

## AST ADVANCES UK OPERATIONS

**A**ST Technology is expanding, and part of that expansion includes the establishment of AST Technology (UK) Ltd., based in Oldham, UK. In addition, AST welcomed three new employees to the UK office.

Paul Stidworthy recently joined AST as Business Development Manager. Previously he worked as a Business Unit Director at a medical moulding company. With over 25 years of experience, Paul is a true industry expert with a PhD in Polymer Engineering and a wealth of experience from automotive to medical. E-mail Paul at [paul.stidworthy@ast-tech.de](mailto:paul.stidworthy@ast-tech.de).



Adam Clitherow joined AST in late 2012 as a Process and Training Engineer providing process optimisation, troubleshooting and tool validation services. Adam has extensive experience in the field of process optimisation, covering various industries from industrial monitoring through to medical moulding. E-mail Adam at [adam.clitherow@ast-tech.de](mailto:adam.clitherow@ast-tech.de).



Chris Newman joined AST as a Process and Training engineer, where he strengthens AST's capability to manage end to end projects as well as support the core processing-related activities. With a B. Eng in Polymer Engineering, Chris is a great addition to the team. Email Chris at: [chris.newman@ast-tech.de](mailto:chris.newman@ast-tech.de).



## VISIT AST AT PDM 2013

**L**ook for AST Technology in Stand D015 at PDM 2013, which takes place 18-19 June at the Telford International Exhibition Centre in Telford, UK. AST will demonstrate the latest edition of its CVe Monitor™ System, which now offers users the opportunity to drive comprehensive mould management in 10 languages, as well as its full array of services.

In addition, Philip Parmenter, Managing Director of AST Technology GmbH & AST Technology (UK) Ltd., will be a featured speaker at the PDM conference. His topic, titled "Optimising the Design to Manufacture Process", will present strategies, supported by real-life examples, for ensuring that all areas of the DFM process are properly addressed to achieve the best cycle times and the most effective (best quality) solution for plastic injection moulding.

To meet with members of the team at PDM, click **HERE** to schedule a time.

**pdm**  
Plastics Design & Moulding

18 - 19 June 2013  
Telford International Exhibition Centre

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Don't miss the leading exhibition for the design and moulding sectors of the plastics industry

Register free today at [www.pdmevent.com](http://www.pdmevent.com)

Click on the Visitor's Ticket, above, and register by June 10 for free admission to PDM, compliments of AST Technology.

## DID YOU KNOW?

Injection World published Part 2 of a three part article series by Andre Eichhorn, AST Technology GmbH's General Manager, which focuses on mould venting and cooling.

In the article, Andre explains how venting of a cavity is often overlooked during the design phase and therefore is left to chance when it comes to producing quality parts. The mould tool itself could also be at risk.

"Having a good understanding of the tooling technology and venting requirements of moulding materials will help greatly during the design phase of the plastic component," he writes. "Three key factors need to be taken into consideration while setting up a proper venting system on a tool..."

Click **HERE** to read Andre's article, and look for Part 3 in the next issue of Injection World Magazine.

Mould design: part 2 | DFM

In the second part in this three-part discussion on mould design, **Andre Eichhorn** provides some advice on avoiding problems due to poor venting and cooling of the cavity

### Mould venting and cooling

As stated in the first part of this discussion on efficient and structured mould design, venting of the cavity is often overlooked at the design stage and only given any real consideration once the tooling has been built. If problems are reported in production, however, remedying venting becomes an intractable task after the tool has been built, can be complicated and sometimes even impossible due to the space restriction and the features and components such as cooling channels.

venting issues are most often created by the component geometry and Figure 2 shows an example where a design can be improved to ease the filling and avoid a gas trap on the flow front and thereby preventing a chamber on the edge of the cavity.

Having a good understanding of the tooling technology and venting requirements of moulding materials will help greatly during the design phase of the plastic component. Venting can be achieved in several ways, such as venting grooves, electric, special designed core shifts, or venting channels on the main parting line which can be converted into the component geometry with small venting grooves. These key factors need to be taken into consideration while setting up a proper venting system on a tool: determining the vents, keeping them clear, and venting the gas.

#### Dimensioning the venting grooves

All moulding materials will have different flow behavior and therefore will also have different requirements for the venting system.

Figure 3 shows a cross-section of a mould cavity. The vents are dimensioned according to the material used.

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