

AST ON THE TRADE FAIR CIRCUIT

AST recently exhibited at the 22nd Annual Fakuma International Trade Fair in Friedrichshafen, Germany, where the latest edition of the CVe Monitor System was featured.

"Fakuma, as usual, was a superbly well presented show," AST Managing Director Philip Parmenter said. "Many customers were very excited about the CVe Monitor, which by year's end will be capable of providing comprehensive reports of a mould's activity in ten languages. One global company requested a quote for the largest shipment of CVe Monitors we've ever made."

For those who missed Fakuma, AST will soon be exhibiting at EuroMold, which takes place on 27-30 November 2012 in Frankfurt, Germany. Visit us in Hall 8.0, Stand F111, and visit www.euromold.com for more information.



Our Fakuma team, from left, AST Managing Director Philip Parmenter, John Wakefield, managing director of sister company Progressive Components Europe, AST's Julia Heimann and General Manager Andre Eichhorn.

DID YOU KNOW?

AST's General Manager Andre Eichhorn published the second of a series of articles in the October edition of **Injection World Magazine** titled "**Effective Material Selection Essential for Good Design**".

The article discusses the factors that should be considered when selecting the proper plastic material for optimum plastic part production, including product-related characteristics and costs.

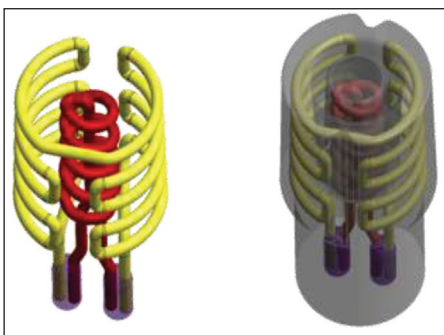
COOLING VS. PART QUALITY & COSTS

AST was recently involved in an optimisation project where a 64-cavity tool moulding a medical component was experiencing high scrap rates. First, the cooling circuits of all 64 cavities were linked together so that the temperature in cavity #1 had a Δt of 15°C compared to cavity #64, causing a big impact on the part's dimensional stability. There was also a very small cooling line \varnothing (d=4mm) in the area of an undercut which needed to be bumped off. By linking this circuit into a bolster plate cooling line with an 8mm \varnothing the component area was too hot and too soft to keep its tight tolerances after demoulding.

By introducing laser sintered inserts to achieve high pressure cooling close to the component using lines with very small \varnothing and special cooling devices, it was possible to cool the component down so that it was stiff enough to flip back after the undercut was bumped off. The cooling circuits were also arranged into 4 cavities per circuit to achieve a uniform temperature distribution across the whole mould tool.

As a result, the overall cycle time was reduced by 23% and the scrap rate reduced by 28%. Overall savings based on 80 million parts per year was calculated to €2.8 million/year.

To learn more about how AST Technology can optimise your next moulding project, visit www.ast-tech.de or email AST at contact@ast-tech.de.



Custom cooling lines in a laser sintered insert helps achieve outstanding cooling performance.

Intelligent material selection can have a big impact on the cost of a project and is an essential step in any good DFM project. **Andre Eichhorn** explains why.

Effective material selection essential for good design

Selecting the correct material for plastic parts is a complex task. It involves a deep understanding of the part's requirements, the manufacturing process, and the material's properties. The material chosen can significantly impact the part's performance, cost, and lead time.

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