



Press release

Schaffhausen, October 2009

Viscosity monitoring in the mold

One of the biggest problems in everyday life of an injection molder is certainly the recurring process variations which have for instance, due to different batch variations, to be corrected by adjusting the machine settings. This is also the reason why molds can't be transferred smoothly from one machine to another without optimizing again the process.

The main criterion for a constant process is thus the viscosity of the plastic melt which should preferably not change during a production period. The conventional method to detect the viscosity with a rheometer offers due to the isotherm conditions ideal prerequisites but are relatively expensive and complex and do not reflect the variations in the process.

With the viscosity detection in the mold cavity PRIAMUS offers an easy, cost efficient and automatic method where cycle by cycle the viscosity values are detected directly in the mold cavity, documented and monitored. At this the rise of the pressure signal as well as the temperature signal rise are being automatically detected during injection process and analyzed for the viscosity evaluation. In line with demand all PRIAMUS software products offer recently the possibility to determine automatically not only one, but several viscosities, shear rates and shear stresses in one injection mold. For the reference value either the melt temperature or the cavity temperature can be measured or else can be manually entered.

On the one hand viscosities can be monitored cyclical in each single cavity of a multi cavity mold or for example the viscosities in different sections of a large part. In this way real viscosity deviations can be detected on the spot - in contrast to indirect characteristics determined by machine parameters such as the flow figures or the injection work.

PRIAMUS SYSTEM TECHNOLOGIES AG
Bahnhofstrasse 36
CH-8201 Schaffhausen / Schweiz
www.priamus.com

Contact
Heidi Hug, +41 52 632 2605