

***shawpak***

MEDICAL PACKAGING SOLUTIONS

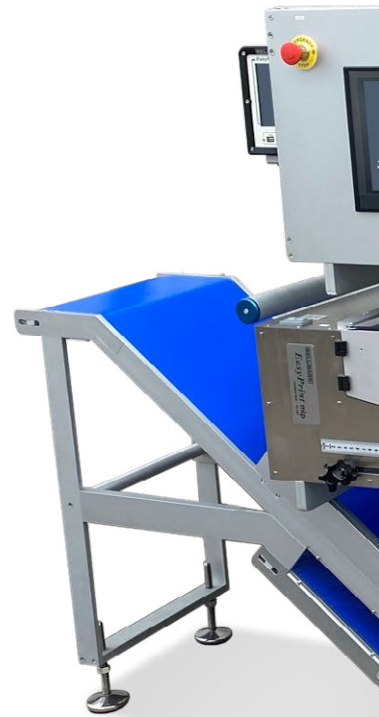


revolutionary thermoforming machinery



The **shawpak** is a revolutionary machine offering a thermoforming solution to your packaging needs that is totally unique.

Built in the UK at our state-of-the-art engineering facility based in Derby, every care has been taken to ensure the machines are built to the highest quality.



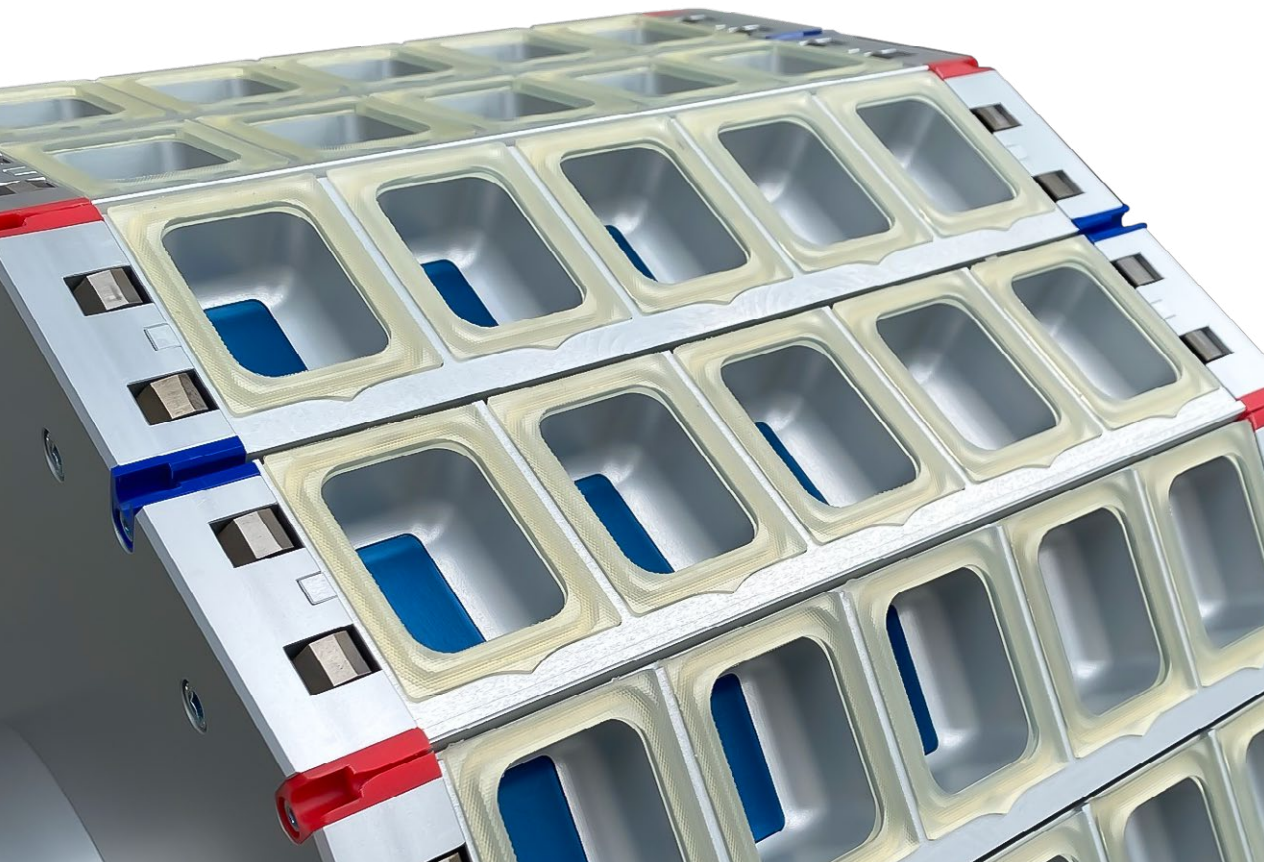




Amazingly compact, portable, flexible, energy efficient and above all, very competitively priced.

These are just a few of its unique attributes. The **shawpak** is just so different - its tiny size and flexible layout means that it can be configured in so many different ways to suit the customer's requirements.

During the task of developing the **shawpak**, Riverside's extensive experience in packaging, dating back to 1979, has played a major role in identifying the vital features and production advantages that the **shawpak** provides, overcoming many of the disadvantages and limitations of the generic thermoforming machines currently available.





shawpak



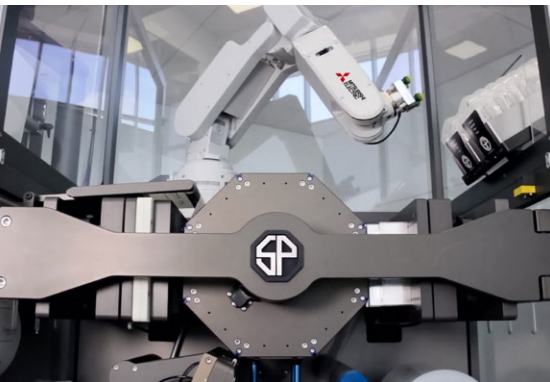


## shawpak

### Single Piece Flow

The benefits of Single Piece Flow (SPF) are the small footprint and loading area enabling the **shawpak** machine to be integrated into production cells, increasing production efficiencies. There are no tool changes needed and this reduces double handling as it's directly packaged.

