key tech

Unlock
Your Toughest Product Development Challenges

Product Development Services

End-to-End Product Development
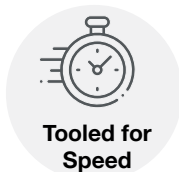Subsystems or Complete Systems

Alpha and Beta Prototype Development

Tech De-Risking
Test Design and Development

Rapid Innovation
Invent, Prototype, Test, and Iterate

Creative Planning
Roadmapping Workshops, VOC Evaluations, Brainstorming and Concept Exploration, Independent Design Reviews, Requirements Definition

Since 1998, Key Tech has been transforming complex technologies into intuitive products for the world's leading medical technology brands. Our team of interdisciplinary scientists, engineers and designers bring a uniquely personal approach to unlocking the potential in your development pipeline, from concept to manufacturing transfer.

Tooled for Speed

Creative & Fresh

Efficient, Compliant Processes

Experienced Team

With a Proven Track Record of Success and Repeat Clients including:

Becton Dickinson | **General Electric** | **B. Braun** | **Thermo Fisher**

Markets

DIAGNOSTICS

GenMark Diagnostics

UltraCrit
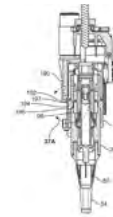
MEDICAL

CoolStat

Cooper Surgical

PHARMACEUTICAL SYSTEMS

BD

UCB Pharma

AN OVERVIEW OF PROCESS:
End-to-End Product Development

Feasibility Proven

Design Freeze

Launch

Creative Planning → Concept Exploration → Feasibility → Alpha → Beta → Mfg Transfer & V&V → Improvements

De-Risking
For When There's No Clear Solution

Development
We Have Compliant, Efficient Processes

Commercialization
We Focus on Speed to Market

Learn more at keytechinc.com | TalkToUs@keytechinc.com | 410.385.0200 | © Key Tech Inc 2023. All Rights Reserved. | **ISO 13485 certified**

Disciplines

Tooled to develop the digitally-enabled MedTech devices of the future

MECHANICAL ENGINEERING

_ Custom mechanical systems
_ Material selection and design for manufacturing
_ Precise thermal control
_ Fluidic handling across micro and macro applications
_ Actuator and complex motion mechanisms
_ Optical systems design
_ Static, transient, and thermal simulations
_ Design for biocompatibility and sterilization

ELECTRICAL ENGINEERING

_ Coupled PCBA schematic capture and layout design
_ Precision sensor technologies
_ Wireless communication systems including BLE and NFC
_ Custom batteries and low power circuitry for mobile applications
_ Custom UI's with a variety of displays and inputs
_ High precision signal conditioning and analysis
_ Real time signal measurement and control systems

COMPUTER ENGINEERING

_ User centered software applications for PC and mobile devices
_ Custom embedded firmware
_ Multiple processors and computing platforms
_ Advanced signal and image processing
_ Machine vision applications and custom algorithms
_ ANSI C, Visual C++/OO, C++, VHDL, Python, and more
_ IEC 62304 compliant process for medical applications
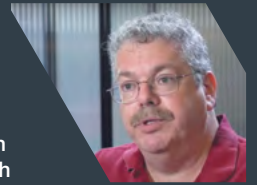
INDUSTRIAL DESIGN

_ Human factors, ergonomics, and usability
_ GUI design
_ Rapid concept visualization and rendering
_ Workflow analyses and illustration
_ User research
_ Use study design and analysis
_ Adobe Suites, Keyshot, and Rhino
_ Brand language development and translation

SYSTEMS ENGINEERING

_ Build and checkout testing
_ Requirements and specification development
_ Integration testing
_ Interdisciplinary team integration
_ Design and testing for serviceability and reliability
_ System architecture development
_ V&V

> " When we need creative and fresh ideas, we bring Key Tech in. Their methodical approach with prototyping, with usability, with risk management... we treat them as an extension of our design team."
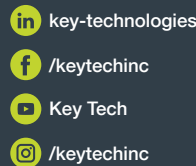
Steve Falk
Chief Engineer
GE Healthcare

Product Types

Surgical Robotics

Laparoscopic Tools

Infusion Systems

Wearable Remote Monitors

Digital Platforms

Pharmaceutical Preparation

Drug Delivery Devices

Interventional Catheter-Based Products

In-Vitro Diagnostics, including Sequencing

Point of Care Diagnostics

Imaging Systems

Diabetes Care

Hospital Equipment

Smart Consumables

Data Analytics & Algorithm Development

Custom Test Fixtures

Let's Talk About Your Toughest Product Development Challenges.

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100% Employee-owned

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