Partnership with Colsen



Flo-mech are pleased to announce a partnership with Colsen. Together we can provide a full turnkey service in the UK and Ireland for waste water treatment projects.

About Colsen

Colsen b.v. is situated in Hulst (The Netherlands). Our customer base is mainly in the food-processing industry and in the communal and industrial waste water area. Colsen is specialized in the execution of projects in the area of water treatment and energy production via (anaerobic) digestion.



The Colsen activities range from problem solving, design and engineering, project management, construction supervision, commissioning as well as operation and maintenance support. Colsen has a very flexible organization and is used to providing tailor made solutions for our clients in a multidisciplinary setting.

Colsen has developed a number of technologies in water treatment, energy (biogas) production



and nutrient recovery. Currently Colsen owns and employs state of the art technologies for nutrient recovery of Phosphorus (ANPHOS®), Nitrogen (AMFER®) and Sulphur (BIDOX®) each based on the C-2-C concept. Furthermore Colsen has developed a unique and sustainable technology for nitrogen removal from waste water (NAS®) and for digestate mixing and processing (Digestmix®). In order to further improve the effluent quality to fresh water quality for boiler feed or cooling towers or to process water, a new RO-Recycle® process has been developed. Current state of the art RO systems are capable of phosphate removal such that chemical de-phosphatization steps can be skipped after biological water purification.

These technologies were realized in close collaboration with academia in various parts of Europe, e.g. University of Gent (Belgium), Ionina (Greece) Copenhagen (Denmark) and Utrecht



(The Netherlands). In this way a broad spectrum of technologies have been developed over the past 20 years. These technologies enable Colsen to provide focused add-on solutions to a given type of technological challenge, but at the same time offer a holistic project approach to our customers. Not only will Colsen deal with the water treatment aspect of a project, Colsen will also ensure that energy and nutrient recovery are part of a sustainable solution. Not only will Colsen look into the optimized bioconversion of waste streams, Colsen will also ensure that the biogas thus produced is further processed in the most economic and environmentally friendly manner. In those cases where project execution requires permits for the local authorities, Colsen is capable of assisting in their preparation. Through its university contacts Colsen is able to constantly improve its technology portfolio.

Colsen has executed projects in Western and Eastern European countries as well as in North and South America and in Africa. For the purpose of project execution and marketing Colsen cooperates with local partners in each country.

Please visit www.colsen.nl and for more information contact Andrew Elderkin – andrewe@flo-mech.com



Message from Stuart Elderkin

Welcome to this latest edition of Newsflo. 2013 has been an exciting period for Flo-Mech: A growing order book has seen us recruit in our Projects, 3D Drawing Office and Energy & Sustainability depts.

We have expanded our Flo™ range of equipment with Flo-Dry® a single pass, single pass/multi-stage and multi-pass dryer range for the Cereals, Snacks, Nuts industries – and we have taken on the UK and Ireland representation for Hoegger AG, Switzerland, a potato mash separation and recovery system. There will be more information about Flo-Dry® in the next edition of Newsflo.

We continue to sell and install projects into Europe, Africa, Middle East and Asia – and are actively seeking our own partner companies to represent and sell our Flo® equipment into regions our UK sales team cannot serve – ensuring full customer support to clients in these regions.

In 2014 Flo-Mech will be celebrating 40 years in business and this will be highlighted in the next edition of Newsflo. Enjoy reading this issue, and for any info and please call us on 01733 233166 or via mail enquiries@flo-mech.com

Yours, Stuart

Cablevey Update

Flo-Mech are delighted to be working with Cablevey promoting this unique conveying system. Over the past 5 years we have supplied equipment into varied and interesting applications. The focus remains on food applications but we have also supplied systems into pet food, reclaimed plastics and straw pellet conveying applications where the benefits of the system suit the products being conveyed and have added value to our clients operations.

