

Silicone Micromolding

Molding the Impossible

Saint-Gobain
Life Sciences –
Medical Components



Actual sample size:
5mm x 2.5mm

Your Growing Needs Are Shrinking

- Complex part geometries
- Parts as small as 0.001g
- Mold tolerances as low as 0.0001"
- Part tolerances as low as 0.001"
- Hole sizes as small as 0.003"
- Thin wall sections to 0.0015"
- Undercuts, threads, blind shutoffs

Demand for Micro-Devices

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. Saint-Gobain's proprietary micromolding process delivers higher precision and shot-to-shot repeatability than conventional injection molding and achieves tolerance targets on complex medical devices that conventional molders cannot maintain. With in-house tooling and dedicated project engineers, Saint-Gobain is your partner in developing and producing even the smallest of medical devices.

Quality

One of the most difficult aspects of micro-molding is part handling and quality assurance. With Saint-Gobain's process specifically designed for micromolding, parts are handled under a controlled de-ionized 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 9001 and ISO 14001 certified. Utilizing the IQ/OQ/PQ process validation system, you can be confident that your quality requirements will be met.

Micromolding Capabilities

Silicone Overmolded Micro Parts

*Stainless Steel, PPO, PC& PC
Alloys, PBT, Nylon, PPS, PEEK, and
more*

Two-Shot Molding

Silicone + Thermoplastic Micro Parts

Rapid Prototyping of Micro Parts

*Providing functional parts as soon as
possible using single cavity steel tooling*

ISO Class 8 Cleanrooms

Custom Packaging

Secondary Operations

Typical Device Applications

Minimally Invasive Surgery

*Laparoscopic, Thoracoscopic,
Ophthalmic, and more*

Advanced Drug

Delivery Vascular

Devices

IV Therapy

Important: "Please refer to our Medical Products Disclaimer at www.medical.saint-gobain.com/resources/regulatory-and-quality/medical-product-disclaimer.

Saint-Gobain's medical products offer covers:

- Medical Components [21 CFR 820.3(c)], intended for processing or use in the manufacture or assembly of medical devices before the finished medical device is packaged/labeled; Medical Components are intended to be included as part of the finished, packaged, and labeled device [21CFR820.3(c)].

- Finished Devices [21CFR820.3(l)] made on behalf of medical device manufacturers [21 CFR 807.20(a)(2)] under contract-manufacturing agreement. In accordance with the United States' jurisdiction, Saint-Gobain complies with the FDA's requirements for contract manufacturers of finished devices."

For more information, contact:

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