

## Case Study

### Aquapurge's Barrel Blitz Universal helps Rutland Plastics save time and money



Hayes, Middlesex, May 2012. The trade moulder **Rutland Plastics Limited** has significantly reduced the time required to switch between separate moulding jobs, as well as for general machine maintenance, through the adoption of **Aquapurge's Barrel Blitz Universal** purging compound. As a consequence, **Rutland** has not only been able to streamline its production, but also reduce the costs associated with production downtime, machinery maintenance and cleaning. **Rutland** is coming to the end of an 18 month trial of **Barrel Blitz Universal** and will continue to use it for the foreseeable future based on the positive results achieved to date. **Aquapurge's** new **Barrel Blitz Universal (BBU)** purging agent increases the productivity of plastic processing equipment by enabling rapid material and colour changes and the effective removal of carbon.

#### Faster change-overs

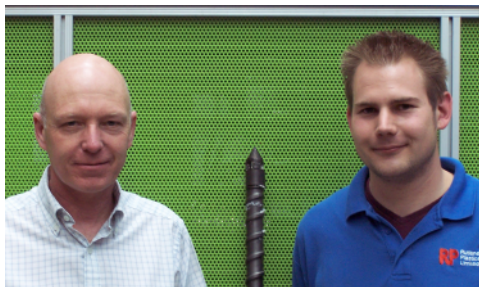
**Rutland Plastics** supplies mouldings to a range of industries, including the building and construction, furniture and medical sectors. It has special expertise in thick-section mouldings, enabling it to mould products up to 48kg in weight and 120mm in section thickness. It runs 25 injection moulding machines at its plant in Oakham, Rutland. These range from 25 tonnes up to two 1700-tonne machines, one of which boasts a 220mm diameter screw.

"As a trade moulder, we are constantly shifting between one job and the next," explains **Rutland's** maintenance manager Kerry Allen. "We do up to six tool changes per day." The faster these change-overs can be done, the less 'dead time' there is in each shift. In each case, one material has to be removed from the barrel before the next one can be moulded. As **Rutland** processes a vast range of materials – from PP and ABS to polycarbonate and nylon – each change-over is different. In the course of a moulding run, it may also change colours several times.

Over the last 18 months, **Barrel Blitz Universal** has been used for all these change-overs. It has proved to be of most benefit in short-run work – where the time taken to switch between jobs can be comparable with the job itself. "The real challenge comes when you switch from a dark colour to a pale colour," adds Allen. "For instance, when we switched from black, glass-filled nylon to a white grade of ABS, we found we could use just 6kg of **Barrel Blitz Universal** and do the switch within six mouldings."

#### Lower maintenance

As well as reducing downtime caused by material change-overs, **Rutland** has also been able to dramatically cut maintenance and cleaning to a fraction of what it once was. "At one time, we were doing five screw changes per month – cleaning them by hand, or in a fluid bed, then re-assembling," recalls Allen. "Now, we probably only do that four or five times per year."



Kerry Allen, maintenance manager at Rutland Plastics (left) Neil Smith, senior processing technician, stand with a screw kept in pristine condition using Barrel Blitz Universal from Aquapurge.

The regular use of **Barrel Blitz Universal** has helped keep **Rutland's** machines and screws in a better state of cleanliness, which reduces the need for manual cleaning. According to Allen, **Rutland** previously spent an average of 50 hours per month cleaning screws, equating to a machine downtime of 33 hours. This has now been greatly reduced, he says. For example, maintenance on a 150-tonne machine can now be turned around in half an hour using **Barrel Blitz Universal** – rather than the previous average of six hours.

**Aquapurge's Barrel Blitz Universal** is made up of a stable, easily clearing polymer and the company's proprietary scrubber concentrate. As with other **Aquapurge** products, its three primary uses are colour changes, material changes and, where it truly comes into its own, clearing carbon. Indeed, it is currently the only product on the market to thoroughly clean colour and carbon. **Aquapurge** has already used **Barrel Blitz Universal** to solve four typical 'material switching' problems – including high temperature to low temperature resin, and even PVC to acetal. It has captured them on film, as part of its '**Extreme Purging Challenge**' – in which it promises to solve difficult purging problems, which is available from its website.

**For more information please contact:  
John Steadman, Technical Director, Aquapurge. Tel: 020 8813 7990.**

Unit 7, Craufurd Business Park, Silverdale Road, Hayes, Middlesex UB3 3BN. UK.  
T: +44 (0) 20 8813 7990 F: +44 (0) 20 8848 8404 e: enquiries@aquapurge.com

[www.aquapurge.com](http://www.aquapurge.com)