- IDEAL FOR INTEGRATION INTO ROBOTIC CELLS
- AN OPTIMUM SINGLE-PIECE FLOW SYSTEM
- BLISTER PACKAGING FOR MEDICAL DEVICES

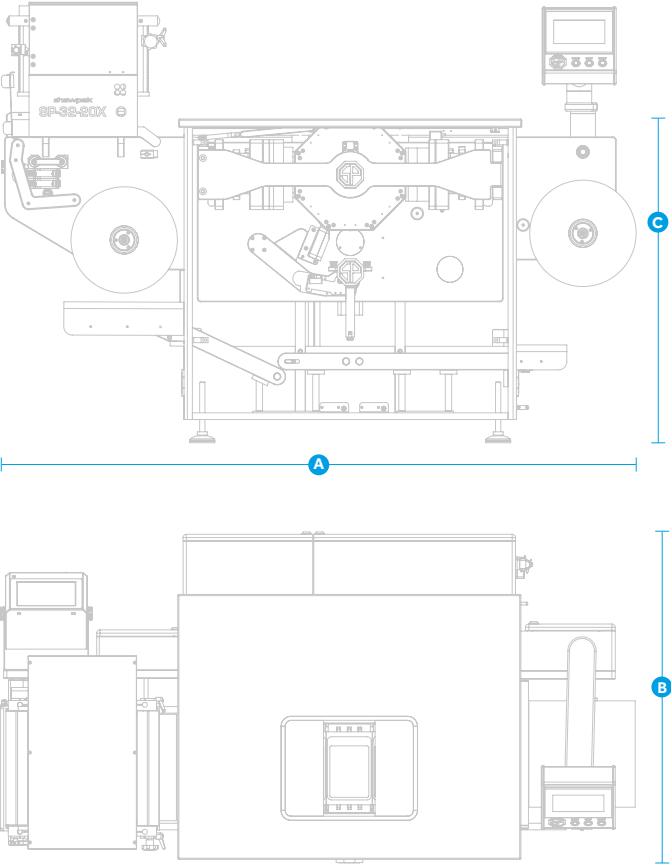




# shawpak Pack and Machine Sizes

Model	Max Flexible Pack Size	Max Diecut Pack Size	Machine Dimensions		
			A	B	C
SP-32/20	320mm x 200mm x 80mm	300mm x 180mm x 80mm	1700mm	960mm	980mm
SP-42/25	420mm x 250mm x 100mm	400mm x 230mm x 80mm	1800mm	1060mm	1030mm
SP-62/25	620mm x 250mm x 100mm	600mm x 230mm x 80mm	1800mm	1260mm	1030mm

## SP-32-20




This method means no gripper chains and no trim, leading to much less maintenance, contamination and down-time. Coupled with this, the product is placed into the mould that creates the form, meaning no blister edges can ever be trapped in the seal.

Our philosophy with the design is based on producing packs in a single lane format. This simplifies the operation of the machine and leads to precise control of forming and, more critically, sealing parameters. This control leads to incredible repeatability which can be recorded and data logged.

Another great benefit is that coding and labelling is kept simpler on a single lane basis.

While single lane may sound limiting, with cycle times of less than 3 seconds we are confident that **shawpak** will meet the majority of tasks both economically and efficiently.



The heart of the machine is a stepper driven indexing drum which transports the webs through the machine. The drum is surrounded by forming, sealing and cutting stations. The product is simply loaded in to the top of the tooling drum and ejected out of the base onto a discharge conveyor. It is that simple!



# The **shawpak**

## Top Web Unwind

As with the base web, accurate tension and lateral tracking control of the top web are essential for reliable lidding. The **shawpak** top web unwind has the same stepper motor driven unwind as the base web unwind. Tension is also controlled in order to register pre-printed web material into position. As well as tension control, web tracking and alignment are critical to ensure the top web feeds on to the drum in the required position. Lateral position can be adjusted in 0.1mm increments either manually or automatically with the Top Web Auto Tracking Option.

## Sealing Station

Once loaded the drum will rotate. At this point the top web of material will be rolled onto the drum to captivate the product in the cavity prior to the sealing process. Once at the seal station the seal plate will operate to pre-defined time and pressure settings. The Airflex bellows system ensures the seal tool produces a perfectly even pressure over the required seal area. All process parameters are monitored each machine cycle and measured back to ensure the cycle has been completed to the set specification. As with the forming station, all settings are logged for each job and restored the next time the particular tool set is to be run.

## Cutting

The **shawpak** has many different types of cutting available to suit the needs of the pack. These include flying crosscut knife, centre cutter, plunge perforation knife, crush cut lane slitting and diecutting.

## Outfeed Station

Once the product has been cut, grippers will release the product onto a discharge conveyor. Vacuum suckers will ensure the product is removed from the cavity under controlled conditions to ensure precise placement onto the conveyor and to confirm that the pack has been ejected from the forming drum. The discharge conveyor can be configured to suit individual customer requirements. Inspection systems can also be integrated at this stage.



## SUMMARY

The **shawpak** provides a simple, but thorough, comprehensive solution. Combined with the **shawpak** gives the **shawpak** produce thermally stable under the strictest conditions and to the most specific requirements.

Its ability to produce a wide range of materials, ranging from none with output rates to 25 per minute. The compactness and its true portability are other features currently

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# shawk Process



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ability are unlike  
thermoformer  
available!

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### Product Loading Station

Product loading takes place at the very top of the drum. Generally one formed pocket will be loaded at a time while the drum is stationary. The loading area is guarded by bespoke safety infills which ensures operative safety. The small footprint of the **shawkpak** makes it easy to integrate into many different production environments. Simple manual loading can take place from a workstation right the way through to full integration into an automated production cell. Machine height, process orientation and specific functions of the machine can all be customised to meet individual customer requirements.

