

Serene™ hydrophilic coatings allow manufacturers to meet FDA critical-to-quality standards while reducing production time and cost.



Reduced Track Force (multiple cycles)



Reduced Particulates



Reduced Process Time



Reduced Reagent Cost



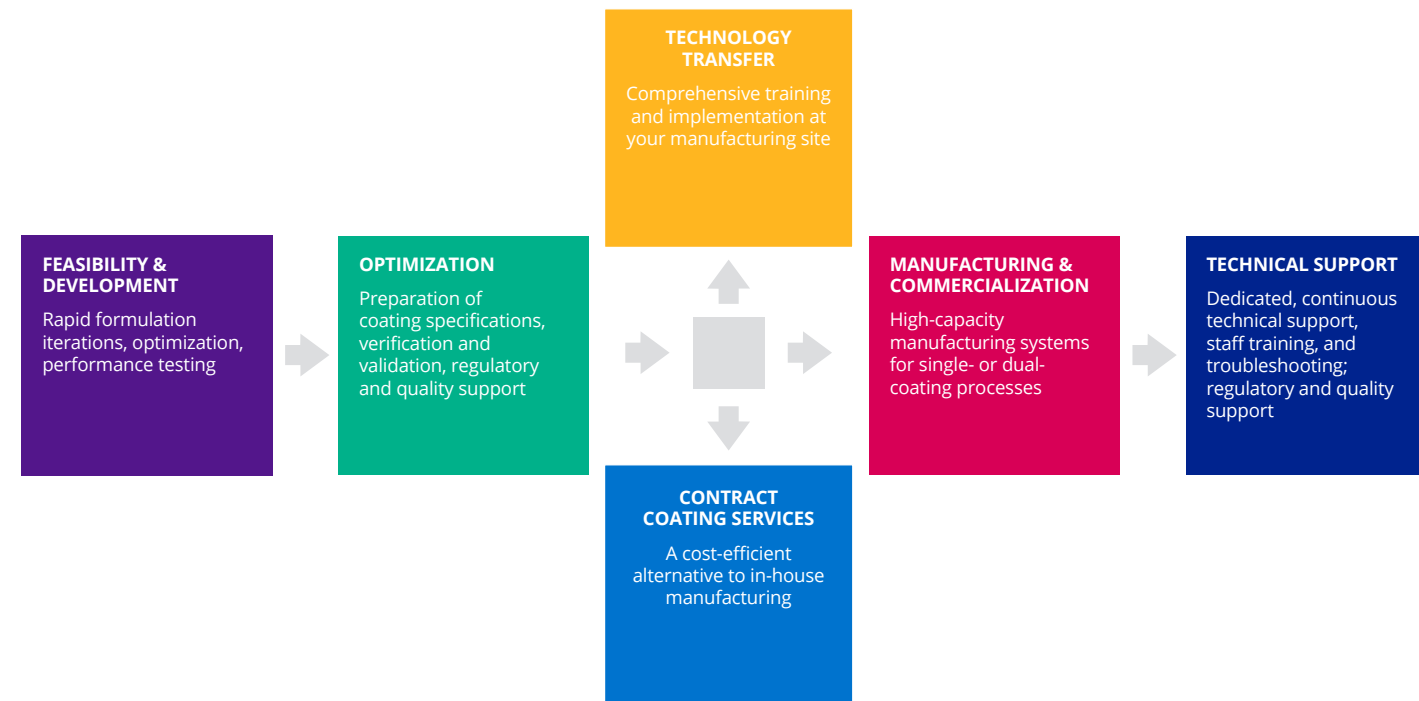
Improved Performance & Process Efficiencies



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**.

REFERENCES
1. Anderson, A., et al. "Technologies for the surface modification of biomaterials." *Biomaterials in Orthopedics*, Marcel Dekker, Inc., New York, NY (2003): 93-148.

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SURMODICS™ HYDROPHILIC COATINGS

NOW MORE THAN EVER,
THE FUTURE LOOKS SERENE

COATING EXCELLENCE
WITHOUT COMPROMISE



Surmodics Serene™ Hydrophilic Coatings
low friction, low particulates



Unmatched lubricity. Low particulates.

Low-friction hydrophilic coatings have played a critical role in improving vascular access. In the past, however, manufacturers who wanted optimal coating lubricity had to accept higher particulate generation as a result¹. With regulatory attention increasingly focused on particulate reduction, Surmodics™ – the global leader in surface technology – has produced a breakthrough solution.

Serene™ coatings: the first no-compromise solution

Surmodics Serene™ hydrophilic coatings combine unmatched lubricity and durability, including dramatically improved particulate reduction (figures 1-3) – an industry first. They covalently bond to a wide variety of substrates (figure 4), and have a proven regulatory record with leading coronary, peripheral, neurovascular and structural heart devices.

