

shawpak

MEDICAL PACKAGING SOLUTIONS



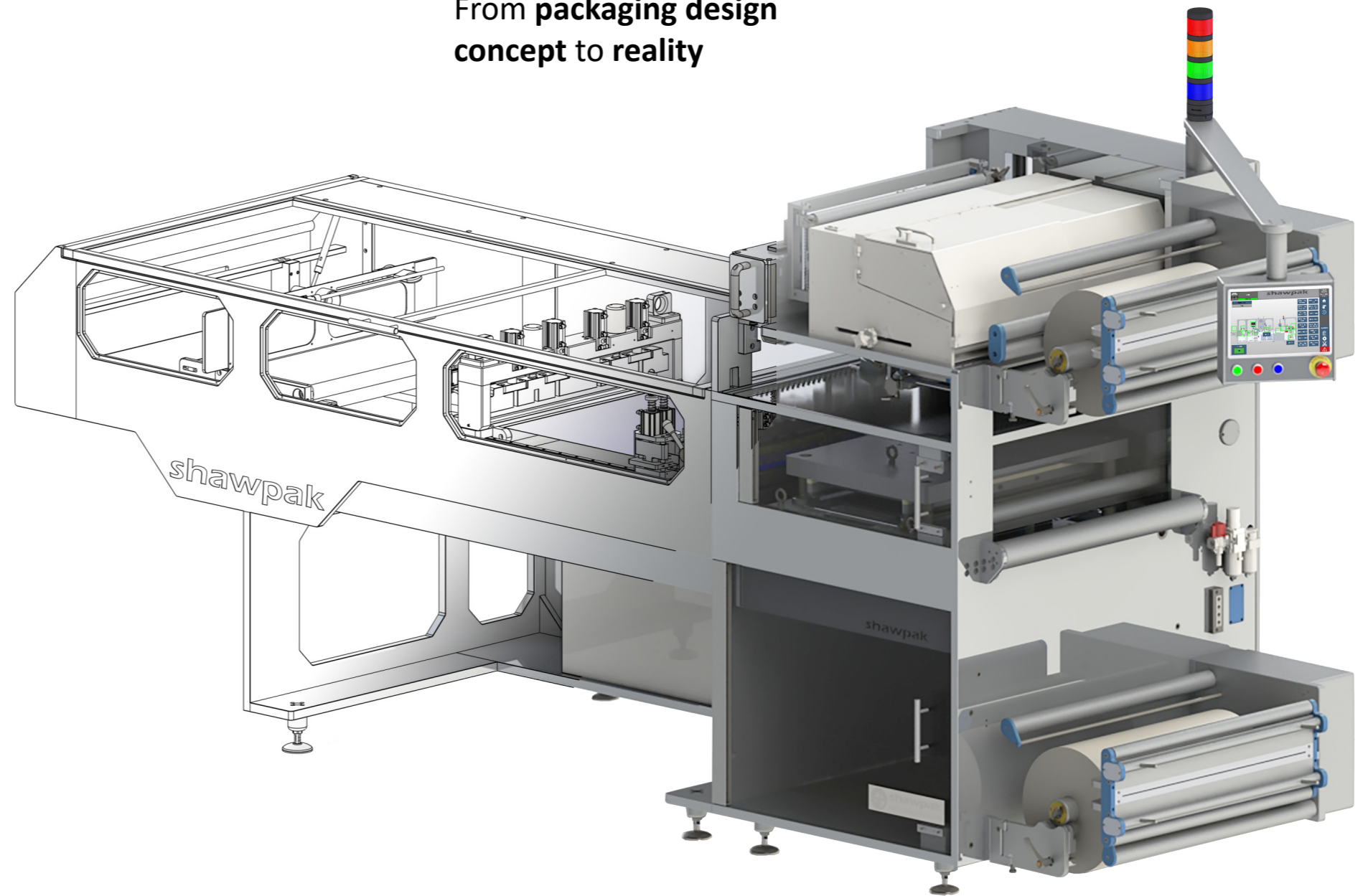
linear pouch machine



From **packaging design**
concept to reality

The **shawpak LP60-30 series** is a revolutionary linear pouch machine offering a solution to your packaging needs that is totally unique.

Designed, manufactured and 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.





- Manual/automatic loading options
- Produces three or four side seal
- Compact bespoke design

The **shawpak** LP60-30 series incorporates the latest technologies and innovative functionality to ensure high efficiencies and low maintenance.

The machine's compact bespoke design gives a small footprint, saving valuable floor space and utilises modular assemblies for quick changeovers and improved accessibility.

