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all things flow

Smart Stator Technology lives up to its promises.

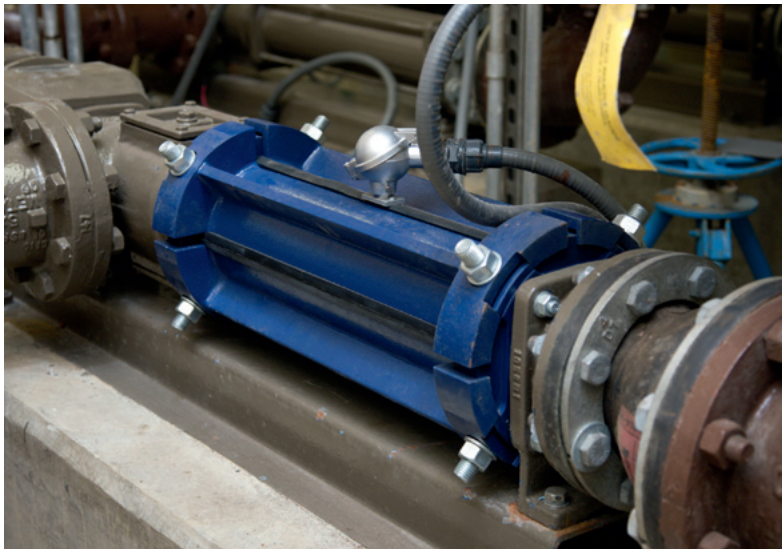
Located in Symmes Township near Cincinnati, Ohio, the Sycamore Creek Wastewater Treatment Plant serves more than 30,000 customers.

Recently expanded, this Wastewater Treatment Plant is one of the first sites in the U.S. to install a seepex pump incorporating the new and unique stator design.

The starting situation
In Sycamore Creek four conventional seepex pumps of range BN with a standard "molded-to-metal" cylindrical tube stator were installed. Standard cylindrical stators use a metal tube, which needs to be disposed when the stator becomes worn adding to the cost of disposal.

The solution
Put into service in February, 2009, the new "Smart Stator Technology" (SST) was retrofitted onto one of the conventional pumps to show the features and benefits directly to the customer. SST is a fundamental new design, which splits the stator into two individual halves, which are held in place by four re-adjustable cast iron segments ensuring longer life. As the SST stators are "free-molded" and not bonded into a metal tube, the parts are lighter, less expensive and easier to dispose.

The key to the SSTs` improved efficiency is its design, which allows the re-adjustment of the stator halves when wear takes place, recreating the integrity of sealing line and increasing the life expectancy of the stator. The design incorporates installation grooves, which ensure that the clamping between the rotor and stator is set correctly to ensure efficient operation.



A seepex pump of range BN retrofitted with Smart Stator Technology installed at Sycamore Creek Wastewater Treatment Plant

This configuration is the product of several years of prototype development and testing. Projected benefits include significantly lower maintenance and replacement costs and improved mechanical efficiency. In fact, "Smart Stator Technology" stators cost less than the conventional styles, and, since they are not bonded to metal, are easily to dispose.

The benefit

Charlie Becker, Maintenance Supervisor at Sycamore Creek, was impressed by the simplified stator replacement procedure. "With our other pumps, we have to dismantle the discharge end, disconnect the outlet piping, use a lot of torque to twist on a new stator, then reassemble the whole thing. This could take up to 2-3 hours. All we have to do with the "Smart Stator Technology" is remove eight bolts to disconnect the adjusting segments, install the new stator halves, and reconnect the adjusting segments. Any one of our people can do this in about 20 minutes."

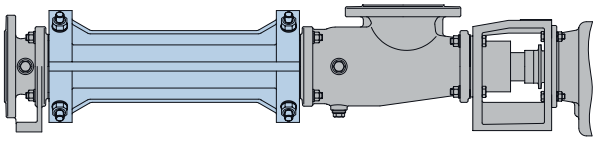
Mr. Becker, who supervises the operation of a total of 16 pumps, says, "This SST seems to be living up to its promises and I'm seriously thinking about replacing all the others with this new technology."

Key Facts

- Quick and easy replacement of the stator
- Reduced maintenance time
- No special tools required

Significant Cost Savings

- Extended service life of the stator by 25 % or more
- Labor cost saving due to reduced maintenance time
- Can be supplied on new pumps or retro-fitted to existing pumps without any pipe modifications
- Lower plant energy costs



Installed Pump Type

- Range BN with Smart Stator Technology (SST)