Serene SC (single coat)

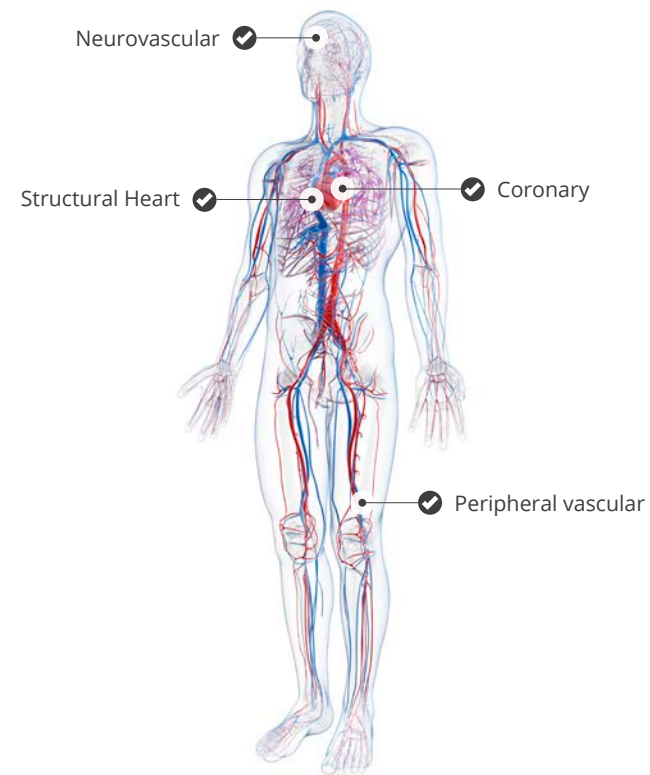
Serene SC solutions provide excellent lubricity and low particulates through a one-coat UV curing process. Not only does this eliminate the need to change existing one-coat manufacturing, Surmodics' enhanced single-coat formulas can deliver substantial reductions in production time (figure 5) and reagent costs.

PhotoLink™ coating technology

Medical device companies rely on Surmodics innovations to advance the performance of their products and improve process efficiencies. Surmodics' proprietary PhotoLink™ UV curing process covalently bonds surface treatments to substrates at ambient temperature, for markedly reduced production time compared to both thermal-curing and alternative light-activated processes. This flexible technology can easily be incorporated into existing manufacturing processes and applied to a broad range of medical device substrates.

Leading the way in surface technology

From access to therapy, Surmodics is the recognized global leader in surface technology for medical devices. The company's high-performance hydrophilic, drug-delivery, and hemocompatible coatings are used on industry-leading devices in all major vascular categories.



Proven performance. Serene™ low-particulate lubricious coatings have a proven track record with leading coronary, peripheral, neurovascular and structural heart devices.

Serene coatings: proven performance and productivity

In head-to-head benchmark tests of devices treated with Serene, Serene SC, and competitor hydrophilic coatings, the Serene family of coatings demonstrated markedly superior lubricity and tracking, durability, and particulate reduction. Manufacturing time for Serene SC coatings, which are applied using Surmodics' proprietary PhotoLink technology, was also sharply lower than manufacturing time for competitor light-activated or thermal-curing applications.

