

Case Study at Shanks, Westcott Park

In order to ensure that the plastics are removed from the digestate, Shanks have installed a HUBER STRAINPRESS® at their Anaerobic Digestion facility at Westcott Park between the digester and the pasteurisers.

The AD plant takes in food waste from both household and commercial sources and de-packages the material on a Tiger unit then separates out the grit on a HUBER longitudinal grit trap prior to digestion.



Installation at Shanks, Westcott Park

The above picture shows the inlet pipe with actuated valve on the right feeding the centre of a perforated drum and the outlet pipe taking the digestate after screening away. The outlet box on the left is for discharging the screened and compacted material.

The totally enclosed design allowed the digester discharge pump to pump the digestate up from ground level through the STRAINPRESS® and on to the buffer tank prior to the 3 pasteurising units without intermediate pumping.

All particles larger than 3mm are captured in the unit and compressed to > 60% dry solids thus reducing the amount of solids for disposal. The flow through the STRAINPRESS® is 20M³/h.

HUBER TECHNOLOGY were pleased to provide a STRAINPRESS® to ensure that the digestate is free of large plastics particles allowing the digestate to be used as a valuable fertiliser.

Enhance Your Anaerobic Digestion Process

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 enhancing the AD process:

HUBER pre-digestion technology is used for:

- Screening
- Washing and compacting of reject material
- Removing grit and glass
- Imported liquid-feed screening

HUBER post digestion technology is used for:

- Plastics removal
- Dewatering
- Digestate cleaning
- Treatment of filtrate

HUBER TECHNOLOGY enhances your AD Process

Pre-Digestion

Screening / Washing Oversized Material

Reject material from hammermills, Atritors, Tiger depackaging units and Waste-Pulpers can be washed to reduce the weight for disposal and then the organics returned back to the process to increase gas yield.

- Solution** ➤ HUBER Screens
➤ HUBER Wash Press (WAP-L)



Light Fraction Screen at Bredbury Parkway

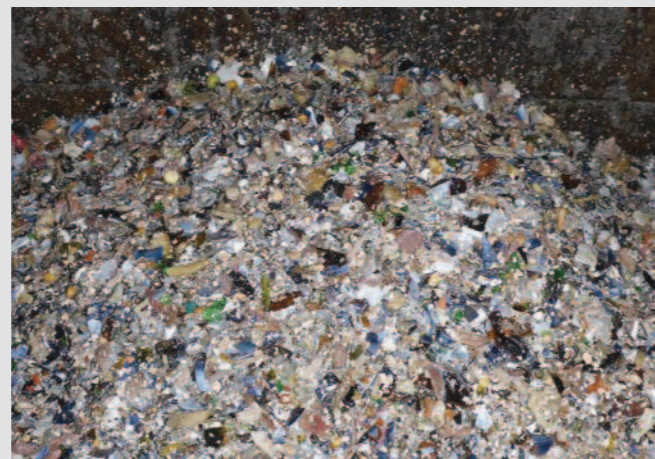
Grit / Glass Removal

There are many problems caused by grit and glass. These are often overlooked until excessive wear and blocked buffer tanks, reduces gas yield.

- Solution** ➤ HUBER Longitudinal Grit Trap Ro6 Bio
➤ HUBER Grit Washer RoSFG4E Bio



Grit Trap and Washer at Shanks, Westcott Park



Washed Grit

- Benefits** ➤ Increase gas yield
➤ Reduced maintenance / downtime
➤ Asset lifetime increased

Post Digestion

Plastics Removal

Residual plastics that are left in the digestate should be removed not only to help meet PAS 110 but also for aesthetic reasons. HUBER TECHNOLOGY has developed solutions for different AD processes and now has multiple installations using our STRAINPRESS® units.

- Solution** ➤ HUBER STRAINPRESS®



STRAINPRESS® at Andigestion



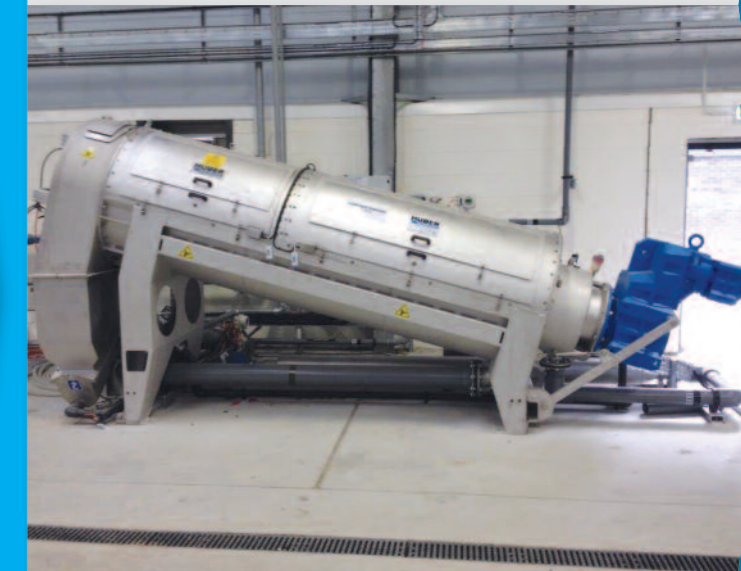
Unwanted plastic particles removed

- Benefits** ➤ Help meet PAS 110
➤ Improved digestate quality
➤ Dry oversize for disposal

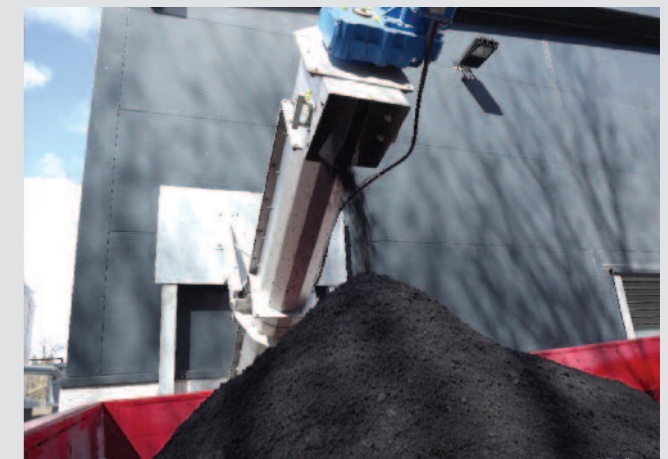
Digestate Dewatering

The HUBER TECHNOLOGY Screwpress is used to dewater digestate and reduce disposal costs. Trial units are available for different AD processes and applications.

- Solution** ➤ HUBER RoS3 Screwpress



RoS3Q Installation at Diageo Glendullan Distillery



Dewatered sludge cake

- Benefits** ➤ Digestate volume reduction
➤ Reduced storage and transport cost
➤ High quality fertilizer



Wash Press washing and compacting reject material at Tamar

- Benefits** ➤ Increase gas yield
➤ Reduce volume for disposal
➤ Cleaner screenings

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