Case Study 5

APQP: Not Required

Part Spec: Ultradur PBT

Mould Flow: Required

Tool: 1+1 Hardened to 48-52 Rockwell C

3D Model: Required

Summary:

On this project we worked closely with the parts' American designer who had limited knowledge of the injection moulding process, offering advice and technical expertise to ensure their parts were suitable for tooling.

Due to these parts being dimensionally critical, gating locations were crucial to ensure minimal warpage on the parts (especially with the material being glass filled), we had a helping hand as always from our Moldflow software coupled with over 40 years combined design experience.

To reduce what we thought were unnecessary costs we put forward to the customer the option of a family tool which although multifaceted was well within our capabilities. This tool incorporates both an unscrewing and fixed half sliding core, which are operated on one hydraulic cylinder, this retracts the cores before the tool opens leaving the parts free for ejection. A very complex tool that our toolmakers were keen to get to grips with.

In addition once operational the parts will be separated on ejection by a robot eliminating the need for hand separation a MUST at all times we think.