



## PTA Plastics uses MeltFlipper® to eliminate gas trap

PTA Plastics is a custom plastics injection molding company known for high-quality parts and up-front engineering support. After encountering an unexpected filling pattern, they utilized Beaumont's MeltFlipper® technology to improve their molding process. PTA Plastics was using a PC/ABS blend in a single cavity mold for the project. Prior to sampling the mold, they ran a mold filling simulation that showed no issues, but after the first shot, PTA quickly discovered that it was impossible to fill the part because a gas trap developed. This resulted in no fills, burns, and flow marks at the area of the gas trap, which was a result of the filling pattern.



After trying process and venting changes without improved results, PTA Plastics contacted Beaumont to design a MeltFlipper® runner to fix the filling pattern. Once the MeltFlipper® runner was implemented, it was able to rotate the higher sheared material to the center of the flow channel and through the center of the part. This changed the filling pattern so the gas trap was eliminated and quality parts are now molded without further issues.

*"I appreciated the honest approach Beaumont's engineers used when determining if a MeltFlipper® design would even be an appropriate solution to our specific problem," said Kirk Baluh, Project Manager at PTA Plastics. "They looked at the problem from an independent, scientific approach when determining if the design should be used. There was also a very quick design turnaround, and timely service."*

**PROBLEM:**

- Gas trap caused by ineffective filling
- Part not filling as predicted

**SOLUTION:**

- Implement MeltFlipper® into runner design

**BENEFITS/SAVINGS:**

- Able to mold acceptable high-quality parts
- Significant savings on potential tooling recuts, processing changes, and additional mold samplings



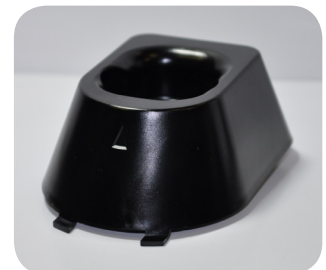
Before MeltFlipper®: gas trap formed using conventional runner



MeltFlipper® Runner



Filling pattern with MeltFlipper®



Completely filled part, gas trap eliminated



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