

# Case Study: Bioconjugation Innova Biosciences

Earlier this year we delivered a freeze dryer to Innova Biosciences (Cambridge, UK).

The company is a pioneer in the field of bioconjugation, the process of joining of two molecules to form a hybrid molecule or 'conjugate'. Traditional conjugation processes are complex and it is difficult to obtain consistency from batch to batch. Innova Biosciences has had enormous success with its core range of Lightning-Link™ kits, which allows antibody conjugates to be made using a uniquely simple (30 seconds hands-on time) freely scalable process. Conjugates are widely used in research laboratories around the world and in the diagnostics sector.

Innova purchased a VirTis "AdVantage Plus" freeze dryer which is essential for the manufacture process of the Lightning-Link™ kits. This innovative bench-top system is small enough to fit into most laboratories but also features a sophisticated control system ideal for complex research tasks. It was supplied with Wizard Workstation software which

provides full historical trending and analysis capabilities, to enable cycles to be validated and optimized.

For more information on Innova and their Lightning-Link™ kits, visit their website: [www.innovabiosciences.com](http://www.innovabiosciences.com)



*Above: CEO Nick Gee with his new AdVantage Plus.*

## Accurate, Economical, Expedient: Powder fillers from M&O Perry

Biopharma is pleased to be representing a range of benchtop, semi- and fully-automated powder fillers from M&O Perry Inc.

M&O Perry were formed when Perry Industries, powder specialists, and liquid handling experts M&O Industries joined forces.

These powder fillers utilise the industry standard ACCOFIL vacuum/pressure principle. The sample powder is compacted under vacuum to a constant density within the filling chamber of the fill gun, and then dispensed by application of pressure. The fill size is dependant on the properties of the powder, and can be adjusted by adjusting the filling chamber or changing fill guns. A wide range of gun sizes is available as standard to cope with different powders and different sizes of container. A special Micro-Well kit is also available to streamline filling of 96 well plates. The dosing function is activated by use of a footswitch, which enables the operators to keep their hands free.

The ACCOFIL principle is an efficient,



*The LM-14 semi-automatic powder filler.*

accurate and reliable method of powder dispensing. This technique was originally developed by Perry Industries, and M&O Perry remain at the forefront of powder handling technology.

The LM-14 is designed to fill powder weights of 2 mg to 10g, while the FC fills 2mg to 250g. Typical production rates are 8-20 fills per minute.

# Demo Systems Available to View

Two of our demo systems have arrived and are available for viewing: the RW-500 Rotary Vial Washer from PennTech and a 5 litre mixing vessel from Adam Fabriwerk.

When PennTech set out to design their vial washers they started from the ground up, resulting in a whole range of innovations and features that offer many alternatives over conventional designs. There are no moving parts in the washing chamber, eliminating particulate generation, and each vial neck format has its own dedicated set of change parts, making changeover quick and easy in under 15 minutes. The RW-500 is the industry's most compact rotary vial washer.

Manufacturer Adam Fabriwerk has a reputation for high quality, cutting edge technology. Unique features of their mixing vessel include zero hold up design of bottom outlet valve, calibrated full view glass for the stir vessel and CIP/SIP-style design of vessel, fittings and pipings. All components and materials are sourced from internationally recognised suppliers.

Both of these manufacturers are already international suppliers and are dedicated to providing the highest construction standards—but don't just take our word for it, come and have a look for yourself!



Top: 5l mixing vessel; Bottom, the RW-500 vial washer

## Credit Card Payments



As from September we are now able to take payments via Visa or MasterCard credit cards. We are able to receive payments up to £10,000 via this method. Please note that for all orders a purchase order number will still be required. At this time we are not able to take payment via American Express. For more information please contact Sharon on +44 1962 841092.

## Dates for your diary

Our next **Freeze Drying Training Course** will be held here in Winchester from **17th-19th November**. The course focuses on the science of formulation and cycles and also GMP in freeze drying.

For more information visit [www.LyophilizationTechnology.com](http://www.LyophilizationTechnology.com).

We will be at the **BioProcess UK Conference 2009**. This is to be held at York Racecourse, **25th—26th November**. This is a key event for networking, knowledge transfer and learning about key developments within the UK Bioprocessing industry. For more information visit [www.bioprocessuk-annualconference.org](http://www.bioprocessuk-annualconference.org).

## New to Biopharma: Patrick Conway

Biopharma are pleased to welcome Patrick Conway to the service department. Paddy is a multi-skilled maintenance engineer with many years experience in mechanical and electrical engineering and control systems. He is already well practiced in training operators and maintenance personnel and has excellent faultfinding skills. Along with Bob McCullen, Paddy will be responsible for servicing and repairing laboratory and research-scale freeze dryers and carrying out operator training.



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