2

### Film Forming Station

The 5 stage Pureform forming process has been developed specifically for the **shawkpak**. Temperature, vacuum and compressed air are all used in combination to generate the perfect forming conditions for the film being processed. All settings are monitored each machine cycle and measured back to ensure the cycle has been completed to specification. The principles of the unique **shawkpak** process eliminates the need for numerous vacuum holes on the thermoforming cavity leading to high quality formings with minimal cosmetic witness marks. All form settings are logged for each job and restored the next time that particular tool set is to be run.

1

### Base Web Unwind

Accurate tension and lateral tracking control of the base web are essential for reliable thermoforming. The **shawkpak** has a unique stepper motor driven unwind to control tension to the exact tolerance of the material to be used. This flexible control means the **shawkpak** can handle delicate 50 micron flexible films right through to 800 micron rigids. As well as tension control, web tracking and alignment are critical to ensure the web feeds on to the drum centrally and is captivated by the grippers each side. Lateral position can be adjusted in 0.1mm increments either manually or automatically with the Base Web Auto Tracking Option.



shawpak  
SP-32-20



The **shawpak** being so compact can offer unparalleled flexibility for how it is used.



#### Machine Pack

Product is loaded by an operator.



#### Work Assembly Station Pack

A **shawpak** is integrated within the operator work cell.



#### Conveyor Pack

Several operatives load a conveyor which loads a **shawpak**.



#### Automated Cell

**shawpak** is integrated into an automated cell and loaded automatically.



#### Direct From Injection Mould Machine

Moulding is loaded direct to **shawpak** by pick and place unit.



#### Hopper Fed / Bowl Feed

Hopper load product directly above **shawpak**.



## shawpak Specifications

Main Machine	Standard	Option
Rotary Index Drive	●	

### Forming Head

Airflex Form Bellows with Digital Pressure Control	●	
Digital Form Pressure Control	●	
Stepper Driven Toggle Lock Form Head	●	
Pureform Heater	●	
Plug Assist		○

### Sealing Head

Airflex Form Bellows with Digital Pressure Control	●	
Stepper Driven Toggle Lock Form Head	●	

### Base Web Unwind

Base Web Stepper Drive Unwind	●	
Base Web Manual Tracking Adjustment	●	
Base Web Edge Detection		○
Base Web Auto Tracking Adjustment		○
Splice Table		○

### Top Web Unwind

Top Web Stepper Drive Unwind	●	
Top Web Manual Tracking Adjustment	●	
Top Web Edge Detection		○
Top Web Auto Tracking Adjustment		○
Auto Print Registration		○
Splice Table		○

### Cutting

Standard Crosscut Flying Knife	●	
Centre Cut		○
Double Crosscut Flying Knife		○
Multi Lane Crush Cut		○
Multi Lane Perforation Cut		○
Plunge Cut Perforator		○
Thumb Hole Punch (base web)		○
Thumb Hole Punch (top web)		○
Diecut Unit with Pack Ejection		○

### Outfeed

Standard Low-Level Outfeed Conveyor	●	
Swan Neck Conveyor (standard height of 850mm)		○
Reject Conveyor		○

Overprint and Coding	Standard	Option
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Thermal Inkjet Printer		○
Thermal Transfer Printer		○
In Line Pre-Printed Label Applicator		○
Inline Print and Apply Label Applicator		○
Flexographic Printer		○

### Vision & Inspection

Print Inspection		○
Product In Pack Inspection		○
Splice Detection		○

### Bench Top

Bench Top with Loading Station	●	
Light Up Safety Infill Panels for Operator Alerts		○
Bench Top to Customer Requirements		○
Open Top (for automated loading)		○

### External Finish

Natural Anodise	●	
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### Control

7" Colour Touch Screen	●	
Data Logging to SD Card		○
Data Logging via Ethernet Connection		○

