

Product Catalogue







With over 40 years combined experience, we make British-made machinery for the Mattress Industry.

Based near Accrington in Lancashire, all of our machines are British made in-house and are built on rock-solid foundations using our own manufacturing facilities and the latest state of the art machinery equipment (Amada). This gives us full control on every aspect from machine design to testing and PDI. Our team of in-house CAD designers, using the latest SolidWorks™ software enables us to create quality and reliable machine designs.

This philosophy allows us to develop valuable long-term relationships with customers for whom we offer extensive support and technical expertise.

We're a mixture of designers, engineers and problem solvers who love what we do and take great pride in our ability to deliver integrated solutions for the Mattress Machinery industry.

MATTRESS MAKING MACHINES

1.	BCUTTEK	
	3DTEK	
	VBTEK	
	SERGETEK	
	TAKTEK	
	HMTEK	
	HLATEK	
8.	TAPETEK	.∠
	TUFTTEK	
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	MMCTEK	

Shaun Peel | Technical Director

Shaun started his career as an apprentice pattern and tool maker while studying mechanical design engineering at college. He went into designing machinery for the mattress industry in 2002 and, during the following 3 years, completed a degree in integrated engineering technologies at Liverpool John Moores university, with first class honours. During his career from 2002 to early 2017 he completed 13 years within the mattress industry, he also had a few years drawing/designing machinery for the bandsaw cutting industry, can production machinery and large industrial ovens.

FULL SERVICE AUTOMATION CONVEYORS

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CASE STUDIES

We have committed to the Armed Forces Covenant and segment the transformers Community. We complete the contribution that terridos personnels, but in egular and reserved wearants and military filmfills made to our organisation, our community and to the country.

PROLIDLY SUPPORTING THOSE WHO SERVE



Michael Birtwistle | Sales Director

Michael started his career in 1996 as an apprentice electronic engineer, building mattress machines while studying electronics part time for 5 years at college. He went on to installation and servicing the mattress machines around the world. He has installed single machines through to factory automation and project management, working with some of the worlds leading manufacturers of mattresses. During his 20 years in the mattress industry he has helped design and maintain all models of mattress manufacturing machines whilst also providing global online and telephone technical support to customers and technicians.

We're proud that every part of our machines are Made in Britain

We're also well-versed in Export across North America, Canada, Europe, Mexico, and Australia

SCAN THE QR CODE FOR THE FULL RANGE



Mattress Machines



Conveyors

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Machinery for the Mattress Industry

The MattressTek brand represents innovation, quality, and reliability. Our desire to improve and innovate is ingrained within the company ethos. It's our aim to develop a reputation for developing and manufacturing leading-edge technology to rival existing worldwide mattress industry specialists.

All our machines are wholly designed and built on site in modern, purpose built premises just outside Manchester, UK.

Specialising in the design, manufacture, installation and maintenance of mattress making machinery, MattressTek has the expertise to help you improve the overall operational performance and productivity of your business.

Our current mattress machinery products include Tape Edge, Tufting, Fabric Roll Slitter, Handle and Label Attaching machines, SergeTek and Conveyors. We've also developed a full portfolio of mattress making machinery including Border, Panel Cutting and Slitting machines.

BCUTTEK BORDER CUTTING MACHINE A compact, robust, high speed stand-alone border cutting machine. High speed pull-through rubber-covered nip rollers, high-end accurate encoder measuring system and heavy duty guillotine to cut your borders to desired length. Super quiet cutting • HMI Touch screen to configure border length, batch qty, etc. · Material run out detection sensor **MULTI-NEEDLE MACHINE 3DTEK** A high quality multi-needle sewing machine capable of creating different 3D border effects such as adding twin tapes down the edge, 3D air vent mesh fabric strip down the centre or a decorative straight line stitch. • All types of sewing widths and specs available All types of material folders available · Material runout detection for all fabric layers. • Unique inverter driven rewind system to create tighter rolls **VBTEK VERTICAL BORDER MACHINE** Designed to use the latest engineering material and techniques to create a simple to operate yet highly functional machine. The high-speed chain stitch sewing head, mounted on high quality linear rails, coupled with inverter driven motor, ensures consistent square corners on the castellation pattern. Two driven rollers in front and the rear of the sewing head ensure consistent drive and holding the material with minimal stretching of fabric. • Rubber coated drive rollers for accurate feed of material • Material runout detection for all 3 fabric layers · Quick and simple set up of the pattern spacings SERGETEK **DOUBLE OVERLOCKING MACHINE**



Using two inline overlocking sewing heads this machine can overlock a 40m border in under a minute. This machine is an asset in any mattress manufacturing operation. With high speed, high loft, heavy duty sewing heads and material runout sensors and a rewind unit that creates very tight rolls.

- · LH and RH overlocking sewing heads
- · Simple waste material run off, with air blow assistance
- · Independent sewing head on/off function for single/double side serging
 - · Unique inverter driven rewind system



TAKTEK HMTEK

SIDE STITCH / TACKER

A simulated Side Stitch machine which is fast, reliable, British made and with high quality components.

