



Custom IVD Solutions

Freudenberg Medical supplies over 80 million custom molded thermoplastic and silicone parts per year to In Vitro Diagnostic OEMs around the world. Our engineering teams are equipped to engage in projects of diverse technical difficulty. By partnering with our customers from design for manufacturability to improving an existing process, we tackle projects that range from sample tubes and lateral flow tests to intricate cartridges that require extremely precise molding with tolerances of ± 2 microns.

We have the technical expertise and experience to solve manufacturing challenges for point-of-care devices and analyzers used in a variety of applications including:

- Molecular Diagnostics
- Immunoassays
- Clinical Chemistry
- Hematology
- Coagulation

We have been successful in the IVD market by creating innovative solutions that combine multiphase processes to reduce time in production while still providing superior quality. Our advanced tool designs and visual inspection systems ensure that we are exceeding customer expectations. Lean principles enable us to practice waste reduction and implement continuous improvement strategies to optimize manufacturing processes to give our partners a competitive edge in the industry. Our specialized IVD capabilities include:

- Design and development
- Prototyping and rapid prototyping
- Material characterization
- Thermoplastic injection molding
- Silicone (LIM) molding
- Multi component (two-shot) molding
- Insert molding
- Over molding
- Close tolerances: ± 2 microns
- Validation and qualification
- Assembly and subassembly
- Pad printing
- Laser etching
- 24/7 Lights-out production
- Automated raw material flow
- Automated part handling
- Form/fill/seal
- Lot sterilization labeling
- Label creation/artwork
- Fully-automated custom packaging