### Cabinet & Guarding

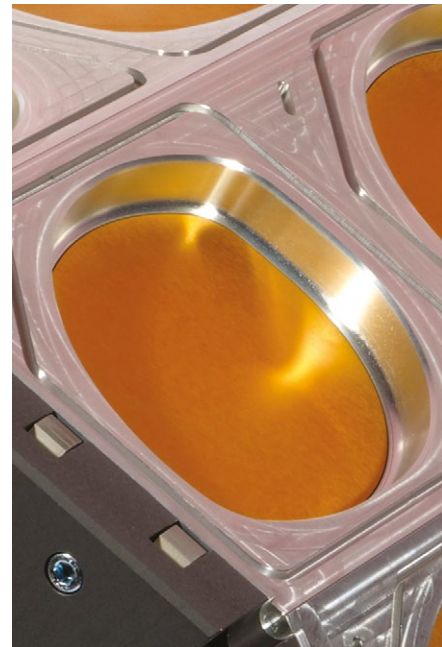
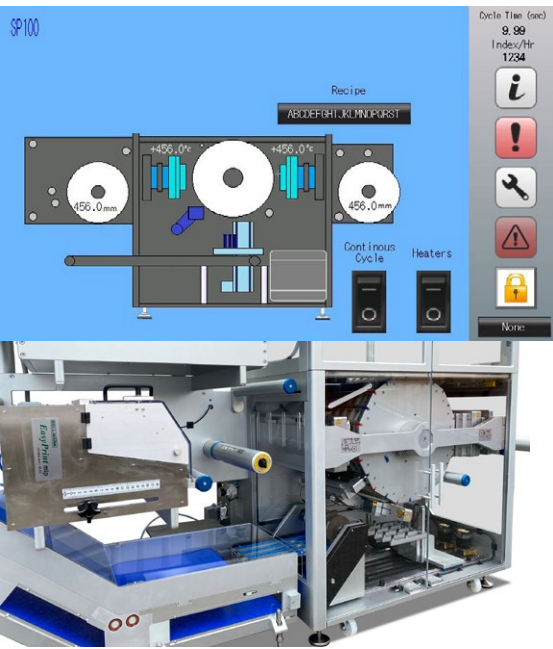
Electrical/Pneumatic Enclosures	●	
Clear Acrylic Guarding & Doors	●	
High Impact Guarding & Doors		○
Machine Feet & Castors	●	
Bolt Down Machine Feet & Castors		○

### Integration

Manual Rotary Filling Station		○
Automatic Rotary Filling Station		○
Robot Loading		○
Production Line Integration		○
Weight Hopper Integration		○

## shawpak Pureform

Pureform is Shawpak's unique forming process that eliminates witness blow holes and cold spots. Through high pressure air flow the Pureform process rapidly evacuates the air between the forming material and heater plate allowing highly consistent direct contact which eliminates any cold spots on the forming material. Airflow is through slots on the outer edge of the cavity without leaving any witness marks. These combined features give excellent consistency to the blister.





