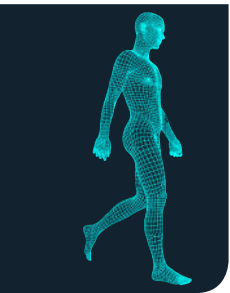




## CASE STUDY

# Design, Manufacturing & Supply Chain Expertise Fuels Stability and Growth of Arthroscopic Product Line

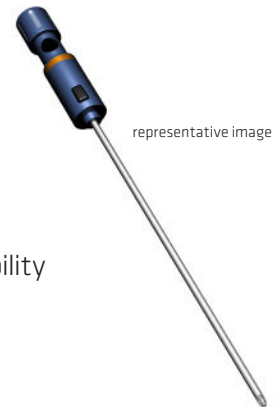
## CUSTOMER SITUATION



A large supplier of orthopedic devices obtained an established arthroscopic product line as part of an acquisition. The line of shavers and burrs was marred by inconsistent field performance, an incomplete design history file (DHF) without the ability to trace root cause, and an unstable supply chain. The customer needed to improve both the product and the manufacturing process, develop line extensions, and lower cost, while stabilizing the supply chain and maintaining continuity of supply.

The customer had limited engineering resources for product enhancements and product qualifications and needed a strong partner. The company selected Viant based on:

- **Proven track record** of success developing arthroscopic products and manufacturing technologies to deliver the highest quality shavers and burrs
- **Design and process expertise** to implement design for manufacturing (DFM) best practices to ensure repeatable and reliable product quality and manufacturing
- **Supply chain expertise** to reduce the number of suppliers and bolster quality and reliability



## VIA NT SOLUTION

Viant took a staged approach to the project. In stage one, the Viant team took over management of the current supply chain. The team also provided design engineering and prototype support, redesigning the flagship device for greatly improved performance and manufacturability. It established US-based assembly cells to launch the refreshed flagship device with improved performance features.

In stage two, the team extended the design enhancements to the entire product line (>25 unique SKUs), including full DHF responsibility. Viant's supply chain experts were able to vertically integrate the device supply chain and save costs by consolidating more operations within Viant.

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In stage three, Viant provided additional design support to develop product line extensions to address additional procedures. The team established a dedicated, vertically integrated cell in a low-cost geography for complex tube subassemblies, which was fed from a dedicated fabrication cell including laser welding, wire electrical discharge machining (EDM), sink EDM, grinding, electropolishing, and other secondary processes.

All told, Viant co-developed and launched 50+ codes with an updated DHF that identified critical quality characteristics.

## RESULTS

Viant successfully transferred the product using manufacturing facilities in both the US and low-cost geographies. The team also redesigned the product for improved performance, improved the manufacturing line, stabilized the supply chain, and launched new devices. These efforts led to substantial improvements:

- 80% decrease in cost of goods sold through material insourcing, automation, Lean manufacturing, and scrap reductions
- Greatly reduced customer complaints; good qualitative feedback
- Line extensions contributed to solid yearly volume growth

