



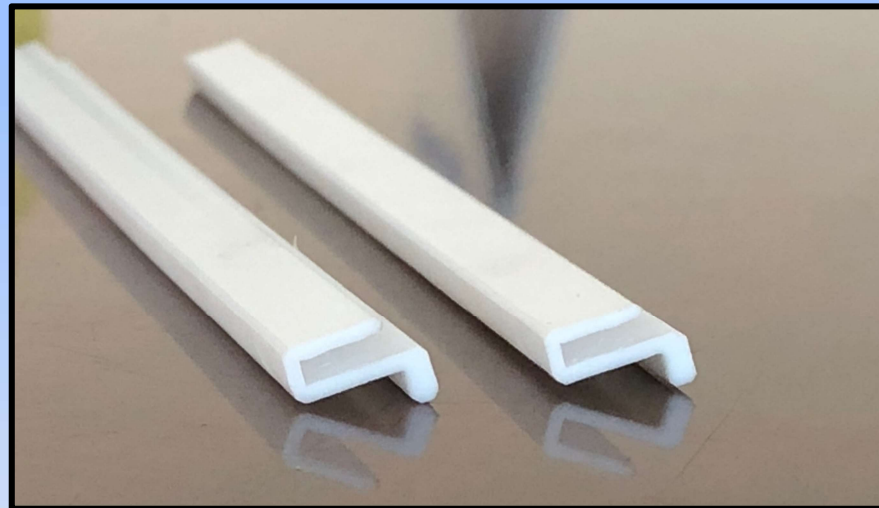
Case Study in New Product Development (3)

Requirement

- A sealing strip to sit between two hot plates for food processing
- Strip must have a thickness of 1mm, length of 150mm be heat resistant to 250 Deg. C and have a u-shape for fitment

Challenge

- Maintaining a 1mm thickness over 150mm length is challenging in PTFE using machining
- Extrusion of the cross section yielded poor results due to the low cross section and poor dimensional stability
- Fitment requirements meant that dimensional tolerances were under 50 micros



- After initially trying and failing with extrusion, the part was developed by machining, using special holding fixtures to ensure the dimensions stayed uniform across the profile
- Tool speed, feed rates and end-mill material all modified to ensure that the side of the part does not tear during machining.