- Fully enclosed conveying.
- 2. Hygienic stainless steel construction.
- 3. No dust or exposure of product.
- 4. Flexible layouts with multiple inlet/discharge configurations available.
- 5. Very gentle on product, we even convey breakfast cereal products without breakage.
- 6. Low power consumption.
- 7. Small footprint.
- 8. Quiet operation.
- 9. Wiper disc continually cleans inside of tube.
- Wet and dry cleaning solutions available, www.cablevey.com/clean/







During our time working with Cablevey we have really got to understand the product and it's applications but more importantly understood the client's specific needs. We regularly work together with Cablevey to evolve designs and solutions specific to customer's needs. With the demands of the food industry evolving Cablevey have expanded the range to add a hygienic model which addresses a number of concerns raised by the industry. The 4300 (4") and 6300 (6") units specifically offer features demanded by the discerning food manufacturer. These units take the 4200 series and evolve this into a fully hygienic and sanitary design.

The main features of the 4300 and 6300 series are as follows;

- Nylon or Stainless Steel drive/idler sprockets
- Full stainless Steel construction
- Cable Tensioning system is external to the turnaround unit (no internal components, such as springs, in turnaround like 4200 series)
- Idler sprocket is supported on an open lattice frame (no flat surfaces for product to rest on)
- Fully welded ports in drive and turnaround units

- Hinged access covers with safety switch as standard (fast safe access for cleandown/maintenance)
- No external stickers, Cablevey logo is blasted onto housing
- Fabricated with radiused corners
- All welds are continuous and ground smooth
- Designed for dry and wet cleaning with drain port in turnaround unit.



Air knife cleaning



Sponge cleaning



Brush box cleaning

4300 series turnaround unit

This unit has really revolutionised the range offering, now allowing us to cover a wider range of customer and application needs. The 4300 and 6300 units have already made an impact on our market here in the UK with 8 of these hygienic systems already installed here in the past 18 months complementing our sales of the traditional 4200/6200 series. The hygienic range has a number of cleaning options ranging from the traditional internal wiper disc through to removable sponge systems, air knives, brush boxes and full CIP systems.

We have further enhanced the 4300 series recently with our own input to a client's specific hygiene needs. A recent installation of a 4300 series system into a major breakfast cereal manufacturer was executed with a specially designed pipe connection. Our client needed an ultra-hygienic connection that avoided the risk of any material hold up. We designed a special joint which was hygienically welded to the tube sections. The joint system eliminates any voids where product could hold up and is also water tight to allow full CIP of the system to be carried out. Another benefit of the in-house solution solving expertise of Flo-Mech working with a world class equipment supplier such as Cablevey.

Of course not all customers and applications demand this level of sanitation and we are still selling a number of the 4200/6200 series units and also the 4100/6100 series for non-food and less stringent primary food conveying applications.

We are proud to be working with Cablevey and look forward to discussing your food conveying application. We also have our own test unit which has proved invaluable in testing/demonstrating the conveying of clients products. Give us a call now to book your test/demo on +44 (0) 1733 233166



Flo-Mech Partnership Update



HOEGGER Separator

Quality Potato Mash – Without the Lumps

Flo-Mech are the UK & Ireland Sales & Service partner for the HOEGGER separator. HOEGGER design and manufacture process machinery utilised in the potato and meat industries. They offer innovative system solutions for form pressing, pasteurizing, cooking, chilling, and separating potato mash and other fruits and vegetable. The HOEGGER company has been active in the food processing industry for more than 25 years. Its innovative separator, which can be used for different applications and production lines, is the result of a continuous development program.

Separator FS301A

The FS301A is the latest incarnation for separation of hard and soft pieces in the processing of food. Now with automatic and recipe controlled regulation of the degree of separation, constant high quality is guaranteed. This robust machine is operator friendly, easy to clean and has only a few wear parts and low operating costs when compared with older versions.



Typical Applications

- Unpeeled or peeled pre-cooked potatoes
- · Whole or cut pre-cooked potatoes
- · Cooked slivers and nubbins from French fry lines

Production of High Quality Puree for:

- · Ready meals
- · Formed potato products
- Fresh mash
- Flake production
- Apple puree



FS301A Features Include:

- Extremely gentle separation
- · Exceptional quality final product
- Precise regulation of separation pressure
- · Optimal hard / soft separation
- · Low operating cost
- · Minimal cleaning and servicing effort
- · Sanitary design
- · High product safety
- Retro-fits for some older machines

For more information on the HOEGGER Separator and how it could add value to your operations, please contact Martyn Henson on +44 (0) 1733 233166 or via email martynh@flo-mech.com

