once Flo-Mech House #2 has been built. Customers will be able to test their own products through the machine and see exactly how the system works.

Flo-Mech are the UK and Ireland Sales partner for Cablevey Conveyors.

Cablevey Tubular Drag Cable Conveyors gently transport products through an enclosed tube without the use of air. Powders, chunks, flakes, pellets, prills, parts, shavings, crumbles, granules, fluff, regrind and dust can all be handled with ease.

Cablevey systems are designed specifically for the individual client and offer many options in layout, length and size. Any design configuration that is required can be accommodated.

Cablevey replaces Bucket Elevators, Screw Conveyors, Pneumatic and Aero-Mechanical systems. Think Cablevey "The Gentle Way to Convey".

For more information on the Cablevey system, or to arrange a trial, please contact Steve Lovell on +44 (0) 7710 156466 or email stevel@flo-mech.com



inFlo General news...



Chris Ellis BEng MBCS
Senior Systems Engineer

Over the past 25 years Chris has worked with a broad range of companies and industries on projects ranging from tens of thousands of pounds to multi-million pound capital investments performing various development and management roles in Systems Engineering and Process Automation.

He brings to Flo-Mech a wealth of technical expertise not just in Control & Automation where he specialises in high level systems including Batch Control, Relational Databases and Distributed Control Systems, but in a vast range of allied Software Engineering fields from 3D visualisation to bespoke application development.

Immediately prior to joining Flo-Mech in May 2011 he spent six years as a freelance Control Engineer and Software Developer serving these industries.

Degree qualified in Electrical & Electronic Engineering, Chris is a member of the BCS (the Chartered Institute for IT) and is working towards Chartered status.

Flo-Mech House #2

Building work on Flo-Mech House #2 is now due to start in September, with a completion date of March 2012.

The new building will house our Energy & Sustainability, Health & Safety and Service departments, as well as a dedicated R&D/demo lab for machinery trials/testing.



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