PhotoLink™ coating technology
Surmodics’ PhotoLink™ UV curing process initiates a covalent bond that ensures superior coating integrity and precise customized thickness from nanometers to microns. PhotoLink allows lubricious, hemocompatible and drug-delivery formulations to be combined on a single device.

PhotoLink advantages include:
- UV-based chemistry
- Covalent bonding at ambient temperature for rapid processing
- Biocompatible reagents
- Water or water/IPA
- Flexible application methods: dip, spray or in-solution

PhotoLink supports a broad range of substrates and treatments:
- Pebax® (multi durometer)
- Nylon
- Polyethylene
- Polyimide
- Polyurethane
- Polypropylene
- Polyvinyl chloride
- Polycarbonate
- Polyester
- PMMA
- Polysulfone
- Polyvinyl alcohol
- Polypropylene
- Polysoprene
- Parylene
- Polyamide
- PEEK
- Silicone elastomer
- Stainless steel
- Aluminum
- Titanium
- Platinum
- Nitinol
- Gold
- Glass
- Other ceramics

Comprehensive customer support
Surmodics’ partners with clients at every phase of product design, development and commercialization, from feasibility to ongoing post-launch support. We offer turnkey manufacturing solutions with in-depth training and engineering support or contract manufacturing services. Because surface technology is critical to device performance, we engage clients at the earliest possible stage to identify and optimize the ideal technology for their products while minimizing time to market.

The Surmodics® collaborative partnership model

FOR MORE INFORMATION ON SURMODICS SOLUTIONS, OR TO INITIATE AN EVALUATION, PLEASE CALL 952-500-7000 OR VISIT WWW.SURMODICS.COM.
Leading the industry in key performance requirements.

Intravascular medical devices have revolutionized minimally invasive treatment of disease. To advance patient care, new devices must continue to improve vascular access and therapeutic effect while improving patient safety. Coating technology makes this possible.

Surmodics’ solutions are unmatched in every major category of coating performance:

**Lubricity**

Hydrophilic coatings provide the lubricity needed to optimize vascular access. Surmodics’ coatings set the standard.

**Durability and low particulates**

In the past, increasing the lubricity of hydrophilic coatings meant accepting higher generation of particulates. Surmodics’ latest generation of hydrophilic coatings have broken this barrier.

**Cycle-process time**

Surmodics’ proprietary Photolink™ UV coating technology covalently bonds surface treatments to substrates at ambient temperature, markedly reducing process time.

**Coating uniformity**

Proprietary Surmodics processes enable more uniform application of drug coatings, enabling efficient drug transfer at low doses and low incidence of distal emboli.

Global leadership in all major vascular categories

Surface technology is the key to advancing vascular device performance. Surmodics’ coatings deliver industry-best lubricity, durability and drug delivery. From access to therapy, Surmodics’ surface technology adds differentiated value to more than 150 medical, biotechnology and pharmaceutical product families worldwide.

Surmodics solutions are unmatched in every major category of coating performance:

**Hydrophilic coatings**

Critical to quality: demonstrating lubricity and durability, specifically low particulates

**Surmodics expertise:**
- Friction testing: basic lubricity and durability pinch force
- Catheter tracking and other simulated-use testing
- Sterilization and accelerated-aging studies

**Hemocompatible coatings**

Critical to quality: animal-derived material requires careful sourcing and additional testing (e.g., porcine heparin)

**Critical to quality:** demonstrating lubricity and durability, specifically low particulates

**Surmodics expertise:**
- Friction testing: basic lubricity and durability pinch force
- Catheter tracking and other simulated-use testing
- Sterilization and accelerated-aging studies

**Drug-delivery coatings**

Critical to quality: significant testing to demonstrate drug duration, benefit and safety

**Surmodics expertise:**
- Achieving desired biological effect
- Efficiency of drug transfer to targeted tissues
- Local and systematic safety and pharmacokinetics
- Coating integrity/particulate release; downstream tissue concentration
- Distribution of drug and drug load testing
- Advanced process and uniformity control