



Novel Articulating Tissue Sealer Design Gains First-to-Market Advantage



CUSTOMER SITUATION

A large surgical device company was planning to commercialize a first-of-its-kind articulating vessel sealer to strengthen its portfolio in the advanced energy device segment of the laparoscopic surgery market. The company faced a compressed time line due to its desire to be first to market with the novel articulating design.

The company evaluated a range of options and ultimately selected Viant based on:

- **Expertise** in designing and developing complex advanced energy devices
- **Optimized product quality and manufacturability** through test method validation, design for manufacturability (DFM), and process development
- **Efficiencies and speed** achieved through advanced manufacturing systems, Lean practices, and process excellence

VARIANT SOLUTION

From concept to scale-up manufacturing, Viant's team of technical experts provided comprehensive project oversight. Running parallel processes for design and process development was a critical element in ensuring the timeline. The team leveraged Viant's expertise in materials and end effector design to ensure a robust design of the flex joint, a key feature that was identified as high risk in the timeline. Another key design issue was fluid ingress. The team worked with different sealing mechanisms and ultimately developed a conformal coating process to protect device electronics.

The Viant team also created a design history file (DHF) outside of—but still compatible with—the customer's quality system. This allowed for easy integration, which enabled a faster time to market. Partnering with the Viant team to amplify the customer's team enabled the customer to launch the product more than 15 months earlier than if they had done the work internally.





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RESULTS

Viant oversaw the company's design and development of the articulating vessel sealer, providing substantial deliverables.

The company gained a first-to-market advantage launching its articulating vessel sealer 15 months ahead of its original schedule. The product's first use was in a procedure for woman who was 16 weeks pregnant. It played a part in a successful procedure to save mother and child that would not have been possible on the original timeline. In addition to this life-enhancing result, the company also bolstered its portfolio in the advanced energy device segment of the laparoscopic surgery market.

15
MONTH
SCHEDULE IMPROVEMENT

FIRST
TO MARKET
WITH NOVEL DEVICE

