

## INNOVATION = EARLY DEVELOPMENT OF PRODUCTION ASSEMBLY AND TEST FIXTURES TO ENHANCE PRODUCT SUCCESS

### INNOVATION AT A GLANCE

**Client:**  
Global medical technology manufacturer

**Industry:**  
Medical device

**Syncroness services:**

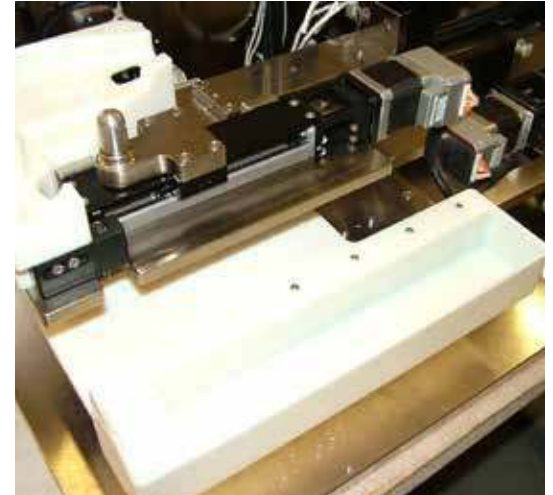
- » Assembly, test, and calibration systems
- » Prototyping
- » Production support

**Objectives:**

- » Minimize design time
- » Reduce assembly time
- » Develop standardized assembly and test methods

**Approach:**

- » Produced development tooling to test product iterations and elicit feedback on the assembly process
- » Used proto-tooling to verify need for automation
- » Developed assembly fixtures alongside device development



Production assembly, test, and calibration play an important role in the overall success of a product. How easy is the process? Is automation absolutely necessary? And how long will the product assembly actually take? These are some of the questions that Syncroness can help companies answer.

### RESULTS

- » Decreased time-to-market by eliminating delay between product development and assembly line completion
- » Significantly reduced assembly equipment cost by avoiding the need for automation
- » Met ergonomic and safety requirements

#### USING ASSEMBLY AND TEST FIXTURES TO ACHIEVE PREDICTABLE RESULTS.

Our client, a world-leading medical device manufacturer, relied on Syncroness to develop both assembly and test fixtures for use during product development and production.

Working in concert with the client's development team, we produced development tooling. This quick prototype tool enabled the product development team to quickly assemble and test product iterations. The team was able to solicit operator feedback on the assembly process, and experiment with possible product changes that could improve overall quality, reduce costs, and decrease assembly time. As a result, the team was able to make all necessary changes before committing to a final design and tooling.

#### READY FOR PRODUCTION WHEN PRODUCT DEVELOPMENT IS FINALIZED.

Our team worked closely with the client R&D team, updating the assembly and test systems as the product's design changed. Through the use of rapid prototyping, the client was able to verify that automation in the assembly process was not necessary, thereby significantly reducing its equipment and maintenance costs.

We leveraged our understanding of the product development process and our experience developing custom assembly and test fixtures for all product lines to rapidly develop the tooling. Along with meeting the client's requirements for safety and ergonomics, the final assembly equipment complied with ANSI standards. Most importantly, the assembly line was ready to go immediately following the completion of product development – enabling the client to get to market quickly and efficiently.

### LET'S KEEP INNOVATING.