Increasing Manufacturing Efficiency with Value-Added Assembly

Value-Added Assembly

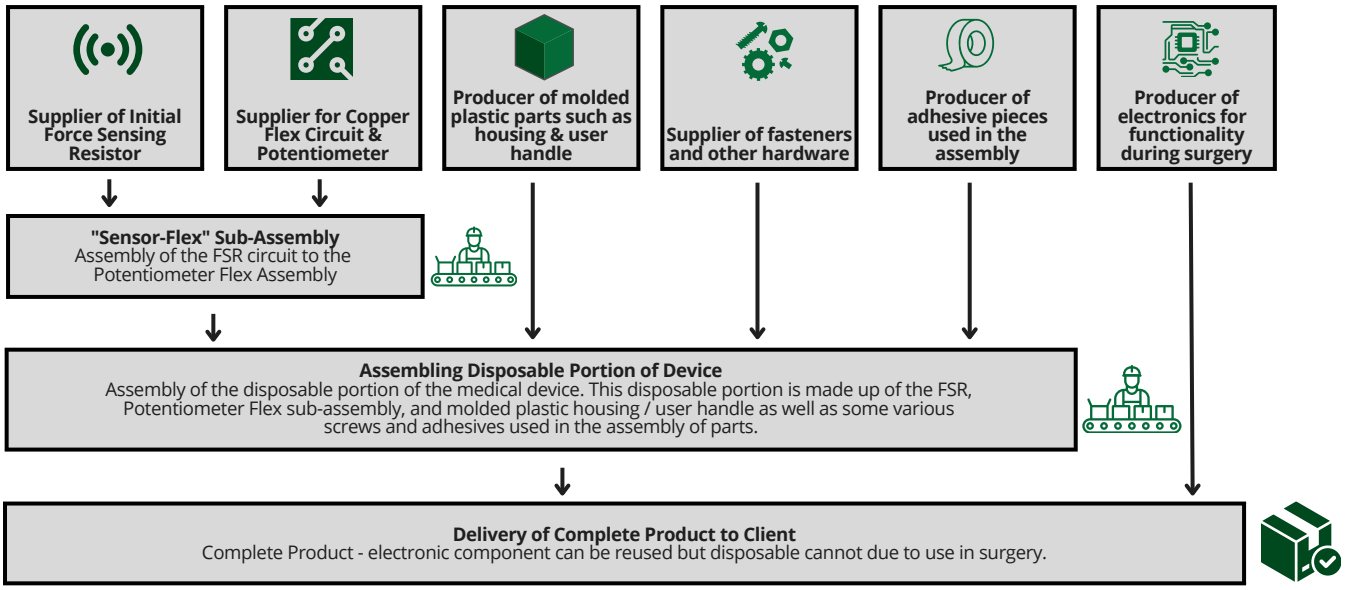
AT A GLANCE

Our medical device client's assembly vendor was changing direction as part of an acquisition, which slowed down their manufacturing capacity. As a result, our client had a gap in their supply chain and needed to find a new assembly vendor.

Butler Technologies, Inc. (BTI) not only filled the gap in the client's supply chain, but also provided improvements in several areas of their product's manufacturing cycle to further improve efficiency and reduce cost.

BEFORE

Previously, this client used multiple separate vendors to provide different components, as well as to complete assembly, calibration and testing, for this product.



ADDING VALUE

When the client became aware that their current potentiometer flex assembly vendor was no longer an option, they reached out to BTI to see what other solutions we could provide for them.

After conversations with the client and learning more about how the FSR interfaces with the mating circuit, we determined that we could help in several other ways to improve the product's manufacturing cycle.

First, we ensured that we could, in fact, assemble the FSR circuit to the potentiometer flex assembly, in order to fill this gap in the supply chain and address their original need.

We also determined that we could procure the copper flex circuit and soldered potentiometer components used in the potentiometer flex assembly. Further still, we identified that we could produce the Z-axis conductive adhesive tape piece used to bond the FSR to the potentiometer flex assembly.

By sourcing the materials for the sub-assembly we would then hand-assemble in-house, we could significantly reduce their overall lead times and shipping costs.

Pleased with the flex assemblies that BTI had procured materials for and built, our client asked if we would be interested in also assembling, calibrating, and testing the disposable portion of the medical device. After sending samples and training materials, observing our assembly process in person, and thoroughly inspecting our initial test builds, the client was pleased with the results and decided to have BTI proceed with taking this role over going forward as well.

Whereas the product's previous build cycle involved various vendors and separate processes, along with shipping between them, bringing BTI on as their assembly partner meant they could substantially consolidate the process.

BEFORE: 8 SEPARATE VENDORS

Vendor #1	Vendor #2	Vendor #3	Vendor #4	Vendor #5	Vendor #6	Vendor #7	Vendor #8
FSR supplier	Molded plastic parts	Fasteners and other hardware	Producer of the specialty electronics	Copper flex circuit & potentiometer	Producer of adhesives	Sensor-flex subassembly	Assembly of disposable portion of device

AFTER: 5 SEPARATE VENDORS

Vendor #1	Vendor #2	Vendor #3	Vendor #4	BTI			
FSR supplier*	Molded plastic parts	Fasteners and other hardware	Producer of the specialty electronics	Copper flex circuit & potentiometer	Producer of adhesives	Sensor-flex subassembly	Assembly of disposable portion of device

**We're also undergoing R&D efforts to improve their FSR design further. Once R&D is complete, we will have consolidated five vendors into one and halved the number of vendors above from eight to four.*

THE SOLUTION

We were not only able to fill the gap in their supply chain, but also consolidate the roles of four separate vendors. By doing so, we've simplified their supply chain to take them from eight separate vendors to five—eliminating substantial shipping requirements and testing overlap, and reducing costs overall.

Through our value-added assembly, this client was able to reduce the above number of vendors by nearly half. This enables them to reduce shipping costs, reduce overall lead-time, and eliminate some of the testing overlap between facilities. This client is a technology development company, not a manufacturer, and by enlisting Butler Technologies' expertise they are further able to focus on their core competencies. Further, our engineering expertise and continual improvement initiatives, in tandem with our R&D team, allow us to provide feedback and increase value and efficiency of the product lifecycle as a whole.

CONSOLIDATE VENDORS

REDUCE OVERALL LEAD-TIME

REDUCE SHIPPING COSTS

ELIMINATE TESTING OVERLAP

Save time, resources, and frustration with Butler Technologies' value-added assembly services.

- *Hand Assembly*
- *Surface Mounting LEDs and other SMD Components*
- *Hot & Cold Laminating*
- *Fastening Assemblies*
- *Electrical Connector Crimping and Installation*
- *Device Calibration & Testing*
- *...and more*

BTI BUTLER Technologies, Inc.

ISO 9001:2015 WITH DESIGN

ISO 13485:2016 WITH DESIGN

To learn more, contact our team today.