

TURN WASTE TO VALUE



RUNI

DANISH ENGINEERING



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COMPACTION >>>

SEPARATION >>>

- SIMPLE AND EFFECTIVE

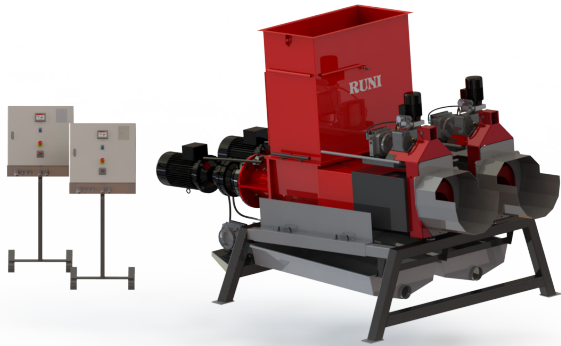


Optimise recycling of resources

The circular economy is becoming a greater necessity in a world with scarce resources. “Turn waste to value” has been our mission since 1997. Our Know-how and solid screw compactors have been put to the test in almost 2000 installations worldwide.

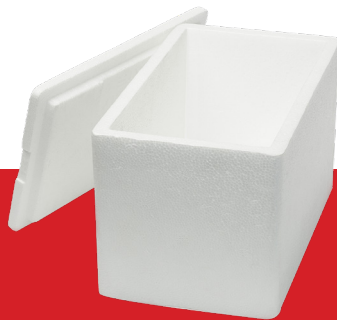
Compacting and separation of returned goods, surplus materials and bi-products benefit both the environment and your finances.

- ✓ Compacted waste can often be sold for recycling.
- ✓ After separation and drying in a RUNI compactor, liquid waste can often be used for energy production and recycling.
- ✓ Great savings on transportation, storage space and human resources.



Advantages of RUNI screw compactors

- ✓ Optimal solutions based on RUNI's pioneering work, development and years of experience.
- ✓ The material is compacted in a continuous process.
- ✓ High compaction rate due to high pressure.
- ✓ Low energy consumption due to the torque of the screw.
- ✓ No heat added, instead utilises the friction of the material and saves energy.
- ✓ Modular machine concept allows for optimal adaptation to the task.
- ✓ Robust and user-friendly, built for hard work in harsh environments.



Compaction

The Runi screw compactor can process many types of plastic materials quickly and effectively e.g. fish boxes or EPS (airpop). Dust collected in extractor can also be processed.



Separation

The RUNI screw compactor separates liquid content from e.g. PET-bottles. In the biogas industry the wet reject can be dewatered. Washed PE film can be dried easily and effectively

Make money on compaction of EPS and other plastic foam

RUNI screw compactors ensure waste management with added value. EPS - also known as airpop® - consists of 98% air and is used for e.g. insulation and transport protection. It is expensive to dispose of but can easily be compacted to manageable blocks that can be sold for profit.

- ✓ Compressed plastic foam, e.g. EPS, EPP, EPE, XPS and PUR, can be sold for the production of new items in recycled plastic.
- ✓ Save energy - no heat is added to the process.
- ✓ Save space and handling in storage and in waste containers.
- ✓ Protect the environment and save money on collection.
- ✓ Sell the compacted EPS blocks through RUNI.



Compaction ratio
UP TO 50:1

Case

Retail - Cap Fraicheur, France

Cap Fraicheur, a French retail chain with a large sale of fish. The company was looking for a solution to compact their many used EPS fish boxes. Normally they have around 60 kg (130 lbs) per day.

Most of the stores are located in city centers, and the available space is very limited. Besides the lack of storage, the odor from the used fish boxes also generated problems among the neighbours.

It was therefore necessary to find a solution reducing the odor and volume of the waste and recover storage space.

RUNI's SK200 were offered to the largest stores. At Cap Fraicheur smaller stores in hypermarkets in Paris the fish boxes now are crushed into plastic bags and then transported to the largest shop for compaction.

Area Sales Manager RUNI, Mr. Jens Kristian Kristensen:

"In this way the company secured a model for recycling of valuable material and with the RUNI SK200 they now have a user friendly and secure machine for its personal."



Case

Processor of fresh Salmon, Morpol, Poland

Morpol in Poland, for many years the world's largest processor of fresh salmon and today part of the Marine Harvest group. Every day Morpol receives thousands of EPS boxes with fresh salmon and chilling ice. The boxes are only being used once and Morpol therefore uses the RUNI SK370 for effective handling of the empty wet boxes contaminated with some blood from the salmon.

