



Product Description

The Valvulotome is a catheter-based surgical device for cutting and disabling venous valves. It is used by vascular surgeons to perform an in-situ bypass of the lower extremity arteries with existing veins.

Goals & Challenges

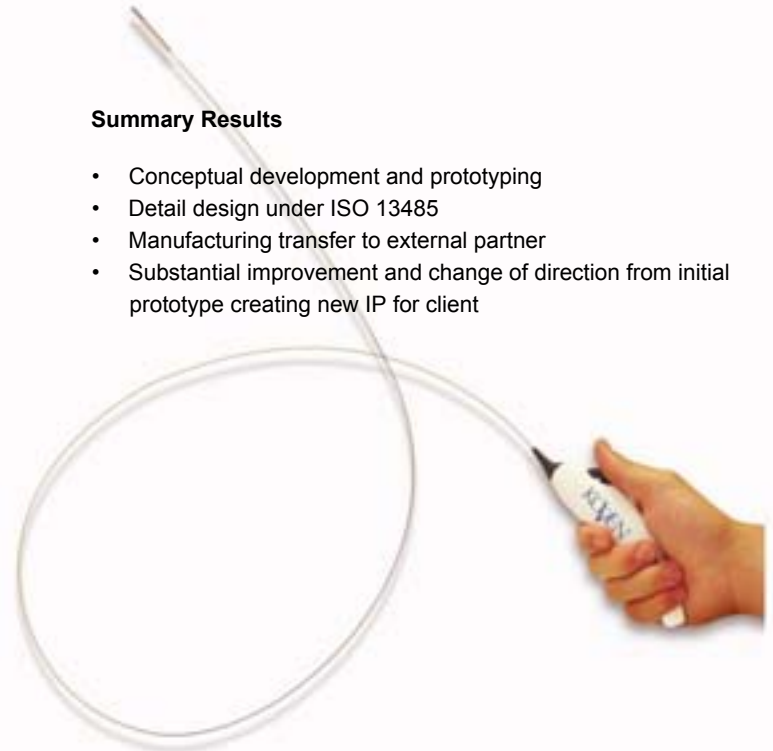
The client wanted to evolve an early stage prototype of the device into a more controllable and manufacturable product. The cutter head design had to meet strict user requirements for operating the controller and to address safety issues.

StarFish Solution

- Design of cutter head, including miniature stainless steel assemblies for self-sized guide fins and cutter blades with mechanical cross-linkage
- Mechanical design of cutter head adjustable to changing vein diameter along full length of a patient's leg
- Safe cutter head housing without exposed blades

Summary Results

- Conceptual development and prototyping
- Detail design under ISO 13485
- Manufacturing transfer to external partner
- Substantial improvement and change of direction from initial prototype creating new IP for client



Build Success with the Right Device™