

# Complex Catheter Solutions

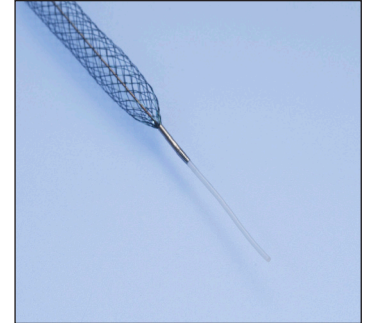
## Design and Development

For over two decades, our experienced engineering team has worked collaboratively with our customers to deliver best-in-class design, development and manufacturing expertise. Our core purpose is to help healthcare providers provide a higher quality of care, giving patients a higher quality of life.

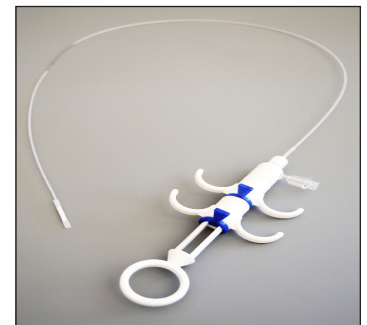
From early catheter design through manufacturing, Medical Murray provides Design for Manufacturing (DFM) practices to reach the market sooner with improved return on investment for our customers. Designs for delivering and releasing implants into the body have been created for devices including sensors, stents and coils.

Some of our complex catheter applications include:

- Embolic protection devices, filters
- Stents and stent delivery systems
- Balloon expansion and isolation
- Drug delivery systems
- Integrated sensors, sensor delivery
- Ultrasonic imaging services
- Retrieval systems
- Endotracheal devices
- Intra-gastric devices
- Closure devices



*Nitinol braid designs including baskets are a core competency.*



*We offer original designs as well as custom processes, and can help with every aspect of your device.*

## Complex Catheter Capabilities



### Proximal

- Hemostatic valve
- Release mechanisms
- Steerable handles
- Side ports / luers
- Overmolded luers

### Mid

- Multi-lumen
- Low friction liner
- Variable stiffness
- Torsional reinforcement
- Kink resistance
- Hydrophilic coating
- Multiple materials

### Distal

- Balloons
- Embedded steering wires
- Radiopaque markers
- Soft tip
- Shaped tip



*Specialized services include multi-layer and multi-lumen catheters, balloon attachment and many more.*

## Contact Us For More Information

Our team would like to help you create and implement your next medical device.

Please contact us or visit our website for more information.

Call us at: **847.620.7990**

Email us at: **info@medicalmurray.com**

Website: **www.medicalmurray.com**



ISO 13485:2003 CERTIFIED  
FDA REGISTERED