



# EXPERTS AT DEVELOPING COMPLEX PARTS RAPIDLY

**CUSTOMER**  
Global semiconductor manufacturer

**PART**  
Custom-layered test fixture seals

**MATERIAL**  
92 series Poron, various thicknesses and densities; white and black Formex 062; 3M pressure-sensitive adhesive

**MARIAN ADVANTAGE**  
Developed complex part quickly, designed part for customer ease-of-use, and reduced overall cost.

### CHALLENGE

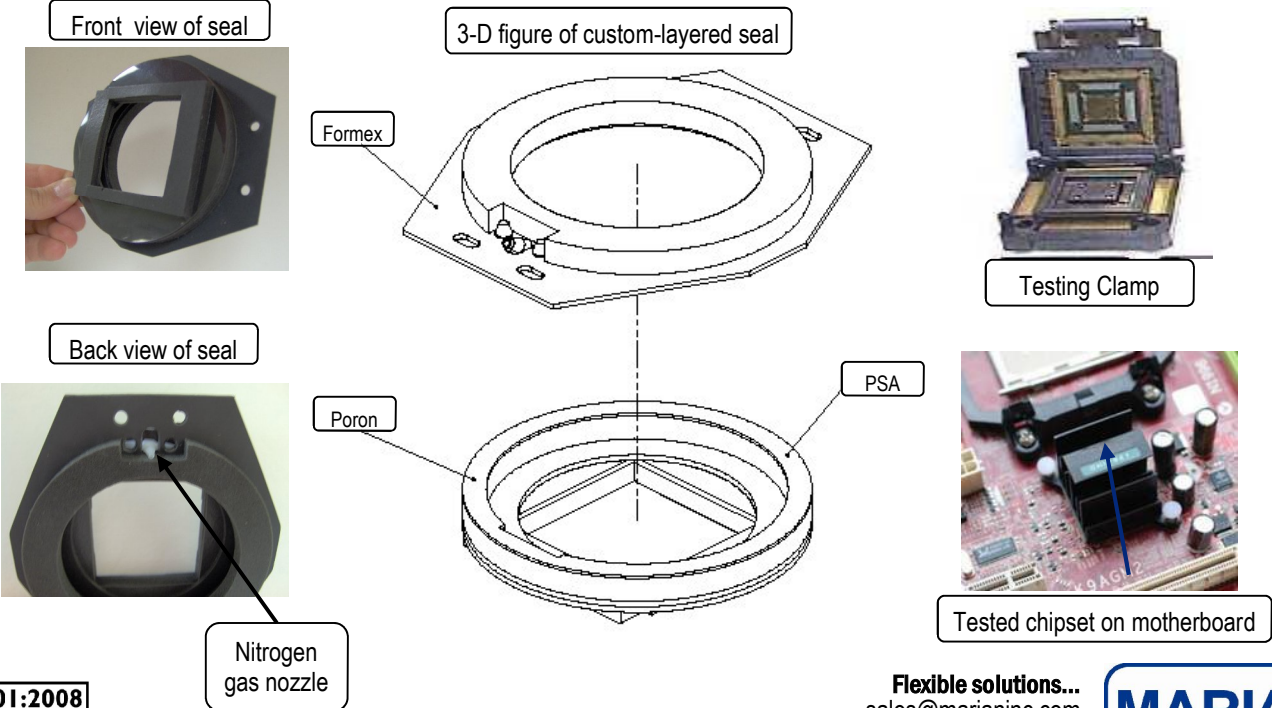
This customer provides processing solutions for the computing, graphics, and consumer electronics markets. They needed a seal in a complex shape that could clamp over a chipset for testing. The seal would be exposed to a broad range of temperatures and nitrogen gas during testing, and it was critical that the seal keep out all moisture to avoid damaging the chip. Durability was also an important factor. Other seals could not keep the moisture out, and the customer was losing chips as a result. The customer needed an effective seal as soon as possible.

### SOLUTION

Marian developed and assembled a custom-layered seal in under 2 weeks. We produced the seals using both black and white Formex, which helped the customer differentiate between different chipsets. The seal successfully protected the chipsets from moisture penetration.

### CUSTOMER BENEFITS

- ◆ **Speed.** Marian was able to develop the custom seal in just 2 weeks. If the customer would have had to mold a seal, their lead time would have been significantly longer (at least 6 weeks).
- ◆ **Low cost.** The customer did not have to pay the high price of injection mold tooling, which means Marian saved them at least 90% in total tooling costs.
- ◆ **Designed to meet customer needs.** The customer needed to distinguish between 2 different seals, so Marian developed both black and white seals.



Flexible solutions...  
sales@marianinc.com  
www.marianinc.com

