

ADVANTAGES OF SIMSITE® IMPELLERS

SUBJECT	BENEFIT OF SIMSITE®	REASON
PUMP PERFORMANCE	BETTER PERFORMANCE HIGH EFFICIENCY	<ol style="list-style-type: none"> 1. Engineering Design 2. 5-Axis CNC Milling. 3. Smooth Vane Surfaces. 4. Self Lubricating Surfaces. 5. Less leakage through Rings. 6. No Casting Imperfections.
CORROSION RESISTANCE	LITTLE OR NO CORROSION (Non Corrosive in Salt and Brackish Water -- Good Chemical Resistance)	<ol style="list-style-type: none"> 1. Phenolic / Epoxy Resin Matrix and Graphite Fibers are not affected by salt water. 2. Simsite® is Corrosion Resistant to Most Acid or Alkaline Solutions.
ELECTROLYSIS RESISTANCE	NO ELECTROLYSIS	<ol style="list-style-type: none"> 1. The Graphite Used in Simsite® is Non Conductive. 2. The more Simsite® in the Pump the Lower the Electrolysis.
START UP TORQUE	LOWER AMPS	<ol style="list-style-type: none"> 1. Light Weight. (Simsite® Specific Gravity is 1/6 the Weight of Bronze and Stainless and 1/3 the Weight Titanium) 2. Always Balanced.
POWER CONSUMPTION	LOWER AMPS	<ol style="list-style-type: none"> 1. Light Weight. (Simsite® Specific Gravity is 1/6 the Weight of Bronze, and Stainless Steel and 1/3 the Weight of Titanium.) 2. Engineering Design. (High Efficiency) 3. Always Balanced.
HYDRAULIC BALANCE	REDUCED HYDRAULIC FORCE	<ol style="list-style-type: none"> 1. Precision Machining - - All the vanes are within .002 inches of each other. All exit ports are equally spaced. 2. There are No Casting Imperfections.
MECHANICAL BALANCE	ALWAYS BALANCED	<ol style="list-style-type: none"> 1. Precision Machining – All Simsite® Impellers are Machined on a 5-axis CNC Machining Center from a Center Reference Point for Symmetry. 2. Simsite® Impellers, Rings, & Guide Bearings will not Corrode in Salt Water and therefore will not go into an imbalance.
WEIGHT	LIGHT WEIGHT	<ol style="list-style-type: none"> 1. Simsite® Specific Gravity is approximately 1/6 the Weight of Bronze, 1/6 the weight of Stainless Steel and 1/3 the Weight of Titanium.
EFFICIENCY	HIGH EFFICIENCY	<ol style="list-style-type: none"> 1. Smoother Surfaces. 2. Precision Machining.

		<ol style="list-style-type: none"> 3. No Casting Imperfections. 4. Minimum Casing Ring Clearances. 5. Engineering Design.
CAVITATION	REDUCES CAVITATION	<ol style="list-style-type: none"> 1. Simsite® Impellers are Designed to Reduce Cavitation. 2. Simsite® Composite is good against the effects of Cavitation.
NPSH (Net Positive Suction Head)	LOWER NPSHR	<ol style="list-style-type: none"> 1. Engineering Design -- The Simsite® Impeller Vanes are Designed to Reduce the NPSHR. 2. Engineering Expertise.