



PROJECT PROFILE

SURGICAL SIMULATION TOOLS

CLIENT CHALLENGE

Our client develops surgical simulation systems that are sold to medical schools and facilities around the world. The client foresees a demand for a radical new medical simulation product incorporating simpler functionality than their high-end systems at a reduced cost. The client required New Product Development expertise in several stages of the New Product Development Cycle:

- Concept/Industrial design
- Proof of Principle (POP) models
- Design for manufacturing- plastics
- Prototype models
- Scheduling and Cost Controls

SOLUTION

Palladium was retained for our expertise in medical products and the New Product Development field. The following tasks were performed on the way to successful project completion:

- Valid concept path was quickly found by producing several early POP models that narrowed the concept choices.
- Chosen concept path was validated by producing a working model for testing by client electrical and software personnel.
- Plastics suppliers were involved early in the prototype design stage to produce a manufacturable design.
- Detailed CAD models and drawings were produced at a point where the expectation of major changes was low.
- Three prototypes were manufactured using a combination of rapid prototyping and conventional machining techniques.

PROJECT HIGHLIGHTS

Palladium delivered the project within time and budget constraints due to our :

- Previous Product Development experience minimized the development time.
- POP models that prove the physics of concepts before designs are taken to the prototype stage.
- Plastics design expertise.
- Earned Value Analysis that tracks project progress.
- Use of up to date distance collaboration tools.
- Efficient project management that anticipates project problems and provides solutions before the client has to ask for them.
- Flexible scheduling to meet changing work loads.

The new product enabled the client to:

- Have their new product to market before the competition.
- Create a new market segment and establish strong brand recognition.
- Establish a new product stream that complemented their existing product portfolio.

