

EDUCATE AND INNOVATE

It's no secret that the plastics industry has been under immense scrutiny in recent years. James Stanton, Commercial Manager at Distrupol, reviews how education and innovation can, not only support customers, but also the future and environmental impact of plastics in our society.

e know that the irresponsible disposal of plastic is detrimental to our oceans and wildlife. What we aim to advocate is the abundance of advantages, positives and lifesaving qualities that plastic can bring to our everyday lives.

We are working with our customers to help them manufacture products that provide sustainable and lasting solutions; from making cars more fuel efficient to enabling the most intricate of medical devices and reducing food waste.

In September 2018 we attended 'The Future of Plastics in a Sustainable Society', a parliamentary reception, hosted by the British Plastics Federation (BPF) that welcomed over 160 people and 22 MPs. Discussions included investing in infrastructure, responsible disposal of plastic and of course the recycling of plastic materials. It is through education, awareness and responsibility that we can leverage the many important attributes of plastic, while caring for our environment at the same time.

We are very proud to have enrolled with the BPF's Polymer Ambassador Scheme. The scheme is an initiative that gives members of the polymer industry the opportunity to teach children and students about the scope of the polymer industry and the career paths available to them. Through this scheme we can inspire and engage with both children and adults in the possibilities of science, engineering and manufacturing.

At Distrupol we have a fantastic



team of highly knowledgeable, skilled and passionate individuals, who offer the highest level of technical expertise and solutions to our customers. Through our "Design Develop Deliver" strategy we can help our customers improve efficiency and costs, as well as streamlining their manufacturing processes.

With this integrated approach, from concept to manufacture, we can assist customers from the earliest stages of product development, really helping them to optimise innovation. With over 4,000 polymer grades to offer, we are able to work with customers on all aspects of product, part and tool design.

MOULDING INNOVATION

To support product design, we have recently invested in Moldex3D, a world leading CAE product for the plastics injection moulding industry. With Moldex3D we can give 3D simulations of how our polymer will flow through a design, meaning that our customers can troubleshoot and optimise product design before tool steel is cut. By offering this 3D simulation service to our customers, we are enabling them to improve manufacturability, shorten time to market and maximise ROI.

COLOURED POLYMERS

We recognise that colour is imperative, attracting us to thousands of objects in our everyday lives. One of the major advantages of thermoplastic materials is that we can supply them in a huge range of colours and shades. From the whites, blacks and greys of consumer electronics and business machines to the bright reds, greens and blues that attract the eye and make products more appealing to prospective customers.

With Distrupol Colour, we are able to supply high quality and tight colour tolerance thermoplastic materials. One of the hallmarks of Distrupol Colour is flexibility – meaning that we can colour match, utilising the latest computerised matching technology and colour laboratory facilities. Production quantities vary from a single 25kg bag to a truckload and can be produced in as little as 24 hours.

We can produce colour compounds from an extensive range of thermoplastic materials, including the full range of 'commodity' and 'engineering' thermoplastics, as well as bespoke colour compound solutions in more 'specialised' products such as special effect colours, including metallic, and talc-filled materials, flame retardant grades and compounds with antistatic or UV-stabiliser additives.

PVOH: A POLYMER THAT DISSOLVES IN WATER!

PVOH (Polyvinyl Alcohol) has been around for many years but, in relatively recent times, new formulations have been developed to make them not only extrudable into polymer film but also convertible by techniques such as injection moulding

PVOH, to touch and feel, can be as flexible as Low-Density Polyethylene (LDPE) or as rigid as Polypropylene (PP). Crucially all formulations completely dissolve in water, to inert biomass which will be metabolised by microorganisms we find in nature. Current applications include; disposables, packaging & medical products with attributes such as cold water dissolve, hot water dissolve, rapid/ slow dissolve and clean chemistry.

We currently bring one of

Eureka!

the largest ranges of 'green thermoplastic' polymer solutions to the market, covering recycled, biosourced, compostable and water dissolvable products.

Using the latest manufacturing technology, our PVOH formulations comply with the European Standard CEN EN 13432 for biodegradation and compostability. More notably, these PVOH products are safe, ecologically friendly and cost-effective.

There is a versatile and extensive variety of applications for PVOH polymers, including dishwasher tablets, laundry capsules, pharmaceutical gelcapsules, water pressure transfer printing, agricultural chemicals, seed-tape, fertilisers, single use disposables and many more. With the support of our development team, PVOH applications can be adapted to suit the requirements of our customers.

Says Simon Clegg, Business Development Manager: "Customers need their polymer distribution partner, to bring innovation and ideas to the table to assist with subject matters, like how we can become more green, and help reduce the plastic waste issues we're seeing right now. The Distrupol Technical Team are innovation leaders, always looking for the next polymer technology, and PVOH is the first in a start



of new product lines, providing an alternate green solution. Over the coming weeks, we hope to provide even further solutions to suit other waste plastic matters."

PHARMACOPOEIA COMPLIANCE

PVOH has been used to replace gelatine in pharmaceutical drug capsules, thus removing the need for animal-based derivatives and by-products. It is non-toxic and will fully dissolve in the digestive system. In this application, specialist PVOH grades were developed to flow down extremely thin wall sections. The grades were also tested by the client to confirm they meet European Pharmacopoeia compliance.

ENVIRONMENTAL COMMITMENTS

PVOH is a great way for us to fulfil the ethical and green commitments of our customers. It has been used in standard applications, whether that be food or even industrial, including injection-moulded caps, blow moulded bottles, film packaging and seed encapsulation.

THE POSSIBILITIES ARE ENDLESS

PVOH is also used in fishing bait deployment capsules. An injection moulded PVOH capsule that contains the bait is cast to a required location, it then dissolves and releases the bait gradually. The PVOH also contained special fish attracting scents to lure the fish to the bait — all of which is fully compounded into the PVOH!



JAMES STANTON Commercial Manager at Distrupol

COMPANY PROFILE

DISTRUPOL

A specialist in the sales and application development of thermoplastic polymers and elastomers

www.distrupol.com

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Distrupol is a European leader with over 50 years of excellence, innovation and expertise in the sales and application development of thermoplastic polymers and elastomers.

Our team of highly experienced sales people is able to meet your requirements and exceed your expectations, whilst adding value to your business. The team is supported in every market by our development engineers, who have an unrivalled knowledge of every aspect of polymer technology including design of parts and moulds, polymer selection to achieve best performance, troubleshooting and optimising the production of parts.