By compacting the boxes, Morpol has turned thousands of tons of plastic waste into valuable recycling materials. In the first years they used a single SK370 screw compactor. Today the continuously expanding company has two effective RUNI silo systems with 7 SK370 placed under each.

Plant Maintenance Manager Morpol, Mr. Miroslaw Nojek:

"With our fleet of RUNI screw compactors, we have gained a customized solution compliant with our need of a high operation security and service. The compactors were fast paid off by the sale of the compacted blocks."



Compaction and separation as a destruction process

RUNI can de-water and compact a wide range of materials. A bi-product in an industrial production, or faulty production and date expired products. With a RUNI screw compactor destruction, emptying and compaction of liquid containers can be done in one operation. Dust from exhaust systems can be compacted for easy handling.

- ✓ Compacted waste takes up less space in the warehouse and in the waste container.
- ✓ Brands are destroyed 100% so there is no risk of resale.
- ✓ PET-bottles, cans and other containers are compacted and sold to recyclers.
- ✓ Water, beer, yogurt and juice and other liquids are separated from solids and can be used for biogas production.
- ✓ Textile dust, mineral wool and other airy materials are compacted and more manageable.

Case

Brewery, Carlsberg Breweries, Denmark

Besides beer cans, Carlsberg Breweries in Denmark also produce Coca-Cola® in aluminum cans and PET-bottles. Carlsberg effective quality control daily sorts out substantial quantities, that needs to be destroyed.

In more than 15 years Carlsberg has used a RUNI SK370 for emptying and compacting of PET-bottles. A few years ago they also got a RUNI SK240 for destruction of beer cans. Latest Carlsberg have installed a customized RUNI SK370 for their new product, 20 liters draught beer in plastic containers.

Produktion Manager Carlsberg, Mr. Sten Klyssing Jensen:

"We are at Carlsberg very satisfied with the compactors from RUNI. It is very important for the company that we effectively can separate directly at the source and here RUNI's compactors have shown themselves effective and robust. In relation with Carlsberg Draughtmaster project RUNI has complied the company's need and delivered a customized RUNI SK370, that solves our compacting task. RUNI has furthermore demonstrated good service through the whole cooperation."



Case

Airlaid, Rexcell, Sweden

The Swedish company Rexcell produces tissue and airlaid. They are among the leaders within this business with a high level of technology in their production.

The RUNI SK370 was installed under their extraction system to compact the dust before it goes into the waste container. The advantage with a RUNI screw compactor is the continuous operation with automatic start, which makes it unnecessary to have an operator standing next to the machine. Also the machine does not need to be airtight, to avoid dust everywhere, as the airy fibre structure is destroyed during processing.

The compacted dust achieves a density of approx. 700 kg/m³.

Project Manager Rexcell, Mr. Sigge Pettersson:

"Runi offered a customised solution to our problem with handling of the off-cuts from the production. The machine (SK370) is very solid and reliable and fulfill our needs. We are also very satisfied the Runi's support during planning, start-up as well as the service after commisioning."





Separation of liquid from solids

A RUNI screw compactor is built to operate 24/7. The modular design means that the machines can be adapted to the customer's needs and requirements. Providing optimal adaptation to existing fully automatic process lines. Remote access provides possibility for quick problem solving and process optimization.

- ✓ More efficient and less energy-consuming than centrifuging or heat-drying, when PE film is dried after the washing process.
- ✓ Dried reject can be used for energy production or disposed of at lower cost.
- ✓ Improve water treatment in production and avoid paying taxes and transport of water.

Case

Biogas industry, Haith recycling, Great Britain

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

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.

Director Haith Group, Mr. Steve Haith:

"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 on the HMI screen. 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."



Case



Plastic film recycling, Systec, Germany

One of the largest manufacturers of plastic granules from post-consumer waste in Europe, Systec Plastics Eisfeld GmbH in Germany, chose in 2017 to replace their existing installation of screw compactors with 6 new RUNI screw compactors type SK370, into their washing line for PE film, as part of the drying process of the crushed and washed plastic flakes.

According to the managing Director Mr. Vilmos Polgar, the reason for choosing the RUNI screw compactors were based on a successful test on site in Eisfeld under production conditions and full throughput of the washing line.

