

# SLIP-COAT™ Technology

## Lubricious, Hydrophilic



*Our experienced staff of scientists and engineers works closely with the customer to develop state-of-the-art coatings for optimum medical device performance. Advanced, innovative coating systems offer the device manufacturer unprecedented opportunities in the development of cutting-edge medical technology.*

### Angiotech BioCoatings

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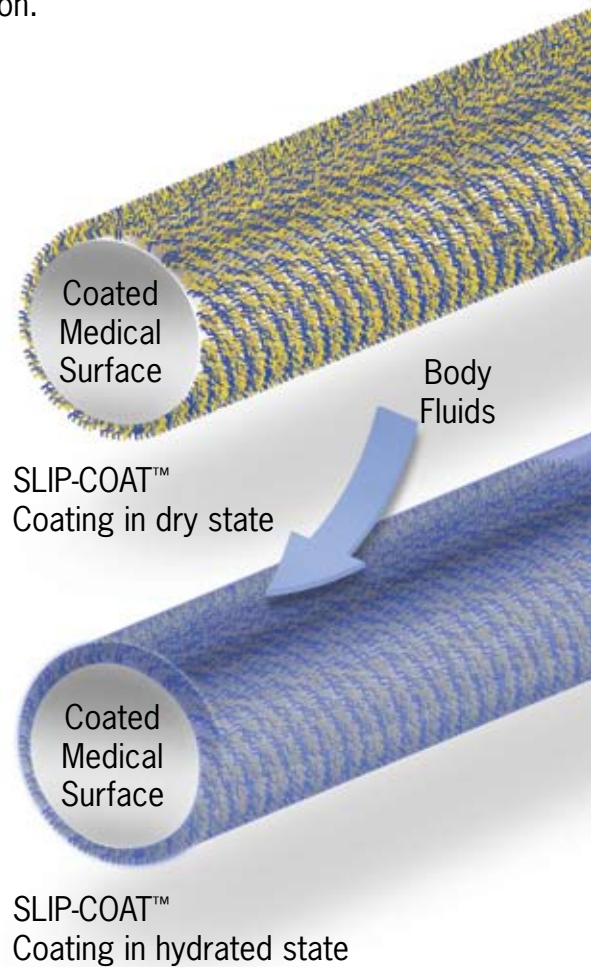
**Angiotech's** superior lubricious coating uses the body's own fluids to dramatically reduce frictional forces up to 90%.

Key advantages of our patented SLIP-COAT™ technology:

- Proven surface biocompatibility.
- Non-reactive hydrophilic/hydrophobic, polymer matrix.
- Can be varied to optimize performance characteristics, such as lubricity, flexibility and hydration.
- Easy customization to meet any performance specification.

### Principle

1. The key to SLIP-COAT™ performance is a patented hydrophilic/hydrophobic polymer matrix.
2. When the coating is exposed to aqueous fluids, moisture is absorbed and retained in the coating by the hydrophilic components.
3. These fluids create a slippery surface, with a high fluid concentration at the coating surface.
4. The hydrophobic components hold the matrix together and firmly anchor it to the substrate.
5. Lubricity can easily be tailored to the device by varying the proportions of the hydrophilic and hydrophobic components in the coating.



**Polymer Coating**

- ~ Hydrophilic molecules
- ~ Hydrophobic molecules

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## Coating Thickness

3 to 10 microns  
.0001 to .0004 inches

## Potential Applications

Catheters  
Guidewires  
Introducers  
Shunts  
Tubes  
Endoscopes  
Blades  
Needles

## Coated Substrates

### Polymeric

PVC  
Polyurethane  
Polystyrene  
PET  
PBAX  
Polyamide  
Polyimide  
Polypropylene  
Polyethylene  
Silicone  
Silastic  
Latex

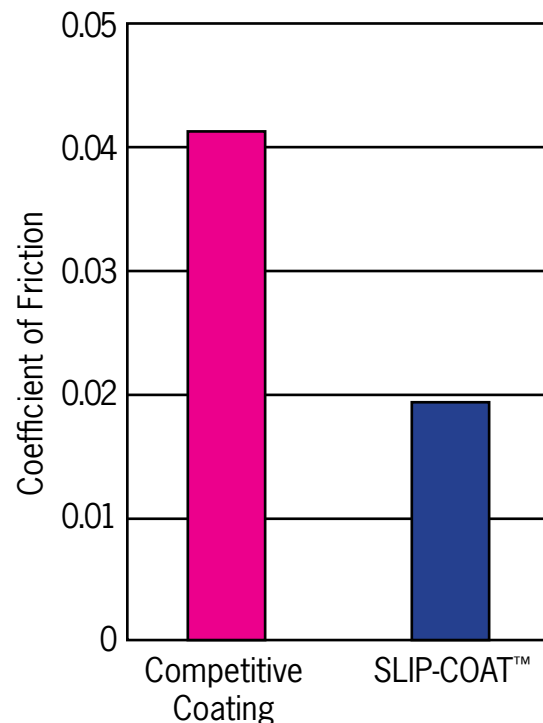
### Metallics

Stainless Steel  
Titanium  
Platinum  
Nitinol

## Advantages

- Easy, low friction insertion, manipulation and removal of devices.
- Customizable lubricity, a real advantage over "one-size-fits-all".
- Devices with irregular geometries are easily coated.
- Permanent bond.
- Low cost, reliable processing.
- SLIP-COAT™ has been used to coat a variety of medical devices world-wide for well over 10 years.

## Coefficient of Friction for Coated Neurointerventional Guidewires Made from Nitinol



## Coefficient of Friction for Various Substrates

