



PROJECT PROFILE

NON-INVASIVE CARDIAC - ANALYSIS DEVICE

CLIENT CHALLENGE

Our client is developing a specialized non-invasive cardiac analysis device. The disruptive nature of this technology will introduce significant cost savings and ease of use to the heart analysis field. The goal of the client is to achieve a design that lowers costs to the point where patient interface component disposability can be realized. The client required New Product Development expertise in key stages of the New Product Development Cycle:

- Concept Engineering design
- Knowledgeable COTS sourcing
- Prototype CAD modeling
- Proof of Principle (POP) models
- Design for manufacturing - plastics, appropriate medical adhesive materials
- Prototype models

SOLUTION

Palladium was retained for our expertise in medical products and the New Product Development field. The following tasks were performed during the project:

- Validated concepts quickly by COTS sourcing and early POP models that narrowed the concept choices
- Plastics moulding expertise was involved early in the design stage to keep the concepts aimed at producing an economically manufactured end product.
- Chosen concept path was validated by producing a prototype for early preclinical testing.

PROJECT HIGHLIGHTS

Palladium staff accomplished the following project deliverables:

- Previous Medical Product Development experience minimized the development time.
- Knowledgeable COTS sourcing and experience dealing with OEM manufacturers.
- DFMA and Rapid Prototyping expertise.
- Use of up to date distance collaboration tools.
- Efficient project management that anticipated potential project issues and provided workable solutions to the client before the client requested solutions.

Palladium's work enabled the client to:

- Produce a realistic design concept that keeps disposability as an option.
- Mitigate design risks by intelligent use of early POP models/testing and analytical analysis.
- Provide a well documented path to more detailed design and prototype development.
- Move the product to the trial stage.

