

CASE STUDY

TWO-SHOT MOLDING: LOW DUROMETER SILICONE & PRECISION BONDING

THE APPLICATION

- Continuous Glucose Monitor (CGM) wearable device
- Plastic/silicone sealing component for sensor protection

THE CHALLENGE

- Aggressive production timeline and scaling pressures tied to a global product launch
- Utilization of a low-durometer silicone (20 Shore A), which presents challenges with molding stability during processing
- Requirement to reliably mold low durometer silicone onto polycarbonate, a combination with inherently low adhesion without the use of primers
- Tight dimensional tolerances required to achieve fit, form, and function

SAINT-GOBAIN SOLUTION

- Applied internal expertise in silicone formulation and bonding methods to achieve direct adhesion without the need for surface treatments or adhesives
- Implemented a custom two-shot molding process to ensure precise material placement and strong adhesion at the silicone-to-polycarbonate interface
- Quickly scaled manufacturing across seven work centers using dedicated resources and validation expertise, and provided project management support

We solved a critical bonding challenge and rapidly scaled manufacturing, enabling faster time to market, regulatory approval, and helping the customer capture market share as a top three global provider of wearable diabetes devices.

Saint-Gobain Medical can help **develop solutions to transform** your business.

Our customers rely on our **expertise to implement tailored solutions** that significantly improve their operations and set the stage for future success.

Contact us today to start your journey towards optimized results and lasting success.

