

It's child's play to change a stator.

Located in the picturesque county of Kildare, Osberstown Wastewater Treatment Work is situated adjacent to the M7 near Naas.

"The most recent upgrading of the Osberstown WWTP began construction in 1999 and was completed in 2001. The work was the first "design and build" operation conducted by a local authority in Ireland.

The design was to upgrade the existing 40,000 p.e. plant to an 80,000 p.e. plant to reach certain BOD, COD and SS targets, incorporating nutrient reduction on the liquid stream. In addition, the sludge produced was to be treated by anaerobic digestion followed by dewatering."*

The starting situation

Until recently the maintenance staff at Osberstown WWTP spent many hours and even on weekends disassembling and reassembling progressive cavity pumps due to blockages from rag.

The solution

While rags continue to present challenges to the smooth operation of the plant, the installation of seepex's patented "Smart Stator Technology" (SST) progressive cavity pumps in addition to the grinders previously supplied by seepex has greatly reduced the maintenance issues associated with ragging.

Compared to the design of a conventional progressive cavity pump, the "Smart Stator Technology" has a split stator which allows the wearing parts to be replaced with the pump in place and no pipe work needs to be removed. The pump can also be inspected and cleared of blockages and rotor/stator wear can be assessed in minutes as opposed to the conventional methods which can take hours. "Smart Stator Technology" can be supplied on new pumps or retro-fitted on site to existing seepex progressive cavity pumps without any modifications to the pipe work or base plates.



Smart Stator Technology was developed for quick and easy removal of the stator and removal of any blockages without the need to remove the discharge pipe.

Mr. Tommy Dowling, Osberstowns' STW Charge Hand Fitter was so impressed with this technology he purchased a SST retrofit kit which seepex fitted on site making Osberstown the first sewage treatment works in Ireland to install a "Smart Stator Technology" kit. Since installation, the pump has operated for in excess of 1,900 hours without problem and consequently he has purchased a further three SST pumps.

The benefit

Instead of two men devoting hours to removing the suction and discharge pipework and then struggling to remove stators from rotors in confined spaces, one man can now remove the blockages in a matter of 30 minutes or less. This translates into a labour cost saving in excess of EUR 300,- every time rag is removed or a stator has to be replaced.

According to Mr. Dowling, "SST has just made my job and the job of my colleagues much simpler. Instead of having to allocate two men for a number of hours to clear a pump blocked with rags, one man can do it on his own in a half an hour. This allows our maintenance staff to concentrate on other more pressing problems. But not only that, when we need to change a stator, it is child's play and cheaper too as the new stator halves are cheaper than the conventional type".

* Extracts taken from website <http://www.osberstowntw.ie>.

Author Dr. Fergal Cronin.



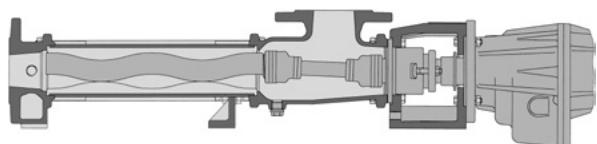
A seepex BN35-6L retrofitted with Smart Stator Technology installed at Osberstown STW

Key Facts

- Quick and easy removal of blockages
- Reduced maintenance issues associated with ragging
- Ease of handling

Significant Cost Savings

- Lower spare part prices
- No special tools required
- Labour cost saving
- Can be supplied on new pumps or retro-fitted to existing pumps without any pipe modifications



Installed Pump Type

- Range BN

And what can we get flowing for you? Your nearest contact: