

Resources & Capabilities

DESIGN

- Custom connectors
- Custom cable
- Custom overmolding and strain reliefs
- Reverse engineering
- Cable assembly and material selection
- Custom components and assembly
- Catheter handle design and internal PCB assemblies
- Connector to device interface
- PWB design
- Equipment, tooling, and fixturing
- CAD 3D modeling
- Design inputs and design outputs development
- Design for manufacturability

VALUE ADDED/VALUE ENGINEERING

- Finished device packaging and sterilization services
- Label design services and finished product label printing and application
- Designing for steam autoclave and Sterrad sterilization methods
- Design to meet EC-53 tribo-electric noise requirements
- Drawing and specification development
- Master Validation Plan development
- Verification and validation testing
- Mold tool design and fabrication
- RoHS verification/certification and X-Ray Fluorescence testing
- pFMEA and dFMEA development
- Finite element and material analysis
- Moldflow analysis
- Human factors collaboration
- Product testing services
 - Environmental – Temp RH, cycling, thermal shock
 - Electrical properties characterization/ investigation
 - Autoclave cycling
 - Bend and flex reliability
 - Insertion/withdrawal connector reliability
 - Tribo-electric (EC-53) low noise testing
 - Low voltage signal performance (ECG)
 - USB 2.0/3.0
 - IPX 1,2,7 (liquid ingress)
 - X-ray 2D/3D service
 - Mechanical testing – tensile, peel strength, etc.
 - XRF Testing – RoHS screening
 - Test fixture & Test method development
- Metal Finishing
 - Tumbling
 - Micro-blasting
 - Electro-polishing
- Nitinol shape-setting and polishing
- Chemical passivation
- Acid cleaning
- Metal and ceramic annealing
- Heat treating
- Oxide surface formation
- Metal deburring
- Precision Inspection capabilities
- Tooling design and manufacturing

MANUFACTURING

- Precision laser ablation of coils
- Laser marked cables
- Precision laser ablated lead bodies
- Laser etched lead bodies
- Laser welded electrode assemblies
- Laser drilled tubes
- Microcabling
- Fine wire termination
- Precision laser ablation of wire
- Precision laser ablation of sensors
- Ultrasound cables
- Laser tube marking
- Laser ablated shafts
- Laser microwelded subassemblies



- ISO Class 7 cleanroom assembly
- Custom cable assembly
 - Material cut, strip, shrink
 - Crimping
 - Soldering
 - Potting and gluing
 - Welding
 - Component/connector assembly
 - TP injection molding
 - Silicone molding (LSR and silicone transfer)

- Box build and electronics assembly
- Fiber optics assembly
- Laser marking
- Testing: Electrical, mechanical, environmental
- Product cleaning
- Labeling
- Packaging



- Precision tube processing for medical devices, medical implants, stents, and surgical tools
- Precision laser cutting metals, plastics, and ceramics
- Precision laser metal welding (including hermetic sealing) for medical device assemblies
- Precision laser drilling metals, plastics, and ceramics
- Metal finishing
- Tube bending for small components
- Thermo processing



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