


CONFIDENTIAL CLIENT



6 MONTHS

DESIGN FOR RELIABILITY PROGRAM FOR MEDICAL DEVICE MANUFACTURER

 Commissioning & Qualification


 Building Commissioning

 Asset Management & Reliability


 Quality, Compliance, & Regulatory

 Human Performance

 Process & Manufacturing Technology

 Program & Project Management

 Automation & Information Technology

 The Chemistry of Full-Scale Operations™

 Data Centers

WHEN YOU NEED TO MEET A HIGHER STANDARD™

PROJECT OBJECTIVE

This medical device company has a corporate goal to double production capacity by 2020. The company has requested CAI's assistance with the development and implementation of a Design for Reliability (DfR) program that can be applied programmatically to the engineering design function as well as influence the procurement and capital project functions of the company.

PROCESS

CAI's senior asset management consultant assisted the client in developing a DfR program, process, and toolkit. CAI then simultaneously supported applying the DfR process via a proof of concept approach to a major new production line and developed and optimized the remaining aspects of the DfR program based upon the application at each stage gate of the capital project process.

The DfR process blends aspects of statistics, probability and reliability theory, and engineering analysis throughout a product lifecycle to evaluate, predict, and verify the application of robust design. Through application of DfR practices, the demand for highly-reliable systems can be met while insuring that the latest methods for the assessment of robust design and risk-management are properly addressed.

SERVICES PROVIDED

- Developed and execute a DfR Gap Assessment Tool
- Provided a written DfR Gap Assessment final report with recommendations
- Developed a Draft DfR Program, Process, and Toolkit to apply to a capital project for proof of concept
- Developed a DfR Directive as the overarching document to define the DfR Program
- Developed a DfR Tool and supporting DfR Toolkit Training and User Manual
- Developed the DfR Site Program SOP aligned with the DfR Directive and Toolkit
- Developed a DfR Enhanced Engineering Specifications Document/Reference/Manual

VALUE DELIVERED

The project successfully established DfR as the means to reduce Life Cycle Cost (LCC) by at least 10% in the concept and design phases of capital projects.