

Our **AGILE Product Development[®]** team is driven by the guiding principles of quality, speed, and partnership. With deep expertise in catheter-based therapies (e.g. structural heart delivery systems, electrophysiology, neurovascular), and implants, our engineers collaborate closely with your team to bring elegant and disruptive medical solutions to life.

From initial design and rapid prototyping to market introduction, process validation and commercial scale-up, we provide the technical expertise and development support needed to accelerate innovation and increase speed to market.

AGILE Product Development[®] process

- 1. Concept feasibility & planning**
- 2. Development & design freeze**
- 3. Design verification & validation**
- 4. Clinical & pre-production**
- 5. Design transfer & commercial production**

Your full-service partner in medical device development

Engineers across our **AGILE Product Development[®]** team are well versed in ISO 13485 Design Control and ISO 14971 Risk Mitigation practices, with deep subject matter expertise in the following markets:

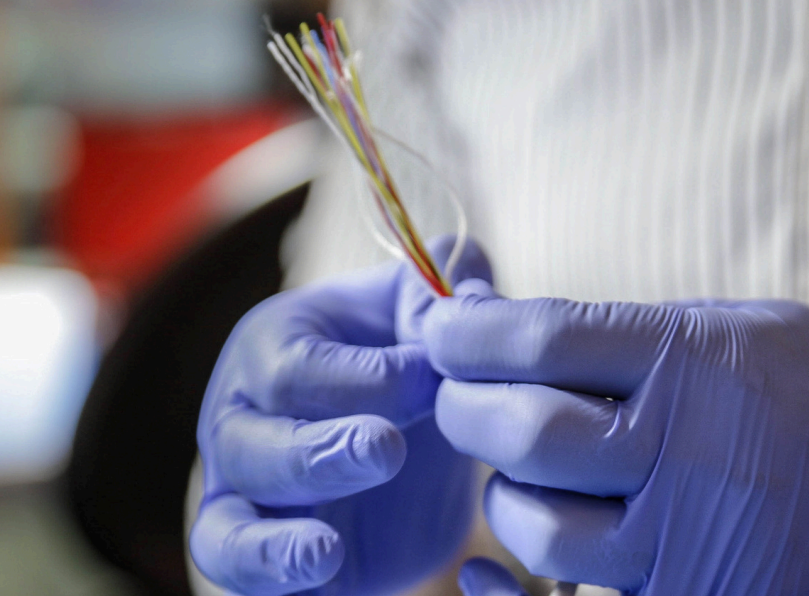
- Electrophysiology
- Structural Heart
- Peripheral Vascular
- Neurovascular
- Interventional Cardiology
- Interventional Pulmonology
- Endoscopy / Gastroenterology
- Cryotherapy
- Drug Delivery
- Transvascular Interventions (e.g. across the blood-brain barrier)
- Pain Management

The Resonetics logo consists of the word 'RESONETICS' in a white, sans-serif font. A stylized orange and white graphic element, resembling a sound wave or a series of vertical bars, is positioned to the right of the 'S' in 'RESONETICS'.

RESONETICS[®]

AGILE PRODUCT DEVELOPMENT[®]

From concept to commercialization



Product development services

- Medical device conceptual design and proof of concept evaluations
- Complex part design (Solidworks)
- Complete catheter delivery systems including handle and mechanism design
- Product and component sourcing to find the best solution, utilizing both manufacturing capabilities across the Resonetics network and external suppliers
- Structured phase-gate development process
- Manufacturing fixture design and documentation
- Complete assignment of product intellectual property
- Design verification, validation, and preproduction
- Transfers from R&D to commercial production
- High-volume manufacturing
- Design history file management and risk management documentation
- Implant design and development
- Catheter manufacturing process development
- In-vivo study protocol development, execution, reporting
- Clinical site initiation, physician training, and case support
- In-vitro test method development and fixture fabrication

Catheter development centers of excellence

Our experienced team of catheter engineers accelerate development and the evaluation of catheter-based technologies through state-of-the-art equipment and capabilities:

- Complex catheter shaft assembly (reinforced, steerable, sensor-embedded)
- In-line laser welders for assembly and pull wire attachment
- Tipping and secondary ops (skiving, hole punching, etc.)
- Overmolding for custom hub and dilator tip configurations
- Adhesive application (UV, cyanoacrylate, epoxy)
- 3D printing (SLA, FDM) and laser cutting for quick turn handle form evaluation, test fixture componentry, anatomical modeling, etc.
- Automated tensile/compressive test stand for bond strength analysis and trackability testing
- Assorted wet lab and vascular models with benchtop flouro visualization
- Pad printing
- Hydrophilic



Learn More
Resonetics.com