

INNOVATION AT A GLANCE

Medical & Life Sciences

CLIENT

Medical technology company with a focus on dialysis

INDUSTRY

Medtech

SERVICES

Disassembly tool assessment
Material selection
Feasibility studies

OBJECTIVES

Improve product usability and sustainability

REDESIGNED DISPOSABLE CARTRIDGE AND FRONT PANEL TO IMPROVE RELIABILITY, USABILITY, AND COST

APPROACH

- Reviewed system design documentation
- Deconstructed and reconstructed system
- Conducted feasibility studies

RESULTS

- Delivered a greatly-simplified cartridge design
- Improved reliability, cost, and usability of consumable design
- Drove feature improvements, cost reductions, and universality of the front panel

KEY TECHNOLOGIES

- 21 CFR 820 (FDA)
- ISO 13485, EN ISO 14971, IEC 60601-1, IEC 60601-2, IEC 62304
- SolidWorks, LabView, Python
- Protocols are all developed in collaboration with the customer based on requirements of the specific system



Project
Management



Systems
Engineering



Mechanical
Engineering



Electrical
Engineering



FTE

7