

# Silicone Micro Molding



## MOLDING THE IMPOSSIBLE

The continued trend toward smaller devices and rapid growth in minimally invasive surgical procedures is driving demand for micro-sized solutions from medical device manufacturers and component suppliers. At Saint-Gobain, our proprietary micro molding process delivers higher precision and shot-to-shot repeatability than conventional injection molding. We can help achieve tolerance targets on complex medical devices that conventional molders cannot maintain. With in-house tooling and dedicated project engineers, Saint-Gobain is ready to collaborate with you in the development and production of the smallest medical devices.

## QUALITY

One of the most difficult aspects of micro molding is silicone component handling and quality assurance. With our process specifically designed for micro molding, silicone components are handled under a controlled deionized air environment in ISO Class 8 cleanrooms. We operate with Six Sigma and lean manufacturing principles, helping us to continually make process improvements, reduce waste, control costs, and optimize production. Saint-Gobain is ISO 13485 certified. Utilizing the IQ/OQ/PQ process validation system, you can be confident that your quality requirements will be met.

## CAPABILITIES

- Silicone overmolding of thermoplastic/metal
- Two-shot molding
  - Silicone and thermoplastic
- Rapid prototyping
- ISO Class 8 cleanrooms
- Custom packaging
- Secondary operations

## TECHNICAL EXPERTISE

- Complex silicone component geometries
- Parts as small as 0.001g
- Mold tolerances as low as 0.0001"
- Part tolerances as low as 0.001"
- Variety of septum port designs
- Undercuts, threads, blind shutoffs

## APPLICATIONS

- Drug delivery
- IV therapy
- Minimally invasive surgery
- Vascular devices

Saint-Gobain Performance Plastics Corporation's Life Science ("Saint-Gobain") products that are used as components in the manufacture of any Medical Devices (as defined by the FDA) are sold by Saint-Gobain only and exclusively to Medical Device manufacturers for use in the manufacture, assembly or distribution of their medical devices. Medical Device manufacturers, to whom Saint-Gobain sells components or for whom Saint-Gobain acts as a subcontractor for finished products, are solely responsible for determining whether their finished products are a medical device and complying with the appropriate certifications and registrations.

This document is intended to provide information about the product to enable you to consider whether generally the Product meets your application need and is not intended to provide product specification. This document should not be considered a Product warranty or guaranty. To the extent this document mentions any tests done by Saint-Gobain, such tests are done under controlled laboratory circumstances and hence other factors in your use and application may impact such values.

Product recommendations are based on a combination of industry knowledge, material science expertise, and/or material testing data.

SAINT-GOBAIN MEDICAL  
[medical.saint-gobain.com](https://medical.saint-gobain.com)