Director Systec, Mr. Vilmos Polgar:

"The RUNI SK370 dewatering press was at the same throughput able to minimise the energy consumption significantly and simultaneously reducing the moisture content with 50% compared to our old installation"



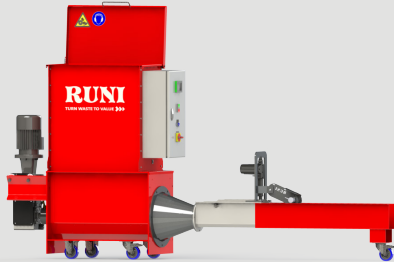
Let us put it to the test!

We have delivered solutions for many different materials. If you have a new material or application simply call us and we can arrange to carry out a test to ensure we offer the correct solution for you.

Machines



Compaction



SK120

A compact and user-friendly compactor for EPS for environmentally aware companies such as supermarkets, fishing companies, catering and appliance stores, who want to minimise their waste cost.

**The SK120 has one year warranty.*

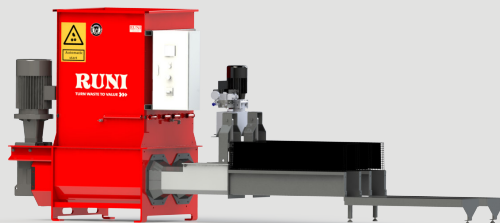
- ✓ Takes up very little space - can be placed under pallet rack
- ✓ Easy to operate
- ✓ Available in automatic and manual edition



SK200

Compactor for larger amounts of EPS (more than 10 tons a year). The hydraulic jaws ensures very easy operation.

- ✓ Can be equipped with sound proofing material, wheels and lid
- ✓ Available in automatic and manual edition
- ✓ 3,5" touch display



SK200Twin

Screw compactor, from the series of EPS machines, recommended where fast compacting of a larger volume of EPS is needed, but where the annual EPS amount is max 50. Tons

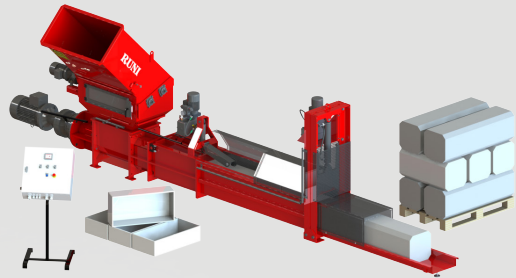
- ✓ High capacity compared to price - 90 kg/hour up to 50 tons a year
- ✓ Fast compaction of large amounts of EPS
- ✓ Block sizes are easy to handle



SK240

This versatile compactor is for the large requirements. Besides EPS it can be configured for a numerous materials e.g. dust, PET-bottles and separation of some types of reject.

- ✓ Airtight
- Suitable for compacting dust
- ✓ Different configurations depending on material and logistics
- ✓ 5,7" touch display



SK370

The large and hardworking, versatile machine for big volumes. With a wide range of equipment: Different hoppers, conveyor belts, and different matrices for separation.

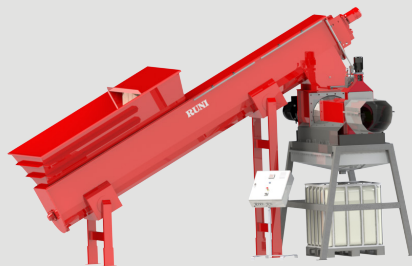
- ✓ Big capacity
- Up to 200 kg (440 lbs) EPS per hour
- ✓ Different configurations depending on material and logistics
- ✓ 5,7" touch display
- ✓ Remote control



Twin Model

RUNI's SK370 can be built together to form one unit but with even larger capacity.

- ✓ Flexible capacity
- ✓ Easy maintenance where one machine can operate during service
- ✓ Remote access



Special solutions

Runi's know-how has resulted in many special solutions for compacting and de-watering.

- ✓ Modular machines ensures great flexibility.
- ✓ Test machines
- ✓ Remote access

Reliable solutions since 1973

The family company RUNI A / S is located in a region of Denmark with a strong tradition of environmental technology and machine production for tough work in agriculture. This exact combination of solid craftsmanship with innovative and energy-efficient solutions forms the basis of RUNI's development and production.

RUNI's machines are built from strong materials. They are reliable, dependable and easy to use.

RUNI has developed a great number of modules, which in different combinations delivers a customised solution suitable for the customer's requirements.

RUNI acts globally. Our experience and know-how is wide and unique in the world market. A professional network of distributors in Europe, North America and Australia ensures local service and fast delivery of spare parts. On all other markets RUNI sell directly to companies in industry and retailtrade.



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