

## SIMSITE® ENGINEERED STRUCTURAL COMPOSITE SLEEVES:

There is absolutely no reason to use metallic shaft sleeves when you can use **SIMSITE®** Structural Composite Carbon Fiber Sleeves, which not only protect the shaft, but they are light weight, and seal better against the O-rings of the mechanical seals.

SIMSITE® Engineered Structural Composite Sleeves, will not corrode in seawater, brine, waste water, sewage, bromine, or chlorinated water and are excellent with most acid and alkaline solutions. All grades of SIMSITE® Sleeves have self-lubricating qualities, which allow for tighter clearances and prevents excessive shaft movement.

Sims manufactures sleeves machined from solid blocks of our patented engineered SIMSITE® Structural Graphite Composite material made of graphite fibers continuously interwoven in a tri-dimensional weave with a hybrid epoxy/phenolic resin system.





## **ADVANTAGES OF SIMSITE® SLEEVES:**

- Corrosion Resistant
- Eliminates Electrolysis
- Protects the Shaft

- Exceptional Mechanical Strength
- Light Weight
- Holds the Shaft More Securely



- Can Take Dry Starts
- Longer Life
- Wears Better Against Guide Bearings

- Increases Operating Lifetime
- Seals Better against the Mechanical Seal





Contrary to metal sleeves,

SIMSITE® Composite Sleeves
allow for easy installation and
removal. They are protective
of the shaft against corrosion,
electrolysis and wear and form
a much better seal with
Mechanical Seals.



Set screws, threads, or a keyway can be installed into **SIMSITE®** Composite Sleeves to prevent them from moving on the shaft. Compatibility with a wide range of chemicals allows for the use of **SIMSITE®** Composite Sleeves in a vast variety of environments. The structural integrity of our sleeves allows for usage with multiple grades of O-rings or gaskets. All **SIMSITE®** Structural Composite Sleeves are precision-machined on CNC Machining Centers to meet the most stringent specifications.

## **GRADES OF SIMSITE® SLEEVES**

SMS - 375 — High Strength Graphite Sleeve

SMS - 300 Standard Grade Graphite Sleeve

SMS - 380 — Higher Temperature Synthetic Fiber Sleeve



Sims Pump Designs and Manufactures Cartridge Style and Spring Loaded Type Mechanical Seals for ALL Centrifugal Pump Applications. SIMS PUMP Cartridge Mechanical Seals are unique because they incorporate SIMSITE® Structural Composite Glands and SIMSITE® Structural Composite Sleeves for superior corrosion resistance and sealing! SIMSITE® Sleeves and Glands are machined from solid blocks of the patented SIMSITE® Structural Carbon Fiber Composite Material.

The SIMSITE® Structural Composite
Carbon Fiber Pump to the right shows a
Rotating Element with two (2) SIMSITE®
Sleeves located on a Shaft with a SIMSITE®
Structural Composite Impeller & Casing
Rings with two (2) SIMSITE® Cartridge
Mechanical Seals with SIMSITE® Sleeves
incorporated in the Mechanical Seal Design.



A Simsite® Structural Composite Pump Casing with two Simsite® Sleeves located on each side of the Simsite® Impeller with two (2) Simsite® Sleeves located inside of the two (2) Simsite® Cartridge-Style Mechanical Seals located on each end of the Pump Shaft.