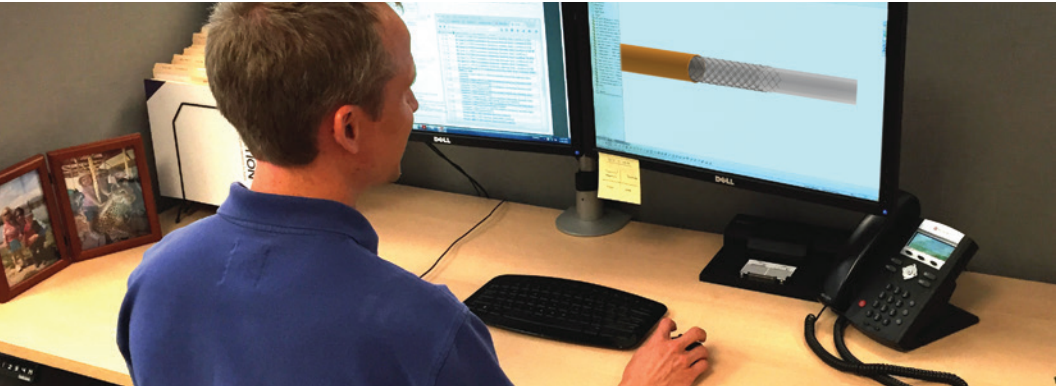


SIMSHAFT™ DESIGN SIMULATION SERVICE

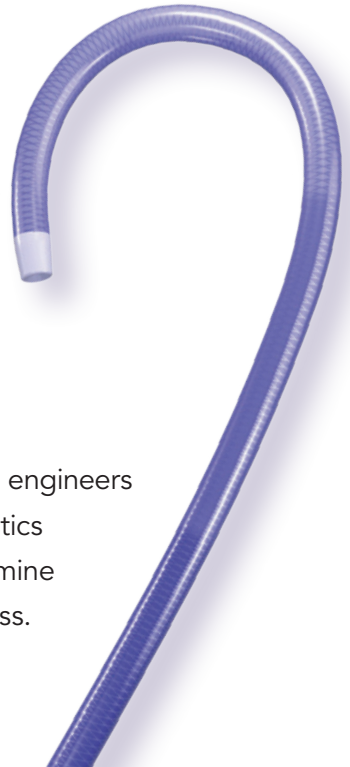


Find your optimal shaft design, faster

Developing a complex catheter shaft takes a lot of iterations, which can strain tight budgets and timelines.

Vention's new SimShaft design simulation service gives you the information you need to make informed design decisions, at a fraction of the time and cost of traditional prototype iterations.

With our SimShaft service, experienced Vention engineers simulate catheter shaft performance characteristics using specialized, validated software and determine the optimal design—earlier in the design process.



Contact us at DesignAndDevelopment@ventionmedical.com to learn how SimShaft can help you find your optimal shaft design—faster.

3 STEPS TO OPTIMAL SHAFT DESIGNS

HOW IT WORKS



Step 1: Collaborate

Working closely with your team, Vention engineers input your current and desired shaft design attributes or performance characteristics, including:

- Wall thickness
- Liner material
- Outer jacket material
- Type of reinforcement (braid or coil)
- Reinforcement material
- Number and direction of wires
- Pick count or pitch
- Tensile strength
- Bend radius
- Flexural modulus
- Burst pressure
- Torque response



Step 2: Simulate

Using proprietary software, Vention experts simulate iterations on various parameters to achieve your desired attributes or performance characteristics.



Step 3: Analyze and Recommend

Experienced Vention design engineers analyze and interpret the results of the software and provide a report with recommended shaft designs.

About Vention Medical

Vention Medical is a global integrated solutions partner with more than 30 years of experience in design, engineering, and manufacturing of complex medical devices and components. Vention Medical specializes in components and services used in interventional and minimally invasive surgical products including catheters, reinforced shafts, balloons, extrusions, polyimide tubing, heat shrink tubing, PTFE liner tubing, molded components, and finished device assembly and packaging.

Real-Life Example:

SIMSHAFT SERVICE QUICKLY OPTIMIZES DESIGN TO ACHIEVE TARGET FLEXIBILITY

A customer developing a second-generation shaft got user feedback that the shaft needed better torque response while maintaining or improving flexibility. Using the SimShaft design simulation service, the customer collaborated with Vention engineers who input current shaft design specifications—including wall thickness, number of layers, wall reinforcement, and materials—and ran iterations on each parameter.

After analyzing the results, Vention experts provided the customer with detailed recommendations for optimal design options to improve torque response and increase flexibility. The process took about a week—much faster and more cost-effective than iterating actual prototypes.

VENTION[®]

Advancing your innovations for health

ventionmedical.com/design-and-development/tools/simshaft/
DesignAndDevelopment@ventionmedical.com