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Huber Technology Middle East



Home HUBER Report Screenings Dewatering and Compacting and Compacting of Reject from Food Waste AD Plant

Dewatering and Compacting of Reject from Food Waste AD Plant



Mixed kerbside and supermarket waste as collected



Reject from Tiger de-packaging unit

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Cleaned dry rejects

HUBER UK, as part of their ongoing development programme to solve their customer's requirements, have been developing and testing well proven equipment in the applications arising on anaerobic digestion plants. One area looked at has been to reduce the amount of rejects from the de-packaging units in order to reduce the volume/tonnage to landfill and recover the organics.

Typically, 7% to 12 % of the weigh bridge food waste is rejected by the de-packaging unit. Household waste having significantly less plastic rejects than supermarket waste and different de-packaging units rejecting more or less plastics.

Tamar Energy recognised the problem as reject disposal comes straight off the bottom profit line and kindly allowed HUBER to run trials over a 9 months period to assess the reductions in rejects possible from their Tiger de-packaging unit.

Initially HUBER trials included washing the rejects prior to pressing them and this showed much cleaner reject material with significant BOD recovery. However batch washing and the water used for the washing was not desirable in the plant operation. The cost of water and the potential increased volume through the process and increased digestate volumes for disposal made high intensive washing less attractive. It may be considered where water is not a problem.

The second stage of the trial involved using a type WAP-L unit modified for the application. It uses very little water and accepts rejects continuously.

The reject material receives turning over in the auger to release free water prior to compacting.

Using the HUBER Screenings Wash Press WAP® L has the following advantages:

- Continuous feed
- Tolerant to variations in feed materials
- Rejects are opened up to release trapped liquor prior to pressing
- Little or no water use
- $\,\blacksquare\,$ < 50% reduction in weight for disposal higher on supermarket waste.
- No free water in rejects to cause spillage problems
- Less odour as rejects are drier with less organics
- Positive environmental advantages as less organics sent to landfill
- Dry Solids content of up to 70%
- Return organics to the soup giving increased gas yield
- Substantial BOD recovery from rejects
- Payback for new equipment on the trial plant of less than 3 months.
- Easy to retrofit
- Elevated discharge of washed and drained rejects

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- Well proven equipment over 380 units in the UK alone
- 4 service depots throughout the UK
- Easy to maintain
- Removable safety cover with viewing window to clear unlikely blockages
- Very high reliability



Wash Press / Compactor type WAP® SL on trial



Washed and dewatered rejects in discharge pipe



HUBER Screenings Wash Press WAP® L on trial



Drained and compacted rejects



Rejects being turned over to drain free liquor



Liquor released to return to the soup

For further information contact:

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Related Products:

- HUBER Screenings Wash Press WAP® L (Launder)
- HUBER Launder Channel HLC

Related Solutions:

- HUBER Solutions for Organic Waste Processing
- HUBER Solutions for Mechanical Pre-Treatment

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