



ULTRA SONIC SCANNING MACHINE DESIGN INNOVATIONS

SITUATION:

The Vice President of Operations at a nondestructive inspection machine manufacturer wanted to design a new product line of machines that would be used by manufacturers “inline” with the assembly process.

- Taking on a project of this scope and scale placed internal pressures on finding the capacity to launch the product line in a timely fashion.

STERLING SOLUTION:

Working with the client’s internal team of mechanical and electrical engineers, Sterling designed a new machine product line.

- Sterling provided both onsite and off site resources to manage the design and build process.
- As part of the project, timing charts, to-do lists, and a knowledge base were implemented by Sterling to provide accurate, accessible documentation for the clients’ internal team.
- The project required expertise from a number of engineers; Sterling used a SolidWorks vault system (EPDM) to maintain revision control during the design cycle and release to manufacturing.

RESULTS:

Sterling was able to reduce the product launch timeline and implement several product innovations into the new machine.

- Sterling integrated a water filtration and water separation system in to the machine.
- The element of “water” adds a layer of complexity when scanning electrical components, Sterling successfully developed a system that improved drying time of the components.
- Sterling’s use of the SolidWorks EPDM vault maintained drawing control during the release to manufacturing and minimized errors.

PROJECT SNAPSHOT

❖ *New product line launch behind schedule*

❖ *New machine design, process control, and machine documentation*

❖ *Reduced time to product launch and added new product innovation*