Dewatering reject from food waste

When refining the organic part of the household waste, large amounts of water is added to the waste to separate the organic material from the rest, leaving the plastic reject and other non-organic materials with high moisture content. This is where the RUNI SK370 or SK240 really make a difference when they efficiently separate the food content and liquid from packaging in a continuous process leaving the reject with 50-65 % of dry matter*.





Integrating the RUNI SK370 or SK240 in the processing line reduces the moisture content significantly leading to a weight reduction of the waste of more than 50%*. At the same time the RUNI extracts extra biopulp from the waste. This ensures a minimization of costs for transportation and incineration as well as a maximization of the output of biopulp.

Biogas plants work 24/7 all year round, and the waste material often contains abrasive elments like sand, pieces of metal etc. This places great demand on the machines working there. For many years the RUNI SK370 screw compactor has proven to be a strong and reliable machine which can work 24/7 with a throughput of 2000-5000 kg per hour. For plants with only an occasional need for dewatering reject we have developed the smaller SK240. Both machines drain the wet material very energy efficiently.

RUNI can customize the console or hopper to your seperator and production line to ensure the optimal fit. We also provide special conveyor screws that enables the RUNI to handle tetrapak, cans, pet bottles and various food containers directly, so these products can bypass the de-packer.

*depending on mix of material







Benefits



Energy efficient drying of reject



Safe and easy operation with automatic start and stop



Specially developed drying technique through many years of experience



Hard metal on screw and matrix in stainless steel (AISI316) ensures long lifetime



Remote access (via SIM-card) ensures easy trouble shooting and assistance from the factory



Fast delivery of spare parts

Options

RUNIs modular machine architecture allows customized solutions to ensure perfect fit for the individual processing line.

Customized solutions

Special screw

We offer a specially developed screw for reject with high level of organic food waste to ensure better dewatering.

Force feeder

If the material is very wet or has very little structure, the optional force feeder will improve the dewatering.











Technical data	SK240	SK370
Material	Reject from refining food waste	Reject from refining food waste
Achieved dry matter percent*)	50-65%	50-65%
Capacity per hour *)	500-1000 kg	2000-5000 kg
Daily capacity *)	2500 kg	48 tonnes - 120 tonnes
Feed-opening dimension inlet (standard)	300 x 260 mm	400 x 420 mm
Weight	1000 kg	1500 kg
Machine dimension (LxWxH) (standard)	4439 x 640 x 1898 mm	4555 x 1444 x 2120 mm
Motor power	Main motor: 5,50 kW Hydraulic pump: 0,55 kW Oil cooling for gear: 0,07 kW Oil cooling for hydraulic: 0,07 kW Circulation pump: 0,25 kW Optional force feeder: 0,55 kW	Main motor: 15,00 kW Hydraulic pump: 0,55 kW Oil cooling for gear: 0,07 kW Oil cooling for hydraulic: 0,07 kW Circulation pump: 0,25 kW Optional force feeder: 0,55 kW
Power supply	3 x 400V, 50 Hz, 32A	3 x 400V, 50 Hz, 63A
Marking	CE-approved	CE-approved

^{*}depending on mix of material

Extract
extra
biopulp to the
digester



Reduce the volume of the reject up to a factor 3



OPTIMIZING BIOGAS PRODUCTION, HAITH RECYCLING, GREAT BRITAIN

Food waste is very suitable for anaerobic digestion plants. By separating as much of the organic liquid from the packaging, more feed stock is created for the plant and the weight of the packaging is reduced. The packaging normally goes to landfill or incineration.

Haith Recycling searched the market before they decided for a RUNI screw compactor. They found cheaper technology but after a test they found that RUNI's SK370 was a better machine able to drain out more organic liquid and reduce the weight of the packaging waste

significantly.



"The machines are robustly built with very little go wrong, very simple control system with auto reverse and auto compression which can be adjusted very simply. I would recommend RUNI to anyone with a de-watering issue and we will continue to install the RUNI in our AD waste food hall de-packaging plants"



RUNI - DANISH ENGINEERING

When working with RUNI you will meet a team with many years of know-how. We seek to create the best energy-efficient and long-term solution, that will make a real difference for your business and the environment.

At RUNI we think long-term, not least when it comes to our relations with our customers. Many RUNI-customers have machines that are 10-15 years old and still running well. Of course, they need maintenance and the occasional spare part, but here we also strive to always offer fast and competent help – also many years after the delivery and installation of the machine.

RUNI's screw compactors support UN's sustainable development goals and make a positive difference, that promotes sustainability and the circular economy.



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REDUCE THE WEIGHT OF YOUR FOOD WASTE REJECT WITH 55 %





RUNI