

**Stratford Milcote STW -
Award Winning Case Study**

The Scheme has been nominated as finalist in 2 categories at the Water Industry Awards 2018



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.

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.

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HUBER
TECHNOLOGY
WASTE WATER Solutions

Dublin Bay

**Solutions
for Sludge
Treatment**

**HUBER Solutions for
Sludge Treatment**

- Sludge Screening
- Sludge Thickening
- Sludge Dewatering
- Sludge Drying

HUBER TECHNOLOGY was incorporated in the UK in 1993 (Registered name Rotamat Ltd.) as a wholly owned subsidiary of HUBER SE, the manufacturers of the ROTAMAT® range of waste water treatment equipment.

Our mission is to protect the environment with sustainable waste water solutions.

HUBER TECHNOLOGY's UK headquarters is based in Chippenham,

Wiltshire and our regional centres in Rotherham, Perth and Portadown, provide dedicated installation and a full after sales service programme to customers in these areas.

HUBER equipment is designed and manufactured in Germany where we have state of the art manufacturing facilities and incorporate the very latest production techniques. Machines are customised to meet individual customers' requirements at our facility in Chippenham.

We design and build bespoke control panels to ensure efficient and cost effective operation of our equipment.

We also offer an extensive range of plant for hire and trials to meet customers' short term needs and help with on site development work.

HUBER TECHNOLOGY offer a wide range of products for sludge treatment:

HUBER TECHNOLOGY – Solutions for Sludge Treatment

Sludge Screening

Screening

To remove solids and rags from imported municipal sludge prior to thickening or dewatering. Industrial applications include removal of plastics from AD digestate, screening and pressing oversized material.

- Solution** ➤ HUBER Sludge Acceptance Plant
 ROTAMAT® Ro3
 ➤ HUBER Sludgcleaner STRAINPRESS®



Ro3 installation at Pembroke Dock



STRAINPRESS® installation at Riverside STW

- Benefits** ➤ High solids removal
 ➤ Low energy consumption
 ➤ 800+ UK reference sites
 ➤ Simple robust design
 ➤ Fully automated operation

Sludge Thickening

Thickening

Sludge thickening - to reduce storage on site and reduce tanker movements from site.

- Solution** ➤ HUBER Disc Thickener S-DISC
 ➤ HUBER Rotary Screw Thickener S-DRUM
 ➤ HUBER Belt Thickener Drainbelt



S-DISC installation at Welshpool STW



S-DRUM installation at Enniskillen

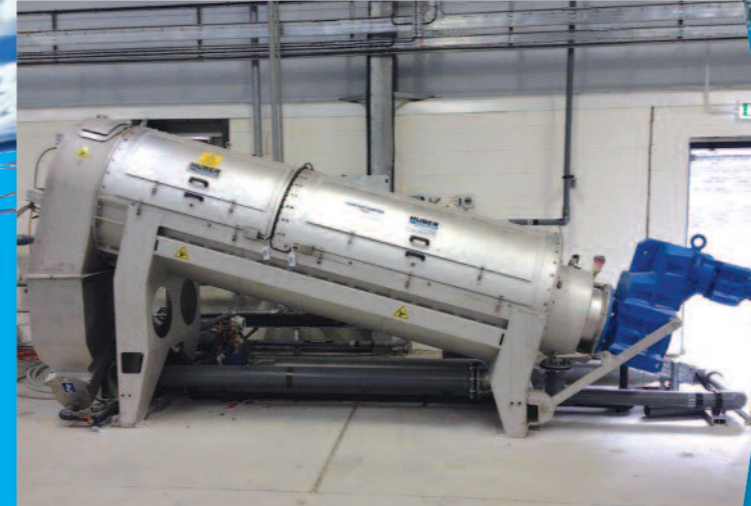
- Benefits** ➤ Low energy & polymer consumption
 ➤ Easy set-up & low operator attendance
 ➤ Installed inside and outside
 ➤ Unique design & compact footprint
 ➤ Simple robust design
 ➤ Offsite build packages available

Sludge Dewatering

Dewatering

On larger sites, sludge dewatering helps achieve a dryer cake for transportation and storage. Industrial applications include dewatering; DAF, settled and activated sludges.

- Solution** ➤ HUBER Screw Press Q-PRESS®
 ➤ HUBER Screw Press S-PRESS



Q-PRESS® installation at Diageo, Glendullan



De-watered sludge cake

- Benefits** ➤ Low polymer requirements
 ➤ Reduces transport costs
 ➤ 50+ UK reference sites
 ➤ Efficient and reliable operation
 ➤ Minimum operator attendance
 ➤ Low power
 ➤ Offsite build packages available

Sludge Drying

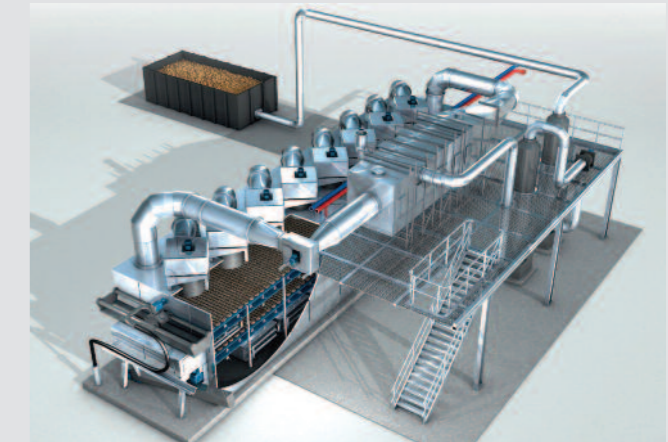
Drying

Thermal Sludge Drying - to achieve >90% dry solids for reduced handling, storage and disposal costs. Dryer includes unique pelletiser and heat re-circulation.

- Solution** ➤ HUBER Belt Dryer BT



Belt Dryer BT installation at Straubing, Germany



- Benefits** ➤ Fuel/fertilizer re-use
 ➤ Reduced costs for transport & storage
 ➤ Reduced odour during storage
 ➤ Low energy requirements
 ➤ Fully automated operation