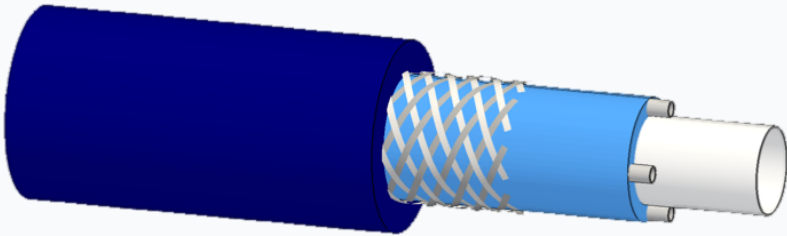


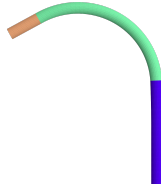


FOR CATHETER R&D ENGINEERS

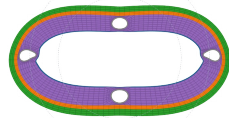
# Refine Catheter Designs in **Hours, Not Weeks.**



LAYER STACKUP



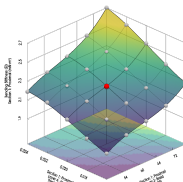
STEERING



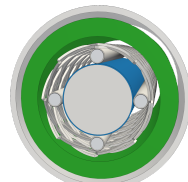
KINK RADIUS



PUSHABILITY



DESIGN SWEEP



REFLOW

AND MORE...

## HOW IT WORKS

# Built for engineers.

Your next prototype shouldn't be a guess. Every step, from describing a construction to exploring its design space, is guided, visual and immediate.

### Build it.

A guided wizard takes the stackup one section at a time: materials, dimensions, durometer, braid and coil parameters. The cross-section and a **scale-accurate 3D view** update as you build.

### Characterize it.

One click computes **bending, torsion and axial stiffness per section**, solved from the whole stackup as one composite, plus tensile, torque, burst and crush limits.

### Test it.

**Kink Radius** bends the real cross-section until it kinks and reports where the lumen halves and which layer creases first. **Pushability** pushes the shaft until it buckles and reports the force the tip can deliver.

### Steer it.

Drive the model on a **virtual bench**. Tip deflection, pull-wire tension and required travel at the handle stream live, with a warning the moment a section is steered past its simulated kink limit.

### Sweep it.

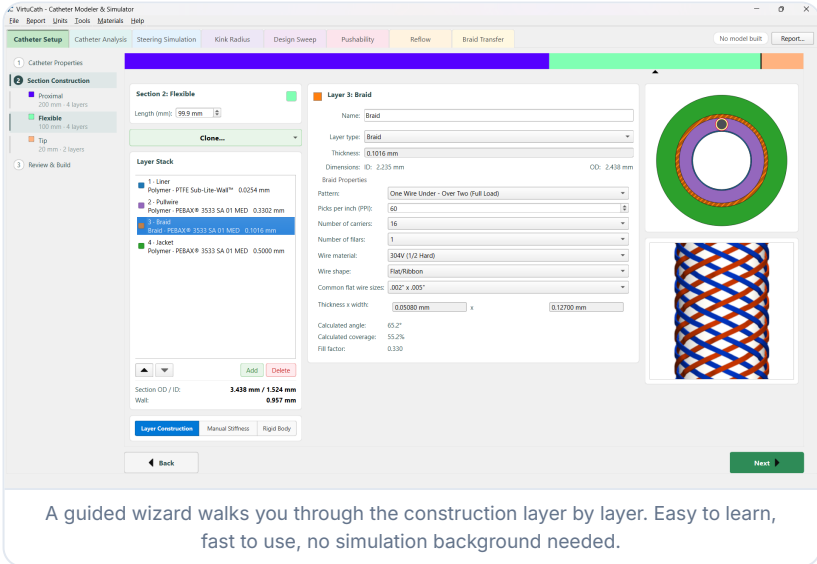
Put a range on any parameter and run a **Design Sweep**. Response surfaces show where performance and manufacturability both hold, before anyone cuts a purchase order.

### Share it.

One **consolidated PDF or Excel report**, images for internal or client communications, and design files that move between team members. Per-section EI, GJ and EA export as JSON for simulation teams.

# Iterate on the design in software.

Optimize stiffness, steering and bend limits, and catch problems early, before you commit to the next build.



## Eliminate Prototype Cycles

A physical prototype iteration takes **3–6 weeks**. Evaluate dozens of variants in software in an afternoon, so your first build is grounded in calculation.



## Model Complex Constructions

Real catheters aren't simple tubing. VirtuCath solves the full stackup of liners, tie-layers, braids, coils and multi-lumen cores with Classical Lamination Theory, then simulates steering, kinking and buckling on that actual construction.



## No Simulation Expert Required

Skip the learning curve of traditional FEA. It runs on the laptop you already have, with no GPU, no cloud compute and no time booked on the simulation team's calendar. Everything stays on your machine.

**Your IP never leaves the building.**

**GET STARTED**

# Try it on your own catheter.

The 15-day trial is the **full software**: every feature unlocked, no credit card, no cloud account. Run it against a design you've already bench-tested and see whether the numbers hold.

**Download the free trial**

Windows desktop. Installed and running in minutes.  
[virtucath.com/download](https://virtucath.com/download)

How the numbers compare to bench tests and published data:  
[virtucath.com/docs/model-accuracy](https://virtucath.com/docs/model-accuracy)

**From \$3,495 per seat, per year**

- The same full software at every tier
- Annual or 3-year terms, no auto-renewal
- Purchase orders and cards accepted

**One avoided prototype cycle pays for the seat.**

**QUESTIONS FIRST?**

**[mikhail@virtucath.com](mailto:mikhail@virtucath.com)**

**An engineer answers. There's no sales team.**

Reach out for a demo session, virtual or in person in the Minneapolis area.