Zacmi's High Speed Vacuum Seamer

Application

Vacuum packed corn, peas and beans, vegetables in general, meat products etc

Special Features

- Very high speed 600 cpm with can size 84 x 84 mm
- High sanitary standard full solid stainless steel construction of seamer and vacuum chamber
- Special design to avoid product spillage
- Possibility of operating without vacuum with hot filled product, without liquid spillage
- Special infeed conveyor guarantees long operation with minimum maintenance. Conveyor weight and wear drastically reduced compared to others
- External lid feed system patent pending
- Synchronized can and lid feeding systems to the seamer with servomotors to guarantee very precise operation
- Parameters are controlled from the touch panel
- High vacuum: 0.9 bar relative
- Automatic draining of water from the vacuum chamber
- Automatic full oil lubrication including seaming rolls, especially designed to operate under vacuum



Advantages

- Minimal use of liquids inside the cans eg brine, results in product being steam cooked inside the cans during steralisation
- Higher product quality: improved taste, improved texture / bite and improved retention of goodness eg vitamins, minerals etc

For more information on the Zacmi vacuum seamer, please contact Martyn Henson on +44 (0) 1733 233166 or via email martynh@flo-mech.com

Some Recent Orders

Cablevey system for cereal	North Wales
Project management for Pet food facility	Midlands UK
Water chiller for Optyx 3000 sorter	South West UK
Cablevey System for Fuel pellets	South East UK
Cablevey system x 4	The Netherlands
Decuffer upgrade for Pattyn bag inserter	Southern UK
Citric acid metering system	Midlands UK
Flo-Cut Sizer Halver 4 Lane	France
Palacation of complete crisp line	South Fact LIK

Key Scale FeederIreland
Key Optical sorterSpain
Flo-Dry SP1000 Eastern Europe
Key Scale FeederIreland
Complete vegetable intake processing & filling line Southern UK
Complete pellet snack frying lineMiddle East
Complete extruded snack processing line Middle East
2 x Hoegger separator upgradesNorth West UK

in Flo General news...

We are continually on the look out for experienced project/technical engineers, if you fit the bill and would like a rewarding career - send a copy of your CV to enquiries@flo-mech.com. It has been busy in recent times for recruitment and Flo-Mech are pleased to introduce the following members of our team:



Kevin Hoskin Project Engineer

Kevin joined as Project Engineer last year and comes from a Process Controls and Automation background having previously spent a number of years working for the food industry on largescale capital and optimisation projects.

Kevin's process knowledge and automation background will help reinforce our growing departments skill-set. Having worked through his career from a time-served apprentice inception, his practical and hands-on approach will positively support installation and commissioning duties.



Peter Todd **Project Engineer**

Peter recently joined our team as a Project Engineer. He has a varied background covering industrial refrigeration, food industry maintenance and operational experience from factory based roles in the food industry. Prior to joining us Peter held a technical sales position but wished to move into a rounded

technical / engineering position. We believe his varied positive experiences in the food industry will support excellent and rounded project deliverable for Flo-Mech and our customers' requirements.



William Channon **Energy and Sustainability** Support Engineer

William Channon has recently joined Flo-Mech's Energy and Sustainability department as a Support Engineer. He is a recent graduate from Manchester University with a degree in Chemical Engineering. From this he has

developed a good engineering knowledge and skill set to bring to the Energy and Sustainability department. William will go straight into working on some recent orders by customers who have requested full energy audits of their production facilities.



Miguel Castro **Project Engineer**

Miguel Castro recently joined the Projects team. A degree qualified engineer whom has already served several years in delivering large-scale capital projects, within the food sector.

He has a wide range of knowledge across many production and processing

methods, from his working in the Mediterranean regions. Miguel is also fluent in Portuguese, Spanish as well as English.



Flo-Mech are celebrating 40 years in business in 2014 so look out for a special edition of *Newsflo*



If you require further information on any of the articles featured in this issue of Newsflo, please contact Flo-Mech Limited Flo-Mech House, Paxton Road, Orton Goldhay, Peterborough PE2 5YA United Kingdom Telephone +44 (0)1733 233166 Fax +44 (0)1733 235200 www.flo-mech.com email enquiries@flo-mech.com