



RAPID Design Engineering of Medical Devices Specializing in Plastics



Our highly experienced biomedical and mechanical engineers leverage our extensive in-house fabrication capabilities to create proven, manufacturable designs with unmatched speed, efficiency and quality. They have developed over 300 successful designs, forming our deep portfolio that has generated hundreds of millions of dollars for our clients. It includes FDA Class I, II, and III devices, developed under our ISO 13485 certified quality management system.



We specialize in design engineering and design-for-manufacturing of innovative medical and life science devices that use plastics

Our Services Include:

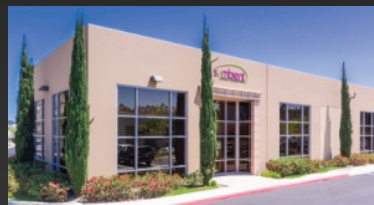
- Concept Development
- Engineering and Design
- Industrial Design
- Design for Manufacturing and Assembly
- Design Control per ISO 13485
- Finite Element Analysis (FEA)
- Design Verification Testing
- Test Method Development
- Test and Assembly Fixture Development
- Transfer to Manufacturing

Our In-House Capabilities:

- Stereolithography (SLA) Prototyping
- CNC Machining / Fabrication
- Prototype Mold Fabrication
- Prototype Injection Molding
- Liquid Injection Molded (LIM)
- Silicone Prototype Molding
- Injection Molding Simulation and Analysis
- Product Reliability Testing
- Plastics Assembly Expertise
- Material Selection Expertise, Research and Testing

Our Portfolio Includes:

- Diagnostics / Molecular Diagnostics
- Sample Collection / Preparation
- Life Science / Laboratory Products
- Microfluidics / Small Volume Handling
- Buffer & Reagent Storage & Delivery
- Surgical / Clinical Tools
- Drug Delivery Devices
- Electromechanical Devices
- Consumer and Industrial Products



SymbientPD.com
+1 760 687 4030 x2
1061 La Mirada Court
Vista, CA 92081

Steps To Success

Our Medical Device Development Process

PHASE 1



Discuss your project needs. Estimate the work to accomplish your vision.



Define the product requirements, giving us a well-defined target for development.



Brainstorm solutions, drawing from the experience of our entire engineering team.

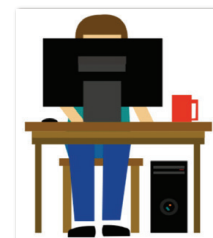
PHASE 2



Develop concepts that provide an array of potential design solutions.



Analyze and present concepts. Determine which one best meets all product requirements.



Design all details in Solidworks, defining tolerances, materials and assembly methods.

PHASE 2



Individually prototype any functions that are likely to require iteration.



Test prototypes against requirements. Quickly iterate with in-house prototyping.

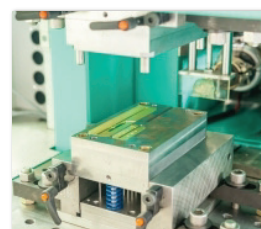


Develop integrated prototype that combines all functions, and meets requirements.

PHASE 3



Fabricate prototype tooling in-house that we can easily iterate as needed.



Mold and assemble fully functional, production quality devices.



Test molded devices against requirements. Iterate molds as needed.

PHASE 4 & 5



Perform Design Verification Testing to confirming that all designs requirements are met.



Seamlessly transfer to manufacturing for production scale up.



Support patent and regulatory approval processes.