

SIMSITE® Rotating Elements



SIMS PUMP manufactures Rotating Element Upgrades for ANY Centrifugal Pump. SIMS rotating elements are manufactured with SIMSITE® Structural Composite Carbon Fiber Graphite Impellers, Casing Rings, Sleeves, Mechanical Seals, and Stabilizing Bushings (stabilizing guide bushings) which **NEVER CORRODE in Seawater, Waste Water, River Water, Sewage, or Chlorinated Water!**

Any metallic components of the rotating element such as the pump shaft, or sleeve nuts are machined from type 316 Stainless Steel, Duplex Stainless Steel, Super Duplex Stainless Steel or Monel.

SIMSITE® Structural Composite Products are machined from solid blocks of the patented SIMSITE® structural graphite composite. SIMSITE® Products are Lightweight, Energy Efficient, Perfectly Balanced both mechanically and hydraulically, and they outlast & outperform other pumps, impellers, and pump products in corrosive environments!

Whether the pump is horizontal, or vertical, the weight and inherent mechanical and hydraulic imbalance of cast metallic impellers (even when they are brand new) sets up a condition for premature bearing, casing ring, sleeve, bushing, mechanical seal and motor failures. Like the pendulum on a clock, the metallic impeller acts like a weight at the end of the pendulum and starts to wobble, or deflect. Any corrosion, or cavitation increases the effect of the movement, and motor bearings cannot hold the stresses, so mechanical seals, sleeves, bushings, motor bearings and motors fail prematurely.

Bearing and mechanical seal failures are directly proportional to the rotor weight, speed, the amplitude of the mechanical imbalance and the radial loading on the shaft. This is why many companies have taken to condition monitoring for the bearings, but this is only putting a Band-Aid on the issue. The solution is to upgrade to SIMSITE® Structural Composite Impellers, Casing Rings, Mechanical Seals, and Stabilizing Bushings (Stabilizing Guide Bearings) which are lightweight and balanced for the life of the pump!





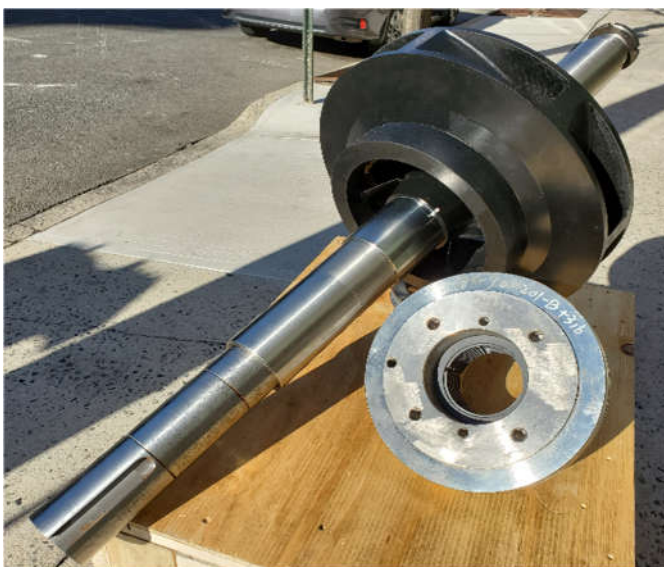
SIMS PUMP manufactures SIMSITE® structural graphite composite computer engineered and generated pumps and pump parts which are 100% machined on 5 to 8 axis robotic machining centers. SIMS uses state-of-the-art CFD techniques to engineer the vane geometries to maximize efficiency and performance specifically for the Customer's System. SIMS can manufacture obsolete parts for any centrifugal pump with quick deliveries.

SIMS PUMP specializes in solving pump problems such as imbalance, cavitation, corrosion, electrolysis, erosion, and radial thrust problems. SIMS focuses on life extension, which is a very different concept from traditional pump manufacturers who make their money selling spare parts.

Instead of just repairing your pump, or replacing the old pump with a new pump of the same type or quality, SIMS PUMP offers better solutions for Customers. With most pumps and pump parts coming directly, or indirectly from out of the Country, the reliability and quality of pumps, materials, and pump parts, as well as the delivery for these items have substantially deteriorated in recent years forcing Customers to replace or repair products much more rapidly. The solution is to upgrade the impeller & casing rings to SIMSITE® Structural Composite Carbon



Fiber which not only does not corrode, but is 100% machined and engineered for performance & longevity and remains balanced for the life of the pump!



A 24" Diameter SIMSITE® Structural Composite Carbon Fiber Impeller on a type 316 Stainless Steel Shaft with a SIMSITE® Stabilizing Bushing pressed into the sealing chamber.