



Integer®

Accelerating Neurovascular Catheter Innovation

From concept to rapid prototype in 8 days

Integer's R&D engineers helped a medical device company turn a complex neurovascular concept into a rapid prototype by combining materials expertise, precision process development, and engineering know-how for speed and scalability.

Challenge

Conventional braiding and assembly methods couldn't meet the customer's needs for micro-diameter shafts, precise pitch control, and distal flexibility. Performance varied; production slowed, and manufacturability suffered.

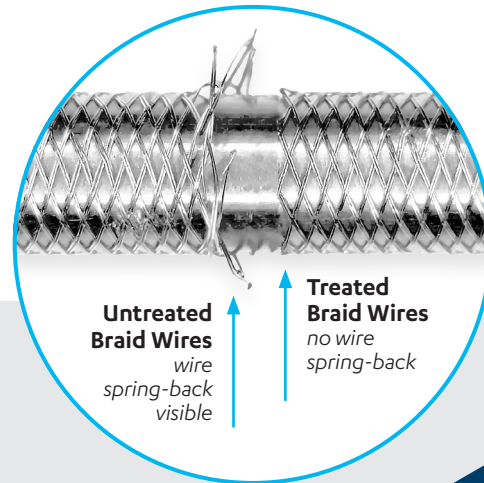
Solution

Integer's engineering team partnered closely with the customer to design for manufacturability from the start. Using advanced materials and proprietary processes, the team delivered functional prototypes in under two weeks.

Key Enabler: Integer utilized a proprietary braid annealing and termination process that finished the braid on the liner without causing damage to the liner, or requiring adhesive at any stage of the process. **This proprietary process improves repeatability, precision, and efficiency for devices as low as 0.021" diameter.**

Technical Advantages

- Direct wire annealing on PTFE liners
- Fewer handling and rework steps
- Higher yields through automation and process control
- Clean, consistent braid terminations with minimal OD growth



Results

▶ **8 days** to working prototype

▶ **Enabled customer to progress faster into next development phase**

▶ **Customer now has early production-ready prototypes**

TAKEAWAY

Integer's R&D ecosystem combines rapid prototyping, advanced processes, and deep manufacturing insight to help medical device companies move from concept to commercialization — **faster.**

Ready to Accelerate Your Next Breakthrough?

Partner with Integer to turn your concept into a manufacturable device.

Contact us: rapidprototyping@integer.net