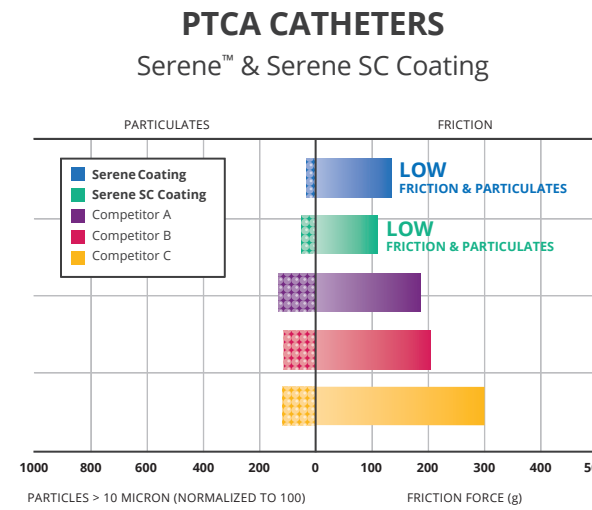


FIGURE 1

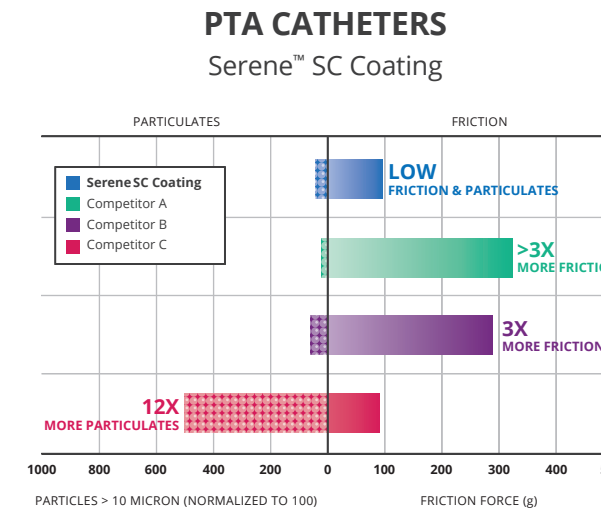


FIGURE 2

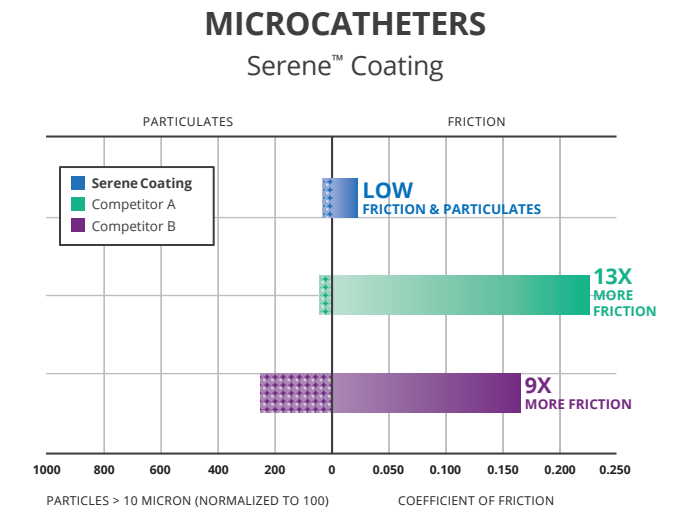


FIGURE 3

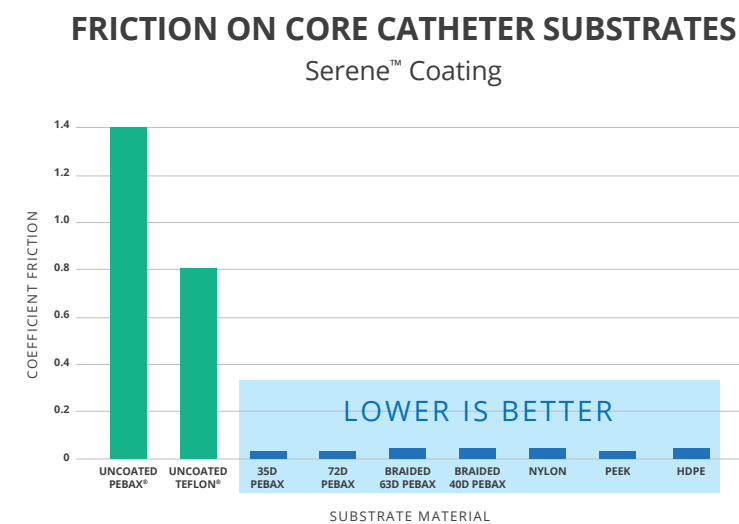


FIGURE 4

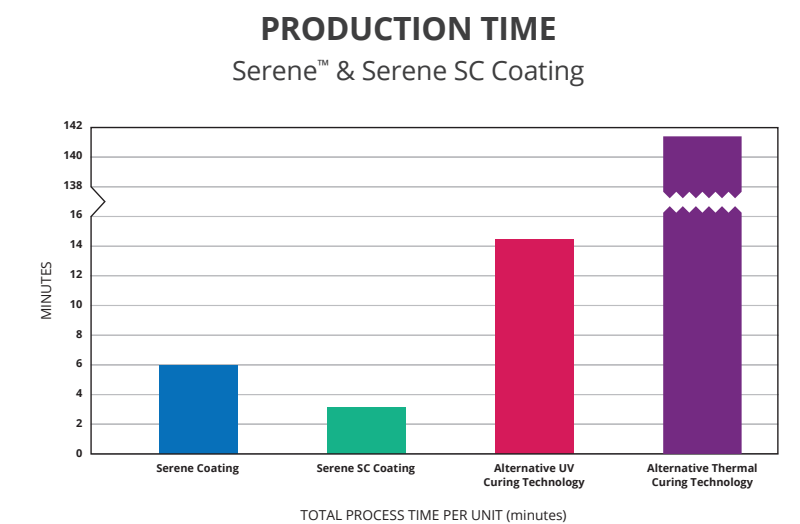


FIGURE 5