



Shrink Bag Replacement

Why Shrink Bag Replacement by Automation?

The food packaging industry is a mature industry being constantly challenged to reduce costs and squeeze profitability. As such, the only way to achieve competitive advantage and long term commercial gains, is to reduce cost or gain price advantages from product and brand differentiation.

SBR systems offer benefits of cost reduction and pack differentiation by challenging the traditional packaging methods and operational efficiencies through automated packaging solutions.

Since the 1950's the shrink bag market has been a manual and labour intensive process of packing foods. Therefore labour costs remain the critical cost in any food factory. The only way to reduce labour costs is to reduce working numbers through automation.

Over the last decade KREHALON have innovated and developed proprietary patented films to run on high speed automated packing systems.

Using Shrink Bag Replacement automation will mean:

◀ LESS LABOUR OPERATIVES RESULTING IN REDUCED LABOUR COSTS

◀ LESS MATERIAL USAGE RESULTING IN REDUCED PACKAGING COSTS

◀ LESS PACK LEAKERS RESULTING IN REDUCED WASTE

ACHIEVING REDUCED TOTAL PACK PRODUCTION COSTS

That is why partnering with KREHALON is proven to deliver sustainable long term commercial gains.

FEATURES AND BENEFITS

Our objective is to take cost out of food packaging through automating the packing process by utilizing cost effective machinery and innovative barrier packaging technology.

Labour cost reduction

Today's food packaging industry is facing increasing labour costs due to rising salaries and minimum wage rates, increasing taxation, pensions and health care benefits. The only way to reduce labour costs is to reduce the number of workers through automation.

Replacing manual bagging and vacuum packing operatives with SBR automation systems could help you reduce the number of workers per production line. This is achieved through easier manual loading or the possible integration of robotic 'pick & place' systems.

High productivity

SBR systems offer high speed automation from proven thermoforming and HFFS flow wrapping technology. The combination of in-line loading, vacuum sealing and shrink process deliver higher packing speed per hour ensuring consistent flow rates.

Seal integrity

The superior seal properties of KREHALON's SBR materials allow simple and clean filling of the formed pockets which minimises seal area contamination by achieving fully hygienic hermetic seals. As a result, product shelf life is extended whilst product reworks and returns are brought to a minimum.

Inventory reduction

Reel stock solutions offer reduced inventory as compared to multiple sizes of pre-made bags in boxes.

Pack cost reduction

Achieving cost advantages is possible with SBR because of the more efficient use of packaging material. When using shrink bags, the dimensions of the bag need to be larger than the product in order to manually fit the product inside. SBR systems offer exceptional material usage savings through efficient machinery design that allows precise material-to-product ratio.



The perfect pack presentation

The perfect skin-tight pack is made from food products that are packed in a tight fitting pack. Efficient designs and sizing of SBR systems result in less material around the products for shrinkage, reducing excess material.





FORM SHRINK

KREHALON Form Shrink (FS) films are a multilayer thermoformable, heat shrinkable range of films using innovative proprietary technology for the thermoforming process. Ideal for consistent and uniform high volume food products, KREHALON's FS films are pre-heated and vacuum formed into bespoke shaped pockets, tailored to match your food products. Food is then placed into the formed pockets and transferred onto the sealing station where, after evacuation, the top web is hermetically sealed onto the formed base web. The package is then neatly cut and transferred through the hot water shrink tunnel, resulting in a skin-tight shrink pack presentation.



KREHALON offers demonstration facilities for FORM SHRINK!



Improved production flow

The in-line vacuum sealing and cutting process of multiple pockets during a single cycle eliminates bottlenecks and piling of packed bags.

Material usage savings

Subject to pocket design efficiency, Form Shrink maximises the number of packs per m² of film, resulting in efficient material usage per pack.

Clean hermetically sealed packs

Simple and clean filling of the formed pockets minimises seal area contamination resulting in hermetically sealed packs. Shrink bags result in contamination of the seal area, as the food is manually loaded into the open bag.



KREHALON offers demonstration facilities for FLOVAC!

FLOVAC

FLOVAC is an automated shrink bag replacement solution, using HFFS flow wrapping technology as a bag maker and product packer. The packaging film is automatically wrapped around the food product and sealed hermetically along the length of the product. Using “length variation” technology, a sensor measures the length of the food product and the film length is sized and cut accordingly. The wrapped food requires post evacuation of air and sealing using vacuum packers.

Improved production flow

The flow of single lane products to the vacuum packer eliminates bottlenecks and piling of packed bags.

Material usage savings

The sensor length variation on the HFFS flow wrapper adjusts pack sizes to the length of each food product resulting in large material usage savings over shrink bags. Shrink bags are fixed length bags where material sizing can be inefficient in real-time production environments.

Clean hermetically sealed packs

During the flow wrapping process the product is transferred on to the film and is carried on the material while wrapped and sealed. Therefore, the flow wrapper delivers clean hermetically sealed packs, reducing the risk of seal contamination. Shrink bags result in contamination of the seal area as the food is manually loaded into the open bag.

Numerous customer case studies have proven the efficiency of the FLOVAC systems where reduced pack leakers were brought down to less than 1%.



WHICH PRODUCTS TO USE AND WHAT SAVINGS DO THEY OFFER?

The choice of Form Shrink or FLOVAC is mainly determined by the volume and shape uniformity of the packed product. Form Shrink is favoured in occasions where there is a lot of uniformity in product dimensions whilst FLOVAC could offer more flexibility when packing irregularly shaped products such as large meats that differ in size.

EXAMPLES OF COST SAVING CASE STUDIES:

Are you interested in efficiencies and automation from SBR?

KREHALON can help you to calculate the cost benefits and return on investment of SBR for your specific application. By reviewing your production facilities and current packaging system, KREHALON's experienced team can identify and calculate the total system cost savings and benefits for your business.

That is why partnering with KREHALON is proven to deliver sustainable long term commercial gains.

Please contact us via sales@krehalon.com or visit our website www.krehalon.com to find your local KREHALON distributor.

Fresh Red Meat – Large Primals

	SHRINK BAGS	FLOVAC
Labour to pack per line	8 people	3 people
Packs per minute	30	40
Labour cost per pack	€0.087	€0.033

Block Cheese

	SHRINK BAGS	FORM SHRINK
Labour to pack per line	20 people	3 people
Packs per minute	25	30
Labour cost per pack	€0.260	€0.032

