

STRATFORD MILCOTE STW – Award Winning Case Study

Improvement of the Sludge Treatment Process

HUBER Technology recently completed and commissioned a **packaged sludge thickener** project for Severn Trent Water to reduce operational costs of tankering thin sludge from the town of Stratford upon Avon in Warwickshire.



Project Profile

HUBER Technology were approached by CiM6 at the beginning of 2017 to look at providing a solution to thicken the SAS from the treatment process on site.

An existing building already existed on site where the thickener was to be located with services already in place.

HUBER Technology Supplied:

- 1 x HUBER S-DISC Sludge Thickener, throughput of 14m³/h @ 0.5 – 1% DS thickening to 6% DS
- 1 x Poly Dosing Plant
- 1 x Skid for complete offsite fabrication

Objective

The challenge on site was to install the equipment into the existing building whilst interfacing with the existing sludge feed and discharge pipework which had already been installed some time ago when the building was constructed.

From the initial outset it was identified that an off site packaged solution may have significant benefits to both cost and the amount of time spent installing the equipment on site.

This innovative solution combines the S-DISC 1 sludge thickener, flocc reactor, polyrex 1.0 dosing unit and discharge pump which are all installed onto a 5m x 2m skid. All the wiring, cable routes, cable ducts and mechanical pipework have been designed and installed onto the skid enabling this to become a plug & play solution.

Benefits

- Time on Site – 3 weeks site was saved - the skid was installed in 2 days rather than 3.5 weeks
- Totex Cost Saving
 - 40% Capital Cost saving – compared to conventional equipment and construction
 - 34% Operating Cost saving – reduction in power and poly consumption over conventional
- Carbon saving - the S-DISC Sludge Thickener uses 35% less chemicals and 45% less power.
- Operator familiarity – the simple, robust construction with no belts or drums means minimal operator intervention and maintenance costs will be reduced.
- Standard Product – this ‘first of a kind’ plant has provided a standard design for future recycling, saving time, cost and benefiting from operator familiarity.



Mike Willis and Dan Thomas from HUBER said “From HUBER Technology’s perspective, working with CiM6 has provided the opportunity to offer a new solution to the Sludge Thickening sector. With offsite fabrication using intergrated 3D design to drive efficiency and our standard unique S-DISC product, we have been able to provide an all in one skid mounted package product to Stratford Milcote STW. CiM6 and HUBER Technology have proven that forward thinking, innovative designs can push new solutions to the UK market.”

Costain’s Senior Project Manager says:

‘I have been delighted at the way the team collaborated to combine innovative solutions and use digital techniques to drive capital and totex efficiencies in Severn Trent’s programme’

At the end of October 2017 we were pleased to be contacted by Steve Czapski and informed “I have great pleasure in notifying HUBER as a whole that the Stratford S-DISC thickener package plant has won the CiM6 Q4 innovation award.” – Steve Czapski (CiM6 Site Agent)

The Scheme has been nominated as finalist in 2 categories at the Water Industry Awards



For more information please contact Richard Willis 07980 316060, email rw@huber.co.uk or visit our website www.huber.co.uk