

# Palladium



# Product Development & Design

www.palladium-pdd.com

# PROJECT PROFILE

## MRI PATIENT TRANSPORT WITH LIFT CAPABILITY

### CLIENT REQUIREMENTS

This client develops specialized MR imaging coils, patient stretchers and software solutions for the MRI field. Their equipment is sold to medical facilities around the world. The client foresaw a demand for an MR patient transfer table incorporating lifting capability that was not available in their current product line. Several current Palladium personnel were retained (prior to the incorporation of Palladium Product Development & Design) for their expertise in medical products design and the new product engineering and development field.

The following tasks were required during the project:

- Research medical customer and MRI site information for customer requirements documentation for the new patient lift/transfer table.
- Concept paths were quickly investigated based on first principles Engineering, hand calculations and FEA analysis that narrowed the concept choices.
- Composite moulding suppliers were involved early in the design stage to keep the concepts aimed at producing an economical, manufacturable design.
- Chosen concept path was validated by producing a production defendable medical show model for the client. Simultaneous development of the production model occurred in parallel.

#### PROJECT HIGHLIGHTS

- Previous Medical Product Development expertise with material characteristics minimized the development time and optimized the design.
- Rapid product development in delivering a Medical show model on tight time lines met the needs of the client's marketing plan while simultaneously advancing technical development of the production design.
- Effective sourcing of composite manufacturing expertise and non-magnetic component options as required for MRI environment resulted in fast turnaround, meeting the client's compressed timeline.
- Use of up to date distance collaboration tools facilitated fast turnaround and efficient technology transfer.



• Efficient project management experience anticipated potential project issues and provided workable solutions to the client, averting delays or overruns. .

## SUSTAINING ENGINEERING SERVICES

Palladium Product Development & Design provides sustaining engineering for many products, industries and companies such as the case history described above. Many of the same personnel involved with the MRI Transfer Table above (some with over 20 years industry experience) are still active with Palladium and providing services to past clients they have served, as well as taking on new clients with upgrades and product improvement programs. Design modifications related to manufacturing/machine design, modernization, researched product quality improvements and inclusion of client/user feedback are routinely implemented as a result of these analyses and design engineering services