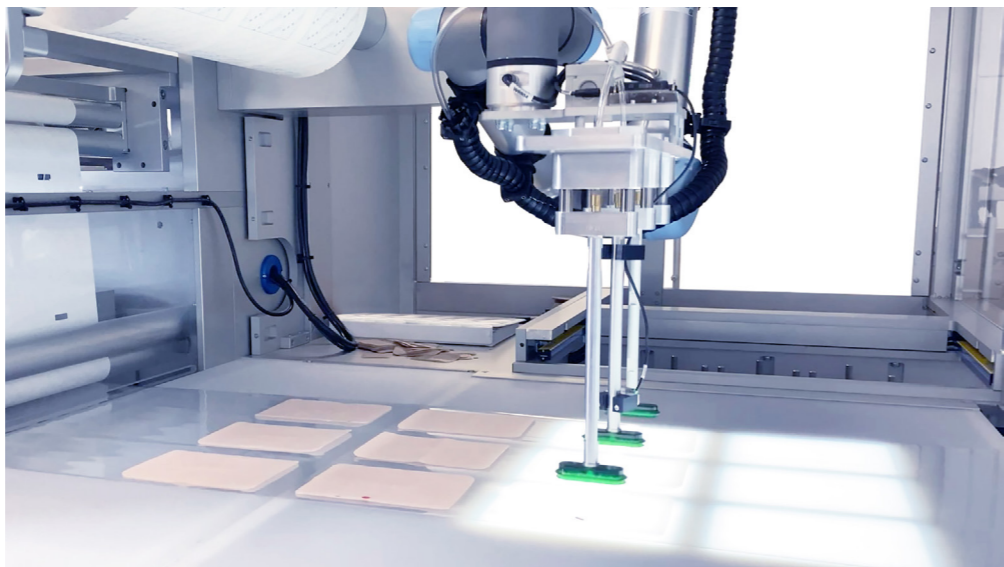




shawpak Robotic Integration

The LP60-30 4SS can be easily automated and is the ideal solution for robotic integration into a production line to avoid double handling and to improve efficiencies. Two dimensional products can be automatically loaded from bespoke designed cassettes utilising pick and place or robotic solutions. The full system can be operated by one person vastly reducing labour whilst increasing output.

shawpak can provide electrical interface for a customer supplied robot for future integration, alternatively we can offer a complete turn key solution and provide an automated robotic assembly which has been set up and tested in-house.



shawpak Medical Packaging on Demand

Take back control of your supply chain and produce your own medical packaging on demand with the **shawpak** LP60-30 series. With this series you'll be able to make your own pouches, allowing you to produce packs, hand fill and then seal within your own production line. Alternatively, the linear pouch machine can be utilised as a 4 sided seal packaging machine packing flat products to a maximum thickness of 5mm on demand and can produce outputs up to 15 indexes per minute.

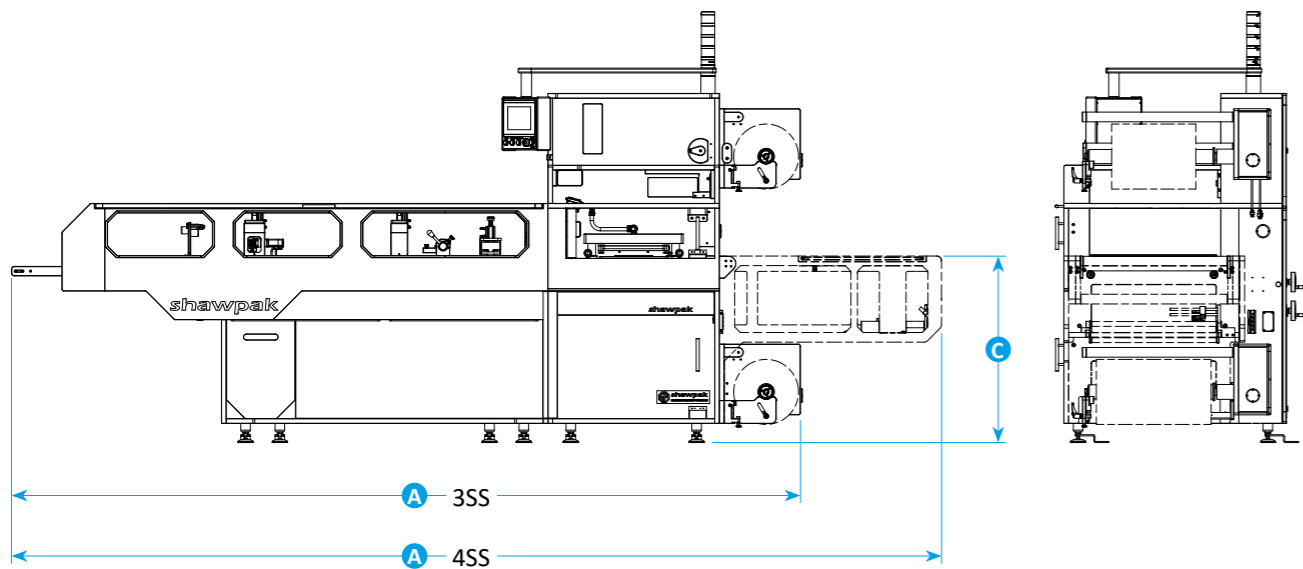
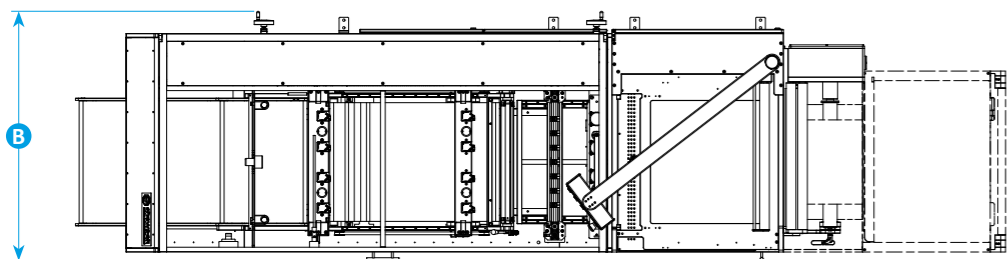
By taking back control you will not only integrate your supply chain but also have the ability to control serialisation and inspection as packs are made, allowing better quality.

The linear pouch machine gives you full flexibility in making pouches on demand from roll stock rather than relying on supply chain to deliver packaging and reduces stock.



shawpak LP Series Machine Dimensions

Model	Max Pouch Size mm (inches)	Machine Dimensions mm (inches)		
		A	B	C
LP60-30 3SS	600 x 300 (23 ^{5/8} x 11 ^{13/16})	3884 (152 ^{29/32})	1301 (50 ^{29/32})	N/A
LP60-30 4SS	600 x 300 (23 ^{5/8} x 11 ^{13/16})	4880 (192 ^{1/8})	1301 (50 ^{29/32})	975 (38 ^{3/8})



At **shawpak** electrical panels are designed, manufactured and built in-house, compliant to UL 508A standards.

The control systems used In the **shawpak** LP60-30 series are Rockwell Allen-Bradley and as standard consists of:-

- Compact GuardLogix PLC
- Kinetix 5300 Servo drives with TLP servo motors.
- 9" PanelView Plus Colour Touch Screen HMI:-
 - Display / editing of all parameters / setpoints (Access level restrictions apply).
 - E.g. Recipe settings, Settings for temperature, pressure, time and speed
 - Machine cycle time and batch counters
 - Machine message banner
 - Alarm alerts
 - 3 levels of login access



Shawpak's LP60-30 series offer a low cost power consumption for all models.

Power Supply:

Voltage: 230v

Phase: Single Phase

Cycles: 50/60hz

Air Supply: 6 bar Minimum – Clean and dry supply





The **shawpak** Linear Pouch Sealing Process

Process 6 - Tear Slitting (optional)

The combined top and base web tear slit creates a tear slit through both the top and base web material. This occurs after the top and base web have been sealed and consists of a punch cylinder which extends the punch units through the web material to create the desired size/shape.

Process 7 - Lane/Edge Cutting (optional)

The pouches go through the lane/edge cut unit, where the pouches are sliced into multiple lanes (if required). Or this can be used to trim the edge of the pouches and comprises of a manually operated rotating mechanism which is lowered to slit the material. For flexibility, the position of each slitting knife can be adjusted as required and unused blade holders can be moved away or removed if not required. Where the edge of the material is trimmed off, the edge trim removal is required to process the waste and remove via pipework into an external trim bin where required.

Process 8 - Index Hitch

The index hitch pulls the pouches through the machine to the next cutting station.

Process 9 - Cross Cutting

The pouches go through the servo driven cross cut unit, where they are cut into individual pouches and dropped onto the indexing outfeed conveyor.

Process 5 - Cross Sealing (optional)

The cross sealing module consists of a number of cross seal cylinders which extend the heated cross seal platen to the web material to seal the top and base webs together. For flexibility the cross seal platen is interchangeable as part of a tool change and can have many different profiles. The machine indexes the web the required number of times to create the required pack length before the cross seal is operated. Each time the web is indexed the seal platen will operate to perform a tram line seal to the material.

Process 4 - Sealing Station

The **shawpak** sealing process includes as standard, Airflex form bellows with digital pressure control and a servo driven toggle lock form head. This system ensures the seal tool produces a perfectly even pressure over the required seal area. The top, bottom web and product (4SS) are fed into the seal chamber, the chamber closes and seals the top web to the bottom web along either the two side edges (3SS) or along three/four sides (4SS).

Process 3 - Product Loading Station (4SS)

Product loading takes place on the loading table at the side of the machine. As the bottom web is passed over the loading table the product is placed on the highlighted area. The 4SS is designed to pack flat products up to a maximum 5mm thickness. Simple manual loading can take place from the loading table right the way through to full integration into an automated production cell.

Process 2 - Base & Top Web Hole Punch (optional)

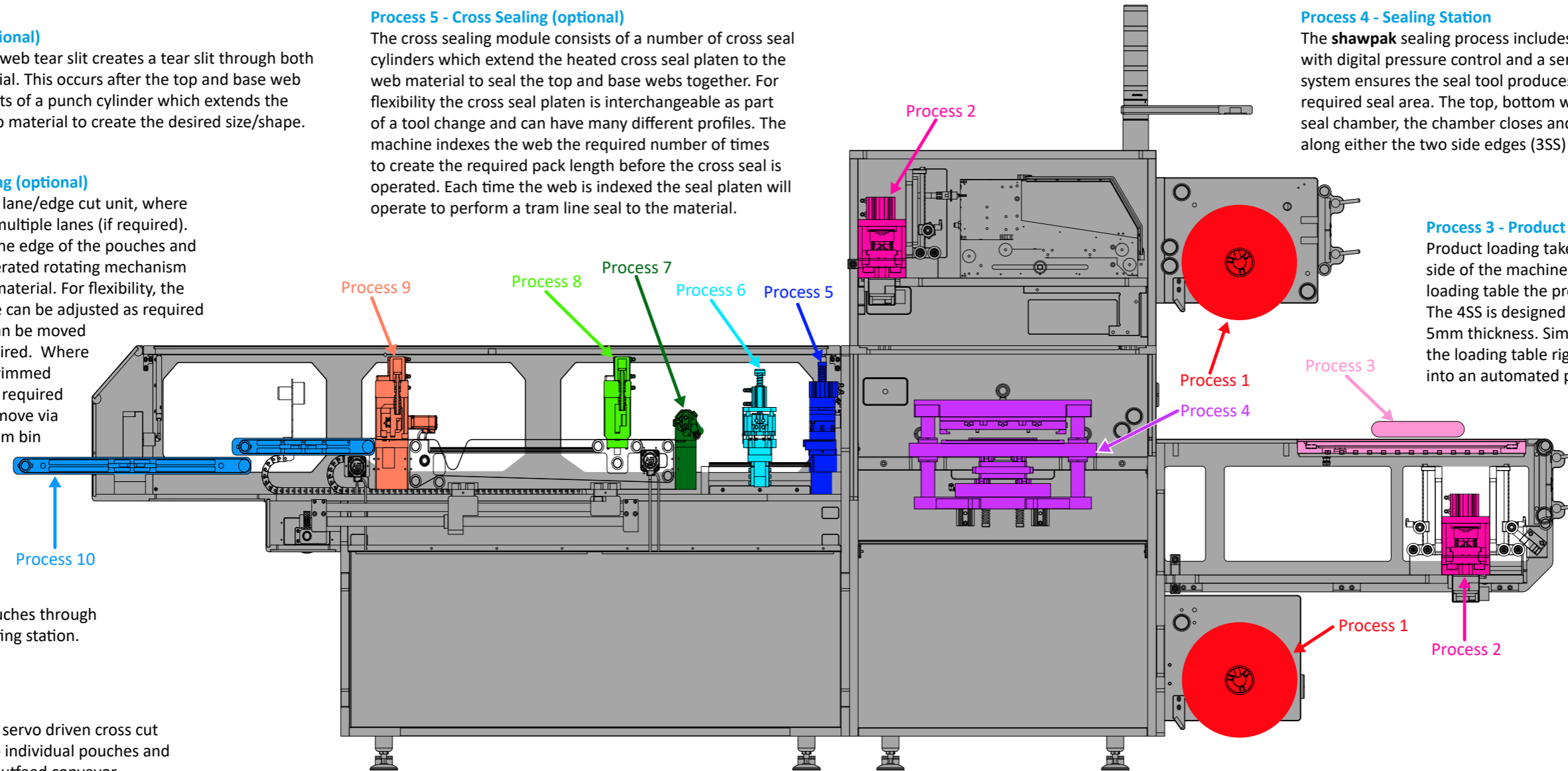
The base & top web hole punch stations use tool specific hole punches & die tools to create a hole on the base & top web material prior to them being sealed together. The module consists of a punch cylinder which extends the punch units through the base & top web material to create the desired shape hole.

Process 1 - Base & Top Web Unwind

Accurate tension and lateral tracking control of the base & top webs are essential for reliable sealing. The **shawpak** has a unique servo motor driven unwind to control tension to the exact tolerance of the material to be used. 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 base & top web indexes through the machine centrally. Lateral position can be adjusted in 0.1mm increments manually on the base & top web. Base & top webs are automatically unwound into the machine.

Process 10 - Outfeed Conveyor

Once the pouches have been cut the completed pouches will eject from the machine via the indexing outfeed conveyor



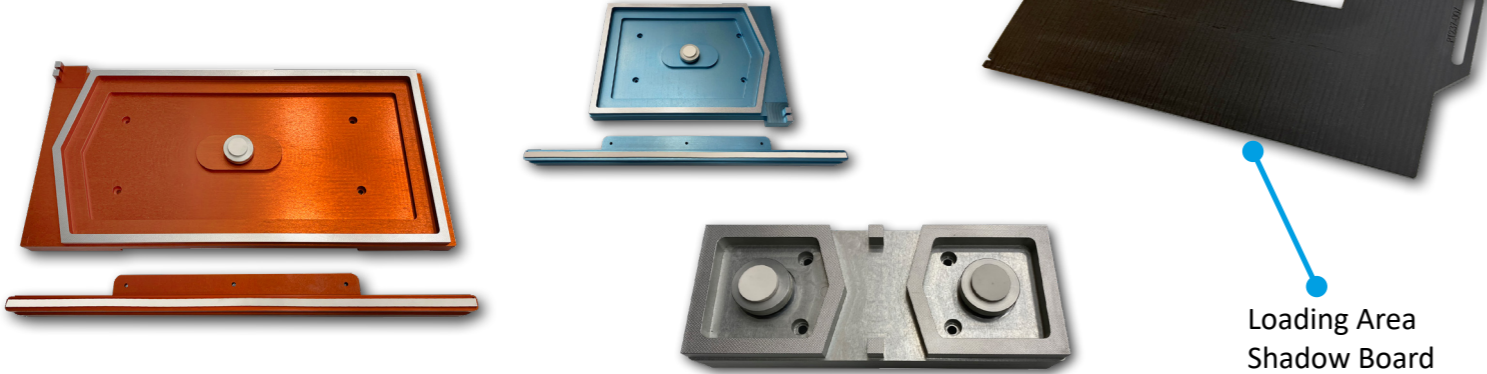


shawpak Tooling

A tool set consists of:

- Sealing Platen & Base
- Chevron Cross Seal (3SS Optional)
- Product Locator/Shadow Board (4SS)
- Thumb Notch Punch (Optional)

The tooling is light, easy to store, economic and above all quick and easy to change. The sealing platens are CNC-machined to accurately suit any seal profile and can be textured or ribbed to suit the pouch material choices.



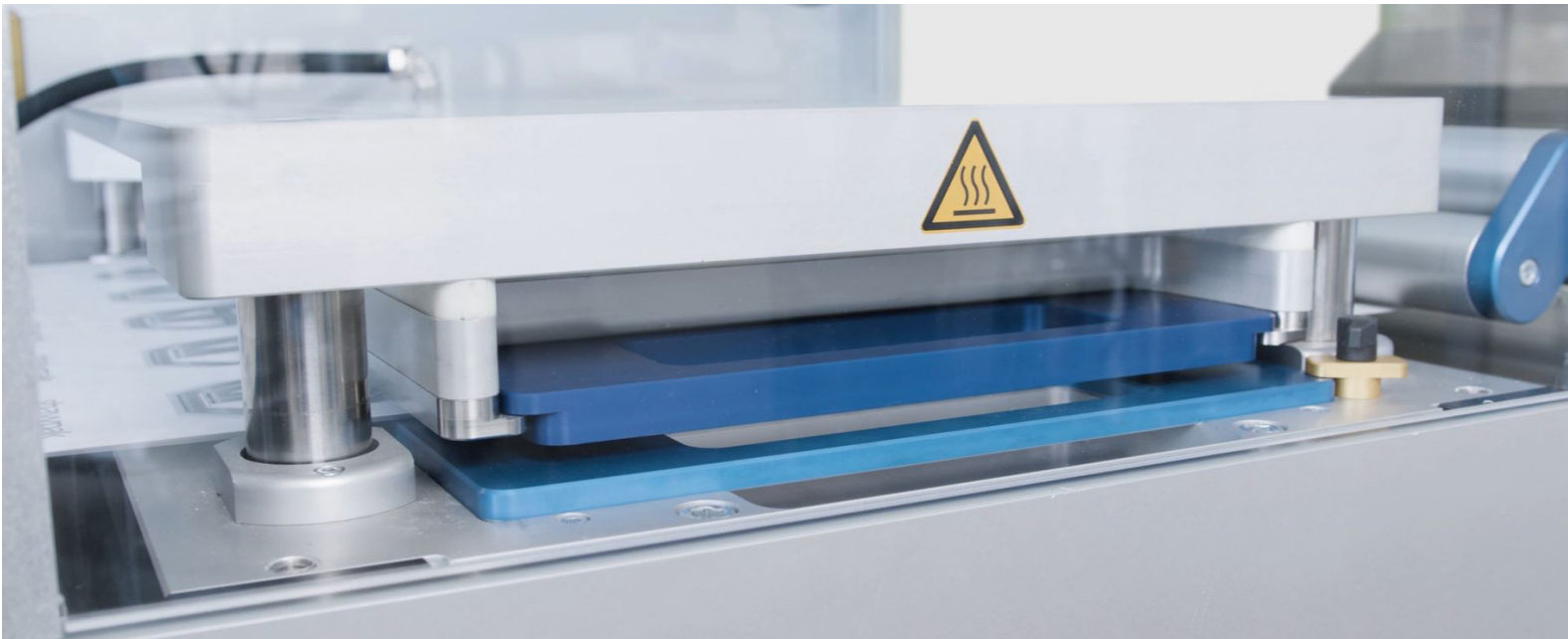
Loading Area Shadow Board

The **shawpak** LP60-30 series is a highly flexible linear pouch machine with capabilities of creating a flat pouch to a maximum size of 300mm(L) x 600mm(W) per cycle or multiple lanes totalling up to 600mm in width and infinite length on multiple indexes. Narrower materials can be loaded onto the machine down to a minimum width of 250mm.

All **shawpak** tooling is designed, manufactured and built in-house utilising the latest CAD/CAM technology.



Tooling Storage Trolley (External)

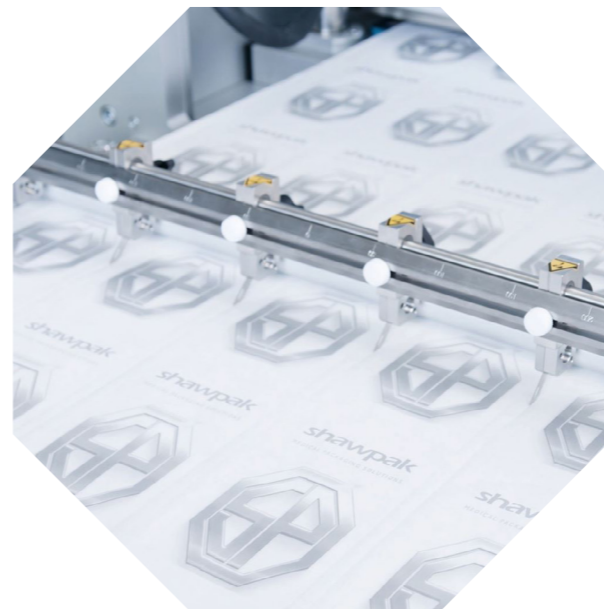




shawpak Specifications

Main Machine	Standard	Option
Index Drive	●	
Clear Acrylic Front Guards & Doors	●	
Operator Interface Mounted on a Swivel Arm	●	
Electric/Pneumatic Enclosures	●	
Bolt Down Machine Feet	●	
Four Colour Light Beacon		○
Sealing Head		
Airflex Form Bellows with Digital Pressure Control	●	
Servo Driven Toggle Lock Form Head	●	
Base Web Unwind		
Base Web Servo Drive Unwind - Ø76mm Mandrel	●	
Base Web Edge Detection - Passive		○
Splice Table		○
Top Web Unwind		
Top Web Servo Drive Unwind - Ø76mm Mandrel	●	
Top Web Edge Detection - Passive		○
Auto Print Registration Sensor for Pre-Printed Materials		○
Splice Table		○
Cutting		
Servo Driven Crosscut	●	
Multi Lane Slitting		○
Hole Punch Station for Thumb Notch		○
Edge Trim Including Waste Extraction		○
Tear Slit Plunge Cut		○
Cross Seal Head		○
Outfeed		
Indexing Outfeed Conveyor	●	
Header Bag		
Header Bag		○

Overprint and Coding	Standard	Option
HD Digital Printer		○
Thermal Inkjet Printer		○
Thermal Transfer Printer		○
In Line Pre-Printed Label Applicator		○
In-line Print and Apply Label Applicator		○
Vision & Inspection		
OCR Vision Inspection		○
Splice Detection		○
Loading Area (4SS only)		
Product Locator Board		○
LED Positional Light Bed		○
External Finish		
Natural Anodise	●	
Control		
9" Colour Touch Screen	●	
Data Logging to SD Card		○
Data Logging via Ethernet Connection		○
Integration		
Robot Loading		○
Production Line Integration		○
Electrical		
Remote Access Module		○
Voltage Surge Protector		○
Anti-Static Bar		○
Other		
Draft IQ/OQ Protocols		○
Tooling Storage Trolley (External)		○
Essential Spares c/w Maintenance Cabinet		○



Lane Slit

The lane slit module slits the processed pouch longitudinally to separate it into individually sealed packs. It comprises of a manually operated rotating mechanism which is lowered to slit the material.

The position of each slitting knife can be adjusted as required.

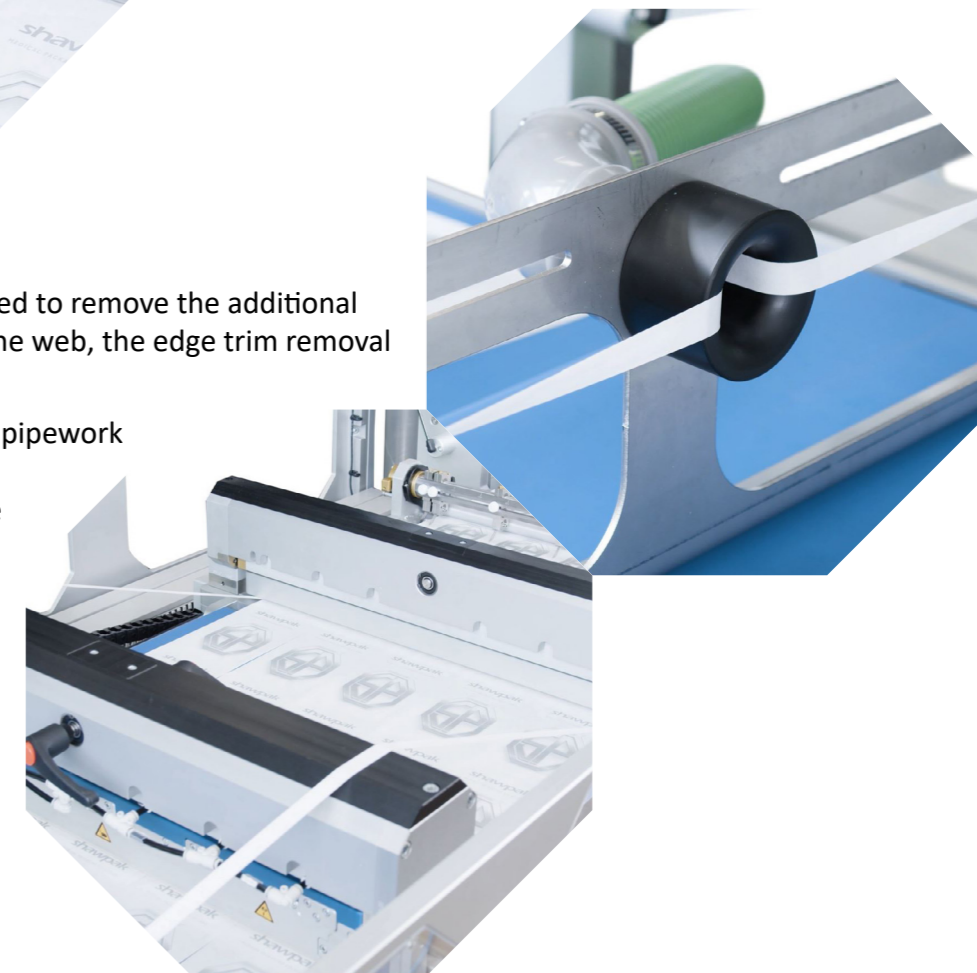
Unused blade holders can be moved away from the material where required. The blade holder can also be removed if not required.

Edge Trim Removal

When the lane slit module is utilised to remove the additional waste material from the edge of the web, the edge trim removal is required to process the waste.

The edge trim removal consists of pipework and bracketry to which a vacuum generator is connected. The waste material is then removed via this pipework.

A vacuum bin can be provided which provides the vacuum air to pull the waste material through the pipework and collates it within the bin.



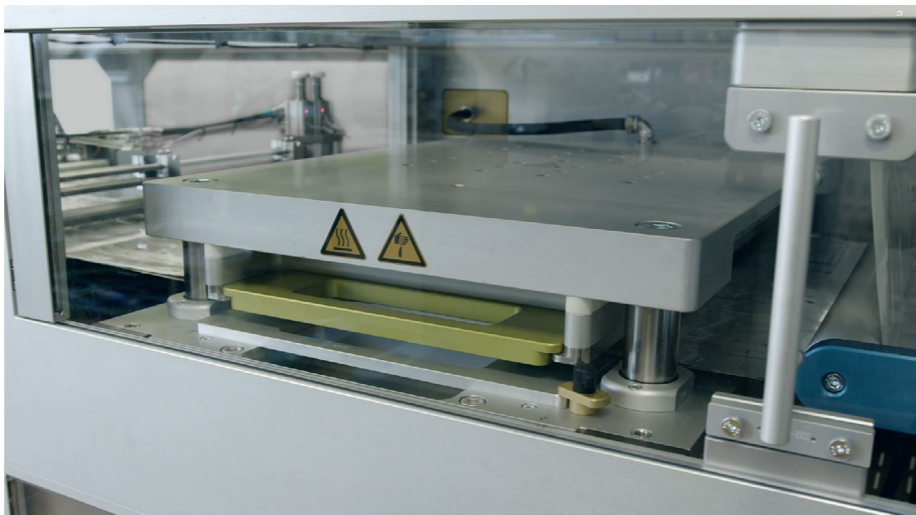


shawpak Servicing & Spares

At **shawpak**, we take pride in working alongside our customers to provide a seamless, ongoing support service to aid continuous production and minimal downtime.

To ensure our customers benefit the utmost, it is important for us to be able to tailor our service plans around our customers individual needs.

Our service specialists are able to define highly economical maintenance plans to provide a worry-free approach to service and maintenance and enhance the performance of your packaging systems.



Setting You Up

shawpak's installation and commissioning process ensures efficiency from day one. As we understand the production process, we are able to set up your equipment line in the most effectual way. Having an installation carried out by one of our experienced service specialists will provide optimum performance and correct OEM set up.



4 Year Total Care Plan

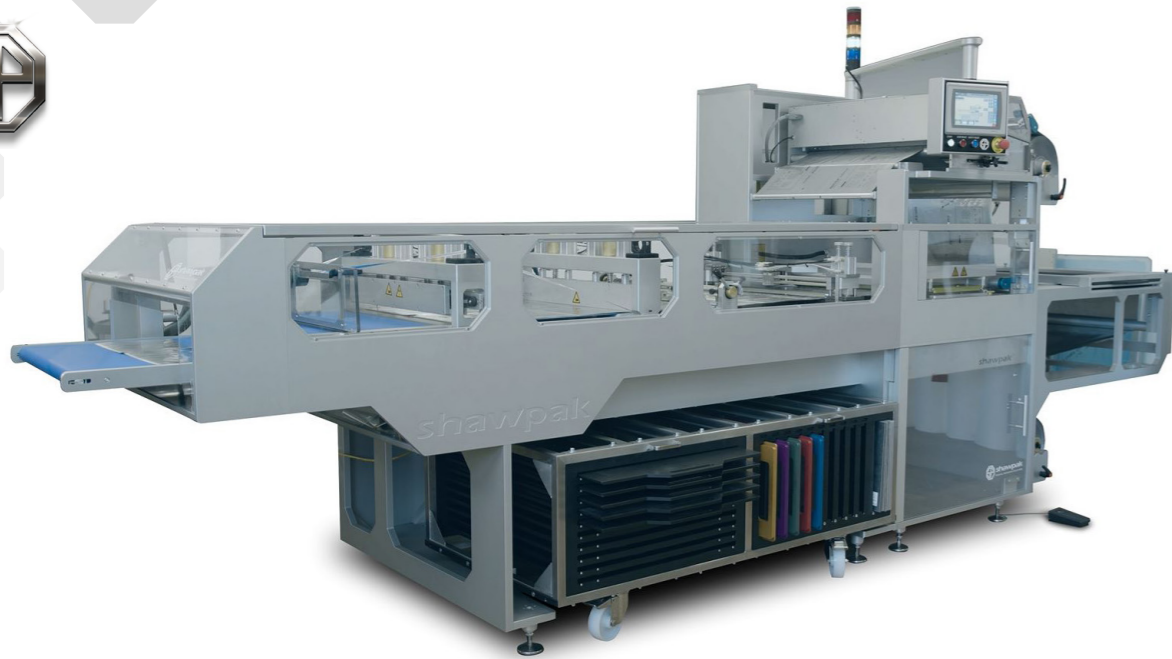
Our 4 Year Total Care Plan is a highly economical preventative maintenance plan we have put together to provide a worry free approach to service and maintenance to ensure increased efficiency and reduced downtime. This plan is based on one visit per annum comprising of a full service visit including on site labour and all mechanical parts changed by a qualified OEM engineer. This plan allows you to have a four year fixed budget for maintenance.

By having a **shawpak** total care plan in place, it means you'll have the benefit of a routine maintenance schedule planned around your production requirements.

4 Year Calibration Plan

Our 4 Year Calibration plan is created for a proactive and easy to budget for approach to calibration. This plan is based on one visit per annum comprising of a full machine and tooling calibration.





shawpak

The creation of the **shawpak** was an invention by David Shaw, CEO of Riverside Medical Packaging.

Following the initial development of the **shawpak** rotary thermoformer, **shawpak** launched at Riverside Medical Packaging Co Ltd in 2018 on the back of 35 years of medical device packaging experience.

From concept to reality **shawpak** design, build and manufacture standard, bespoke, and automated packaging machinery solutions.

Parts are machined in-house at our manufacturing facility, which includes a range of CNC routers, a multi-bar turn mill centre and a range of 3 axis and 5 axis milling centres.

The **shawpak** range of products and services include:

- RT Series: RT32-20 | RT42-25 | RT62-25 | RT82-20
- LP Series: LP60-30 3SS | LP60-30 4SS | LP60-60 3SS
- LB Series: LB63-38
- LT Series: LT63-38
- SS Series
- Integrated Solutions
- Upgrades & Replacement Parts
- Remote Technical Support
- Maintenance Plans
- Training



shawpak are ISO 9001:2015 certified.



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