

Medical device add-on

Features

SHL Technologies collaborates with a company specializing in the development of intelligent accessories to manufacture a medical device add-on. A dedicated team of experts with knowledge in process optimization successfully supports the development of a user-friendly solution that enables patients to automatically log injection events.

- Design-to-manufacture
- Project management
- Supplier relations
- Quality management system (QMS)



PROJECT SUMMARY

Leading manufacturer with knowledge in the medical device industry

A medtech company based in Ireland was searching for a partner with experience in the medical device industry to develop and manufacture a connected accessory for pen injectors. As a secondary aid for diabetes management, the Bluetooth®-enabled device facilitates easy access of injection records in support of the patient's treatment regimen.

The primary focus with this project was to streamline the manufacturing processes while optimizing production costs and timelines. SHL Technologies' expertise in providing early engineering insights into the design process was key to the project's scope. Our experience in manufacturing medical devices with a certified quality management system also contributed to the establishment of the strategic partnership.

Delivering optimization

The development process kicked off with a preliminary assessment to discuss the technical concept based on the customer's user requirement specifications (URS). SHL Technologies' in-house experts focused on evaluating the manufacturing features, such as the ease of the production processes and cost expectations, before proceeding to the development of the prototype. By weaving in the key procedures and techniques early on, SHL Technologies raised the level of integration in the overall design.

SHL Technologies' prototyping services allowed for exploration and extension of ideas to refine and tailor the manufacturing processes. During this stage, information related to the production techniques, materials, and components were gathered and fully analyzed. Experienced engineers proficient in the development of medical devices provided alignment between the design and the internal production capabilities.

After the design was approved by the customer, SHL Technologies ensured all manufacturing elements of the project were geared towards optimization. With effective supplier relationship management strategies in place, the necessary materials and logistical resources were timely secured. Transparent communication was carried through the development stages to streamline the information exchange, so the outcome would fit the customer's purpose and expectation.

A detailed production strategy was outlined to offer better control of resources and delivery performances. From technical modules, in-house reports, to working instructions, the complete documentation was provided in due time.

The cross-functional team not only kept within the production schedule and budget, but also identified and managed any potential risks to secure successful advancement towards commercialization.

Since software-based secondary aid devices must interface with other medical devices, a systematic control measure needed to be implemented. SHL Technologies utilized a computerized traceability system within the production cycle to monitor the components. Each part was assigned a unique ID and the data was recorded automatically in the internal database to facilitate tracking.

The collaboration accentuated SHL Technologies' expertise in scaling production and optimizing costs. The project also served as the highlight for SHL Technologies' holistic and flexible manufacturing capabilities to create value through process optimization. Following the successful launch of the product, the partnership remains strong to this date. With proper tools and best practices set to generate a robust solution, SHL Technologies is committed to assisting our partners to create products and services that help improve lives.