

# MOLDING



## We Get it Right the First Time

Medical Silicone Molding is different. First, a tool-grade steel mold is a significant investment in any fabrication program. Second, this mold must be designed and precisely manufactured to integrate seamlessly with equipment that pumps, mixes, injects, compresses, heats, and ejects. Third, the efficiency of the molding tool will depend on choices concerning cavitation, parting line geometry, gate location, venting, and surface finish. Finally, the mold and any molding process must be sufficiently robust to accommodate the inherent lot-to-lot variability of silicone raw materials.

Those are just a few of the variables that contribute to any successful molding project. And that's why you'll hear us say, "We get it right the first time."

**Let Us Review Your Part.** Supply us with your drawings, specs or just a concept sketch. Did you know we can have a rapid prototype for you in two weeks or less?



## **Our Engineers will Determine the Best Solutions and Materials.**

SSF routinely collaborates with medical device engineers at the earliest concept stages to develop and refine component design features that improve manufacturability, minimize variability, maximize yield, eliminate secondary operations, and reduce costs. In addition to design assistance, SSF experts collaborate with our clients in areas including material selection, validation protocols, and Regulatory compliance to insure a successful and on-time commercial launch.

- **We're Experts in Miniturization and Exacting Dimensional Tolerance**

For more than twenty years SSF's in-house tool room has machined molds to produce parts that meet our clients' most demanding specifications. SSF molding tools are made from only the highest quality tool-grade steel. Our expert mold makers fabricate tools with cavities varying in size from microscopic punctum plugs to large squeeze bulbs and surface finishes are chosen to optimize a component's form and function.

- **We Have the Right Molding Press for Every Job**

We've invested in state-of-the-art molding presses that allow us to choose the optimal equipment for every project. Equipment includes fully automated vertical and horizontal liquid injection molding (LIM) machines as well as transfer presses. Clamping pressures range from 5 to 400 tons. Rotary tables, robotics and other custom automation are available to increase throughput, reduce scrap, and lower costs.

- **Molding Validation**

SSF molding processes are fully validated using Design of Experiments (DoE) and statistical process controls (SPC).