05-14-2009

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Ref.: Testimonial for SIMSITE® impellers in Raw Sewage Service.

According to Dave Allen, pump mechanic with the City of McMinnville, OR.

The City of McMinnville, Oregon, had a pump which was transferring raw sewage from their Pump Station to their Treatment Plant. This pump which is operating with a range of capacity between 400 GPM and 2000 GPM based on demand conditions is working against 70 feet of static head and is operated by a VFD (Variable Frequency Drive) 70 HP Motor.

The Original Impeller in the Pump was an ABS cast iron metallic impeller and the pump was constantly plagued with problems primarily caused by the pump operating in a very wide range of flows from 400 GPM to 2000 GPM. Because of this wide range of flows, the pump was constantly working under cavitation and metallic impellers were constantly being destroying and had to be replaced very often.

Cavitation was destroying these cast iron impellers so the customer approached SIMS Pump Company of Hoboken, New Jersey for a solution to the problem.

SIMS designed and manufactured a SIMSITE® Structural Composite Impeller for this pump application. SIMS Engineers used state-of-the-art computerized engineering and manufacturing techniques to optimize the impeller design to reduce the effects of the cavitation damage and to maximize efficiency, performance, and longevity. SIMS modified the vane geometry of the impeller and machined the new SIMSITE® Impeller from a solid block of SIMSITE® structural graphite composite, which enabled SIMS to optimize the impeller design. The new re-engineered structural composite impeller was successfully installed in the pump and the pump was started in 2007. In 2009, the pump was removed from duty and the SIMSITE® Impeller was inspected after (2) two years of continuous operation. The inspection proved that SIMSITE® impeller is impervious to severe operating conditions. The SIMSITE® Impeller showed no signs of cavitation damage. The same SIMSITE® impeller was reinstalled back in the pump.