عنوان مقاله:

Simulation of hot runner system effect on injection molding process in compare with cold runner

محل انتشار:

کنفرانس بین المللی فرآورش پلیمرها (سال: 1390)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Mahdi Massah - *Department of Chemical Engineering, Faculty of Engineering,Arak University*

Mostafa Keshavarz Moraveji

خلاصه مقاله:

The role of Hot runner system in quality and cost reduction is very important in plastic parts that produced by injection molding process and computer simulation software have had success in predicting effect of hot runner system in compare with cold runner system. A two cavity CAD file design and import in Moldflow software that used a hybrid of finite difference / boundary element solution. Significant reduction in time and cost consumption can be interested reason (or point) to use of numerical method software instead of experimentally experiences. In the studies acrylonitrile butadiene styrene was used as base polymer. Cooling and runner system were designed in real conditions. Results of simulate were plotted as a safe molding area for hot and cold runner system in specific variations of injection molding parameters. The results have a good accordance with the experimentally report and decrease of pressure was seen in hot runner system in compare with cold runner system.

کلمات کلیدی:

Polymer, Injection Molding, Runner System, Numerical Simulation

لینک ثابت مقاله در پایگاه سیویلیکا: