shawpak

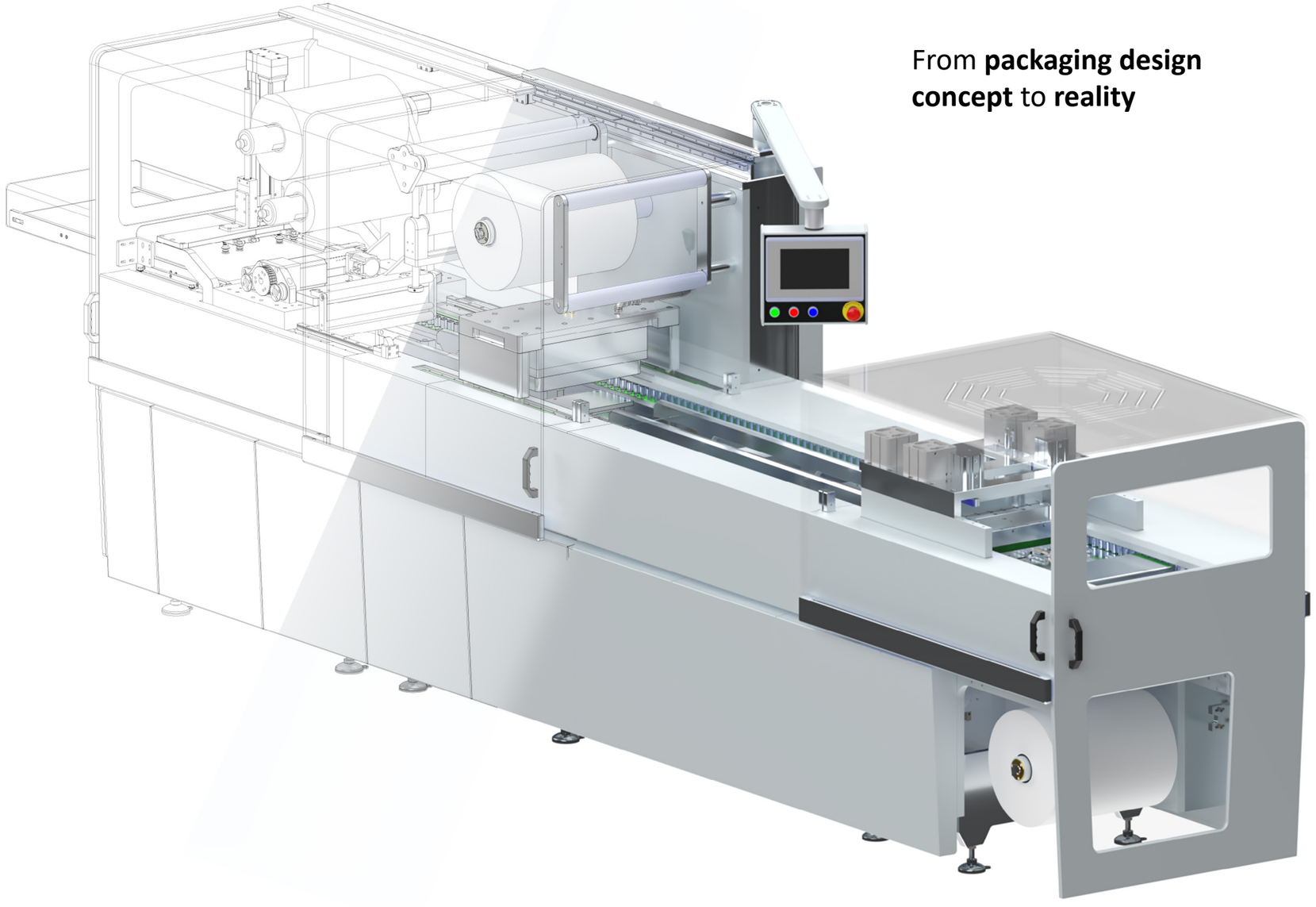
MEDICAL PACKAGING SOLUTIONS



linear thermoforming machine

YOUR DEVICE . YOUR SPACE . OUR SOLUTION

From **packaging design concept** to **reality**



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

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

OUR MISSION

"To provide our customers with innovative packaging machinery designed with a fresh approach to how it's always been done"

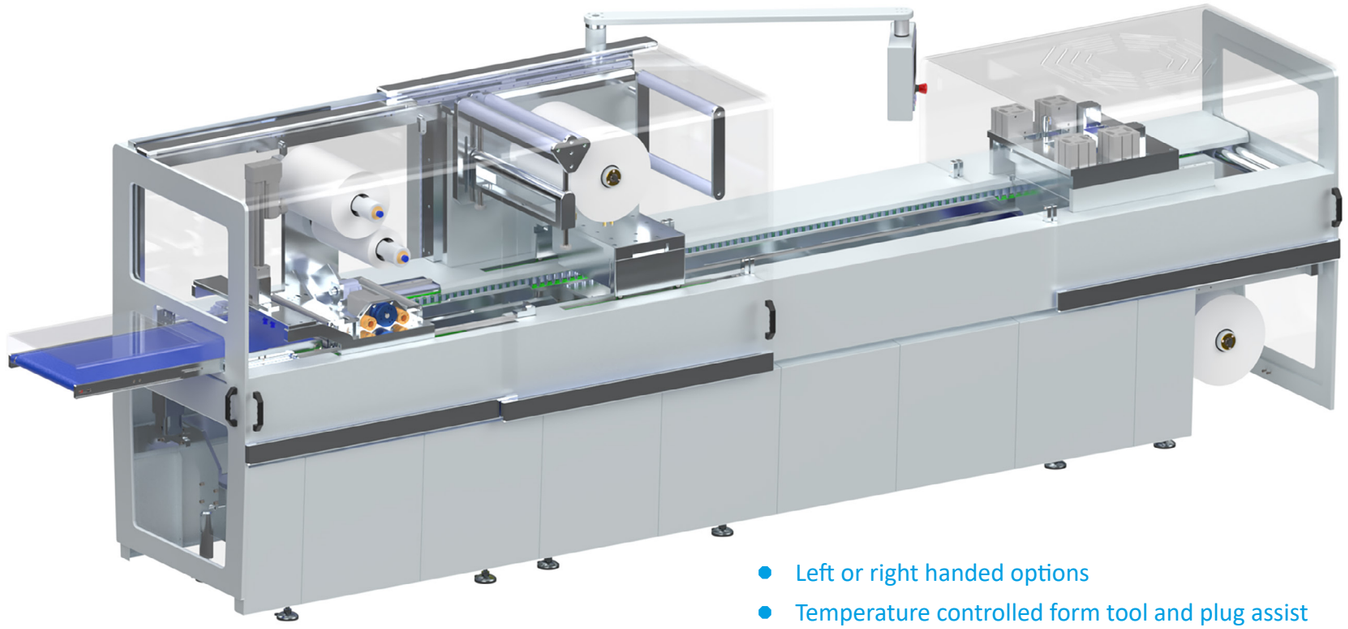
OUR VISION

"To be a world leading packaging machinery company synonymous with the medical device industry"

shawpak LT Range

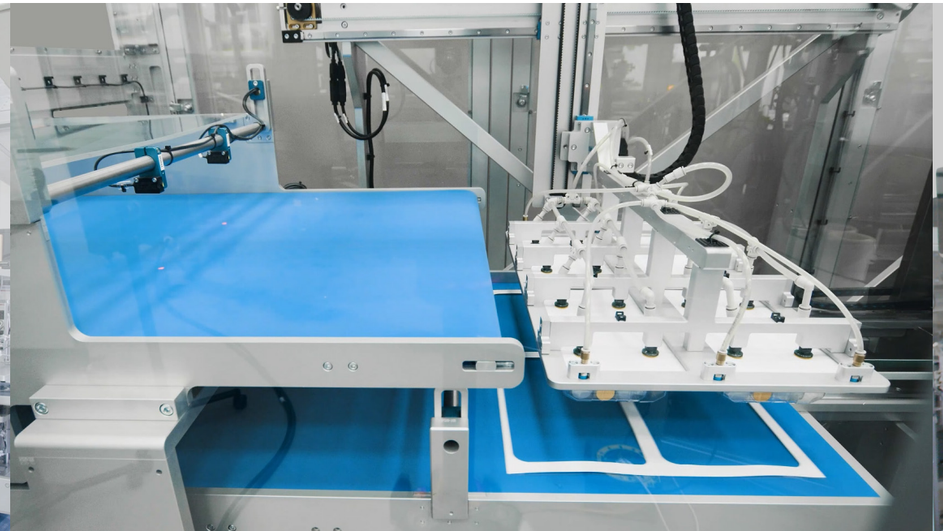
The **shawpak** LT range has been purpose built for the medical device industry, combining precision, compliance and innovation in every design. With extensive integration options and a wide range of bespoke features, each machine is tailored to meet your exact packaging requirements.

Capable of producing larger packs, rigid packs with snap features and complex packs with multiple components, the LT range delivers the flexibility you need without compromising on quality or performance.



- Left or right handed options
- Temperature controlled form tool and plug assist
- Natural anodised aluminium for clean room environment







shawpak Robotic Integration

The **shawpak** linear thermoforming machines can provide a fully integrated packaging line for a complete, compact medical packaging solution. Take back control of your supply chain and produce your own flexible or rigid medical packaging on demand.

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.

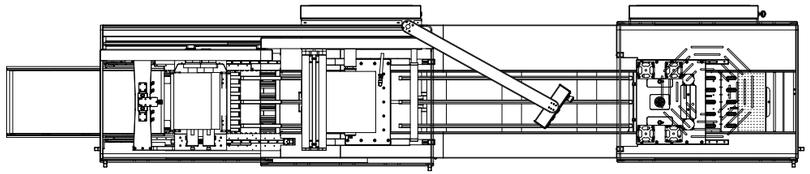
UP AND DOWN STREAM INTEGRATION

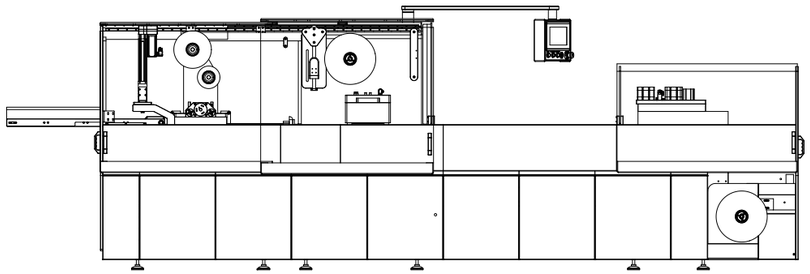


- Integrated primary and secondary packaging
- Advanced vision and inline HD printing integration
- Custom engineered for cleanrooms
- Seamless incorporation of automation

shawpak LT Series

Model	Max Forming Width mm (inches)	Max Index Length mm (inches)	Max Material Width mm (inches)
LT22-18	180 ($7^{3/32}$)	300 ($11^{13/16}$)	220 ($8^{21/32}$)
LT32-28	280 ($11^{1/32}$)	400 ($15^{3/4}$)	320 ($12^{19/32}$)
LT42-38	380 ($14^{15/16}$)	500 ($19^{11/16}$)	420 ($16^{17/32}$)
LT56-52	520 ($20^{15/32}$)	600 ($23^{5/8}$)	560 ($22^{1/16}$)





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

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

- Compact GuardLogix PLC
- Kinetix 5300 Servo drives with TLP servo motors.
- 12” 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 LT series offer a low cost power consumption for all models.

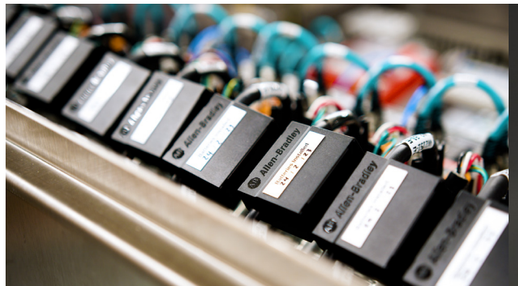
Power Supply:

Voltage: 120~415v

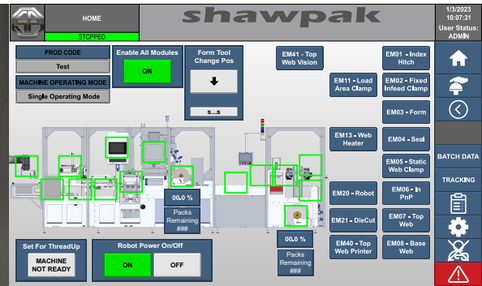
Phase: Three Phase

Cycles: 50/60hz

Air Supply: 6 bar Minimum – Clean and dry supply







The **shawpak** Linear Thermoforming Process

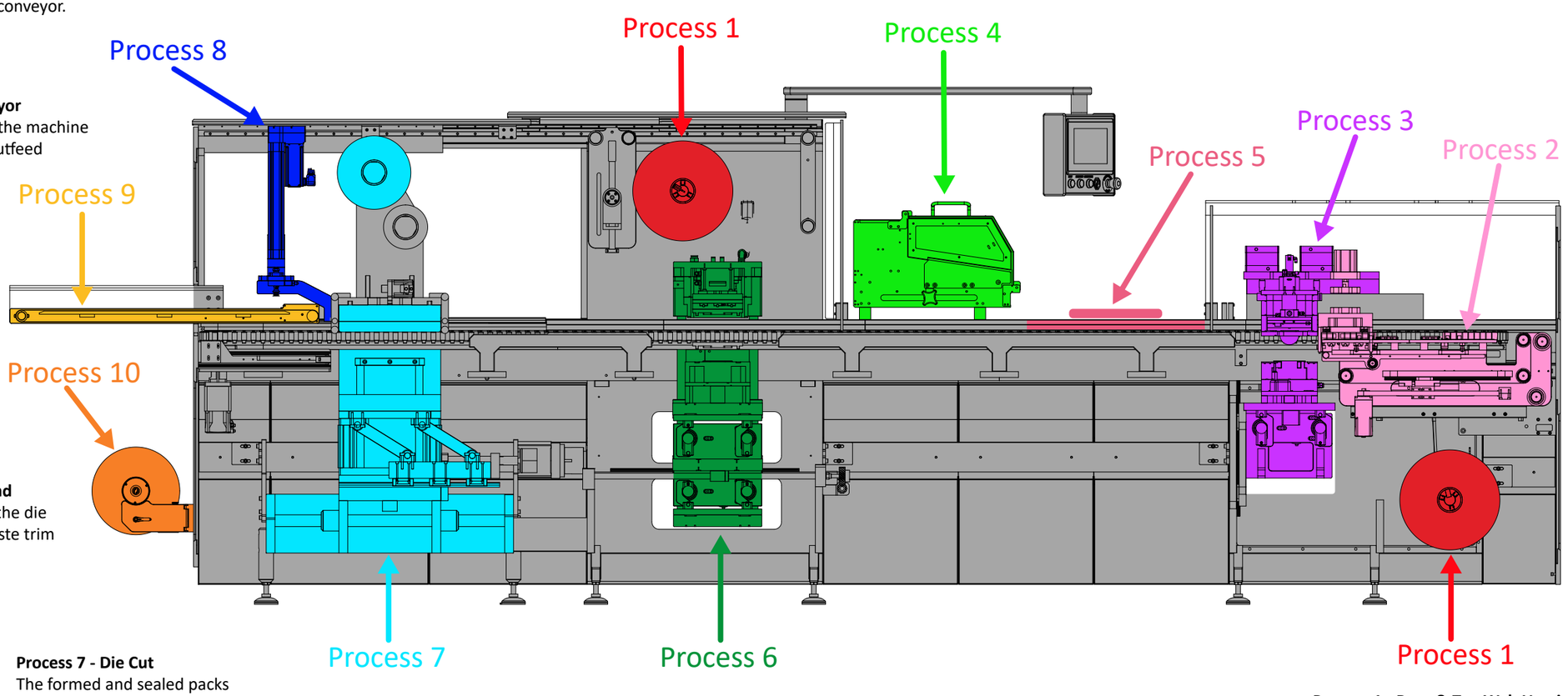
Process 8 - Pick & Place
The die cut packs are romoved from the die cut then placed on the outfeed conveyor.

Process 4 - Top Web Printer (optional)
The Top Web material is printed via inline printer with static and variable print to the customers specific needs.

Process 5 - Product Loading Station
Product is loaded manually or robotically. The loading station is configurable to customized lengths to allow space for multiple products to be loaded . The loading area can be configured with interactive illumination features to indicate when products can be loaded.

Process 3 - Forming Station
The Heated base web is indexed into the form chamber, once the chamber is closed the form is created via positive pressure and/or vacuum. Forming processes can be Female with/without plug, male form, positive pressure or vacuum.

Process 9 - Outfeed Conveyor
Packs are discharged from the machine via a configurable length outfeed conveyor.



Process 2 - Base Web Heater
The base web is heated utilizing contact & non-contact heating processes (application dependent). The process is calibrated and controlled through the machine HMI.

Process 10 - Waste Rewind
The waste material from the die cut is wound onto the waste trim rewind.

Process 7 - Die Cut
The formed and sealed packs are die cut

Process 6 - Sealing Station
The seal station is operated via a servo motor and air pressure giving control of the process to guarantee seal quality.

Process 1 - Base & Top Web Unwind
The unwind systems are driven utilizing a servo motor enabling tension control of materials through the machine.

YOUR DEVICE . YOUR SPACE . OUR SOLUTION

shawpak Tooling

A tool set consists of:

- Male or Female Forming Tool
- Form Heater
- Seal Heater
- Optional Plug Assist
- Die Cut Tooling for Rigid Packs
- Multi-Lane Slitting for Flexible Packs

The LT range offers flexible material and forming widths with variable depths of up to 150mm (5 7/8”).

The unique design provides a maximum overall diameter of 600mm (23 5/8”) of base web material and an optional core size of 76mm (3”) and 150mm (5 7/8”)

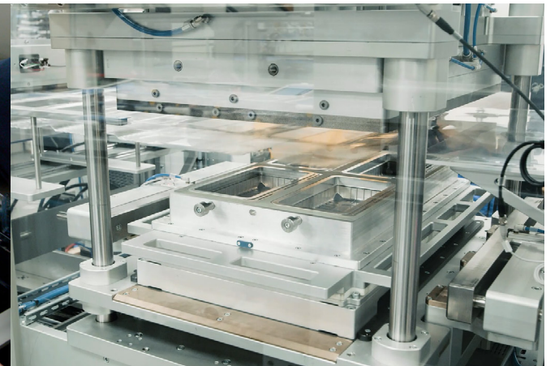
Forming Station

The forming tool is completely bespoke to the product and cavities are designed around the size and shape of the medical device. This can be as simple as a basic rectangle through to a contoured 3D design with embossed surfaces and snap features. For rigid and flexible packs vacuum forming can be featured with a male or female forming tool. Positive pressure and/or plug assist can be integrated with a female forming tool.

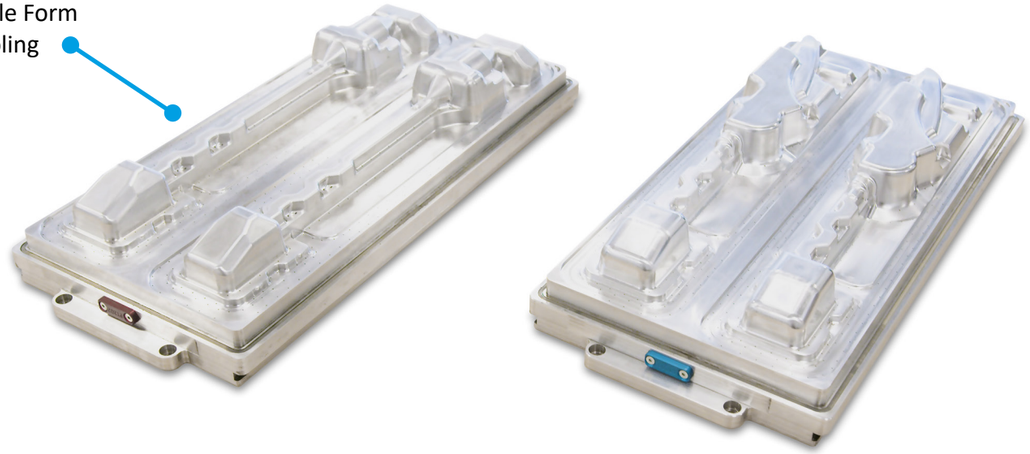
Cutting Station

The **shawpak** LT machine offers a range of cutting capabilities including tear slit plunge cut, multi-lane perforation, plunge cut perforation and ‘C’ hole punch through top and bottom web materials. As a standard the **shawpak** LT machine incorporates edge trim with waste extraction.





Male Form Tooling



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

Female Form Tooling





shawpak Specifications

Main Machine	Standard	Option
Index Drive	●	
Operator Interface Mounted on a Swivel Arm	●	
Electric/Pneumatic Enclosures	●	
Bolt Down Machine Feet	●	
Four Colour Light Beacon		○
Low or High Level Guarding		○
Forming Head		
Digital Form Pressure Control	●	
Female or Male Forming	●	
Plug Assist		○
Vacuum Forming		○
Pressure Forming		○
Sealing Head		
Servo Driven Seal Head	●	
Modified Atmosphere Packaging		○
Heating Station		
Contact Heat		○
Radiant Heat		○
Pre-Heat Tunnel		○
Base Web Unwind		
Base Web Powered Unwind	●	
Base Web Auto Tracking Adjustment	●	
Ø76mm (Ø3") or Ø152mm (Ø6") Mandrel		○
Splice Table		○
Top Web Unwind		
Top Web Powered Unwind	●	
Auto Print Registration Sensor for Pre-Printed Materials		○
Splice Table		○
Cutting		
Multi Lane Slitting (Flexible Packs Only)	●	
Die Cut Station with Pack Ejection (Rigid Packs Only)	●	
Edge Trim including Waste Extraction	●	
Tear Slit Plunge Cut		○
Multi Lane Perforation Cut		○
Plunge Cut Perforator		○
C Hole Punch (top & base web)		○

Outfeed	Standard	Option
Standard Outfeed Conveyor	●	
Customised Reject Station		○
Pack Inverter		○
Additional Length Out Feed Conveyor		○
Overprint and Coding		
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		○
Product Inspection		○
Splice Detection		○
Loading Station		
1.2m Loading Area	●	
Variable Length Loading Bed		○
LED Illuminated Indication		○
External Finish		
Natural Anodise	●	
Control		
12" 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		○
Top and Base Web Deionizers		○
Other		
Draft IQ/OQ Protocols		○
Tool Storage		○
Essential Spares c/w Maintenance Cabinet		○

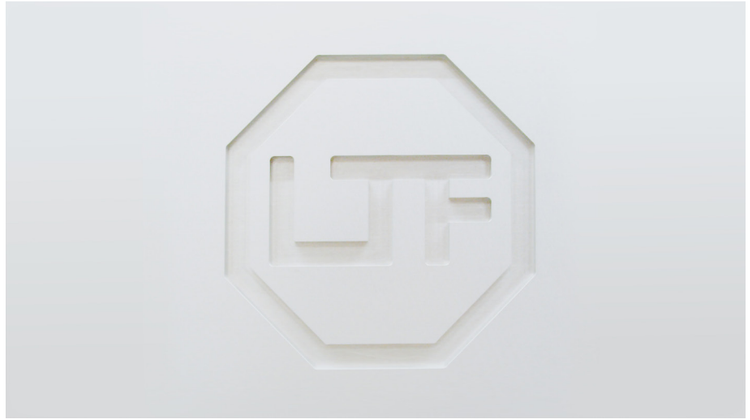


shawpak Servicing & Spares

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 packaging design 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: LT22-18 | LT32-28 | LT42-38 | LT56-52
- DCL Series: DCL42-30 | DCL62-40
- Integrated Solutions
- Upgrades & Replacement Parts
- Remote Technical Support
- Maintenance Plans
- Training

nqa ISO 9001 QUALITY MANAGEMENT — UKAS MANAGEMENT SYSTEMS 0015

shawpak are ISO 9001:2015 certified.

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MEDICAL PACKAGING SOLUTIONS

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