## shawpak Tooling

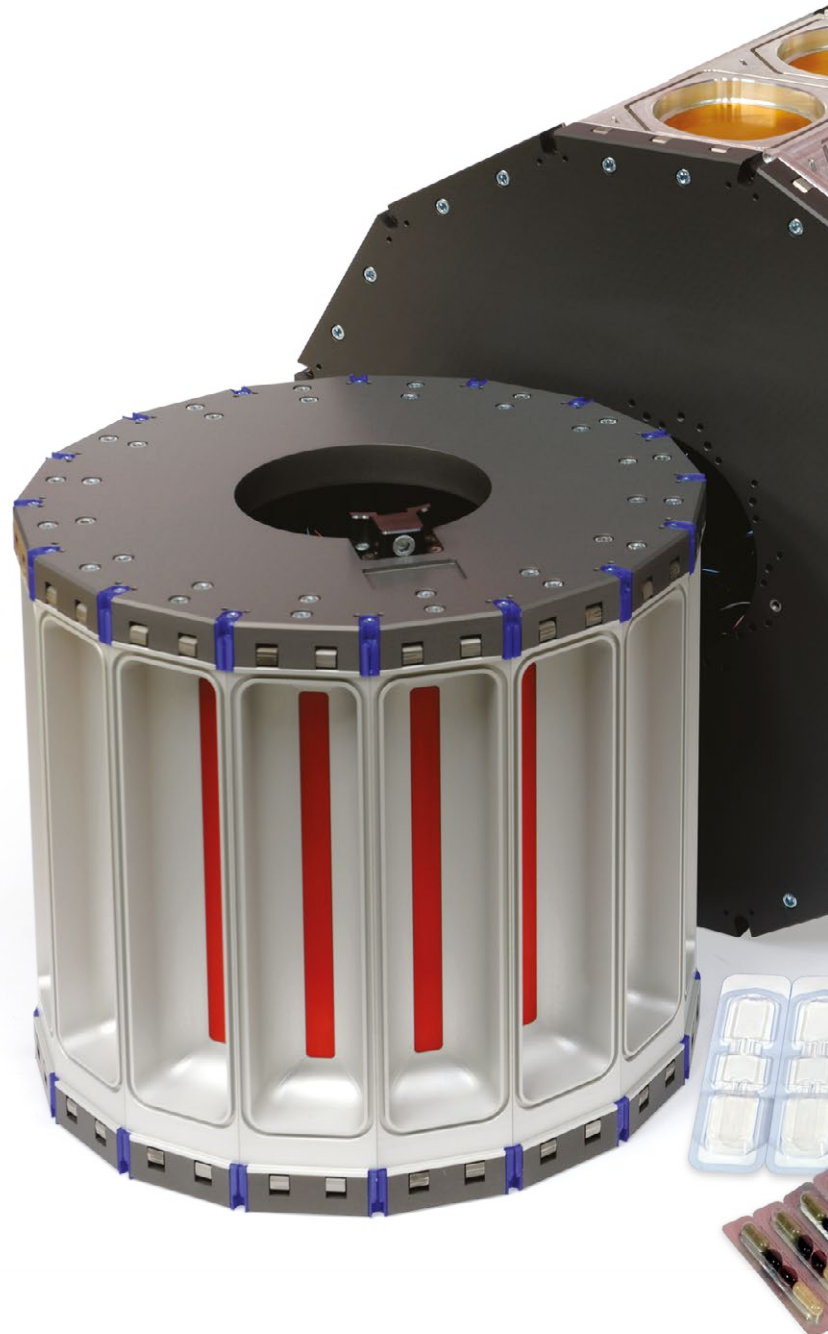
A tool set consists of three main parts:

- Forming Drum
- Form Heater
- Seal Plate
- Controlled Take-off Plate
- Diecut Cutting Board & Base (if required)

The innovative design means that tooling is compact, lightweight, economic and above all quick and simple to change.

### Forming Drum

The drum houses the forming cavities. These can be as simple as a basic rectangle through to a contoured 3D surface to match the product to be packed. Pack forms can be changed either by replacing the drum or by individual pocket inserts.







# RIVERSIDE R

## Riverside Medical Packaging Co Ltd

Since 1979, Riverside Medical Packaging has established itself at the forefront of the healthcare industry. An innovative supplier, providing packaging, contract packing, validation and engineering services. Our state-of-the-art 6000sq metre manufacturing facility has been tailor-made specifically for the manufacture of medical packaging and products.

We currently have eight cleanrooms (two Class 8 and six Class 7), each being either process or product specific. These superb manufacturing cells are testament to our commitment to invest and develop to support the needs of the market.

Over the years, one of our key strengths has been our in-house engineering and design facility.



Our philosophy has been to design, develop and build the majority of our production and packaging equipment in-house. This gives us true flexibility, enabling us to offer the service and technical innovation our customers have come to expect.

From our many years experience in machinery design a new concept was conceived - the **shawpak**. A revolutionary thermoforming machine unlike any other available.

Now Riverside has invested in a new 1200sq metre design and engineering facility for the production of these groundbreaking machines.



# *shawpak*

the revolution is here



## **shawpak**

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