

# Engineering Capabilities

Ambrit Engineering is a local and global contract manufacturer for Healthcare, Aerospace, Commercial and Consumer products. We specialize in being an integrated manufacturing partner for precision plastic injection molding through to final assembly. Our dedicated Process Engineering team excels at developing sustainable and repeatable processes and troubleshooting root cause issues. Our 50 year legacy, turn-key expertise, and reputation for quality and service ensures your project success.

Ambrit Engineering Corp. offers the following engineering services:

## Tooling Engineering Services

- In-House Mold Design and DFM Services using Solidworks
- In-House Mold Flow Analysis using Moldex 3D

## Process Engineering Services

- Level 3 Master Molder directs process development activities
- Scientific molding approach to process characterization
  - Shear Rate Viscosity Study
  - Gate Seal Study
  - Cavity Balance Study
  - Pressure Drop Study
  - Cooling Time Study
  - Cosmetic Window
- Ranging Studies

## Process Engineering Services Continued

- Design of Experiments (DOE)
- Process Documentation
- Setup / Process Sheets
- Work Instructions
- Continuous Improvement

## Quality Engineering Services

- Advanced Product Quality Planning (APQP)
  - PFMEA
- First Article Inspection Reports
- Validation Protocols and Final Reports (IQ, OQ, PQ, PPAP)
- Process Capability Analysis
- Measurement System Analysis (MSA)
- Statistical Process Control (SPC)
- Root Cause Analysis
- Continuous Improvement

The Ambrit Engineering Corp. team welcomes the opportunity to discuss your current and future injection molding tooling systems, molded components, assemblies, and related engineering services needs.

Located in Southern California in the city of Santa Ana, minutes away from John Wayne Airport, Ambrit Engineering Corp. is conveniently located to serve not only the Southern California market, but national and international markets as well.