The machine features 4 fully refurbished PFAFF 3306 sewing heads and HMI touch screen for ease of use, easy, guick manual head position and 2/3/4 TAK configuration.

• 4 fully refurbished PFAFF 3306 Sewing heads - 20 stitches per TAK to give a thick TAK

 Speed - can do 1100mm in under a minute with 60mm spacing - in 2/3/4/ TAK configuration





HANDLE MAKER

Handle making machine which is fast, reliable, British made and with high quality components. The machine features a HMI touch screen for ease of use, batch count facility and handle length input.

- 12 needles (3/16" gauge) OR 9 needles (1/4" gauge) Sewing head
 - · Handle material and folder dims
 - Material start width 85mm
 - Handle finish width 58mm
 - stitch width 45mm
 - Purpose made material guide



HLATEK



HANDLE AND LABEL ATTACHING MACHINE

Using a state of the art direct drive programmable electronic pattern sewing machine, incorporating our own fast and simple attaching tooling system to suit your handles and labels.

- Top and bottom tooling to suit your handle and label sizes.
- Fast, simple tooling attachments to allow for fast changes.
- Sewing speed 2800 stitch/min, with high-quality sewing
- User friendly operation with programmable touch screen panel for customising patterns, dimensions and designs.



TAPETEK



MATTRESS TAPE EDGE MACHINE

Designed to handle manufacturer's full product range from 45mm to 546mm to meet today's deeper premium mattress sizes, using one machine.

Height: 1750mm Width x Length: 1950mm x 1879mm

Weight: 600 - 600kg Electrical Requirements: 240V / single phase + neutral / 16 amp



TUFTTEK



TUFTING MACHINE

Designed to Tuft today's deeper premium mattress sizes up to 500mm deep with a 350mm of compression and handling capability of up to 2.1m x 2.1m.

With our new automatic loading height adjustment, mattresses can easily be loaded by hand or directly from a conveyor.

The loading frame can automatically lower to 875mm (adjustable) to be easily integrated with our indexing conveyors to remove the need for manual handling of the mattress.



RSTEK

Optional Additions: Quick Measuring System

- Measuring roll Layer counter
- · Roll release lever and pneumatic material bar assist

ROLL CUTTER / SLITTER

Our fabric roll cutting machine with powerful inverter driven blade and fabric rotation, simple and easy material cutting on a linear slide motion and built in blade sharpener.

A strong yet simple material bar holding mechanism with a built-in unique internal tube clamp and back to basic simple to use controls make this machine an asset to any manufacturer.

- Inverter driven fabric and blade rotation to set cutting speeds
 - Simple and guick internal tube clamping mechanism
 - Standard length of 2.5m rolls (Longer available)
 - Can cut up to 380mm (Larger available)
 - · Easy load and lock system
 - 3 external chucks to grip even the trickiest of rolls



VPTEK



VERTICAL PANEL CUTTER

Fully automatic vertical standing panel cutting machine with a cross cut blade, easy material loading and panel stacking ability.

With a high quality touch screen display with digital measuring facility to achieve the highest cut accuracy possible with centre and edge trimming

blade options to be added to the machine and capability of cutting over 5 panels every minute. · Quality double nip rollers rubber coated for grip and precision



STFTEK



STUFFER

Designed to use the latest engineering material and techniques to create a simple to operate yet highly functional and reliable machine. The mattress stuffer provides a solution to stuffing mattresses into a bag, sock or mattress zip cover with ease.

Automatically detects the dimensions of the product being stuffed and automatically adjust to suit. Conveyor-driven belts with a grippy surface allow powerful drive and compression of the mattress into the bag / sock.

- Easy to operate and ergonomically designed.
 - · High quality touch screen
 - Low noise Fully CE certified



UBTEK



SPRING UNBALER

The Spring Unbaler has revolutionised the way rolled spring packs are unbaled. This new and innovative design makes unbaling your springs, safer, more reliable and saves factory floor space.

It has a unique door sliding and locking system. Packaging rewind and removal method and an internal turntable to assist the product dispense safely and efficiently.

- · Strong, robust and space saving design
- · Bottom internal turntable allows easy rotating
- Door slides around the arc of the machine for space saving
- · Double door locking system, with safety electrical interlock



SCTEK

SEWER / SOCK CLOSER

Designed to effortlessly close fire retardant socks for foam bed units.

Able to work either in line with a mattress conveyor line or perpendicular to the line where as many sewers can be added to speed up production and work safer to meet demand.

• Ergonomic controls with a knee pad controller so the operator can have both hands on the product while being able to slow down, top and restart sewing with just their knee

High quality touch screen





SIDE STITCH / MATTRESS BUILD-UP TABLE

High quality side stitch / clipping table with linear guide rails and cylinders in all 4 corners to lift even the heaviest mattress evenly with limited strain.

Pneumatic toggle to raise and lower the table to any height within the 200mm cylinder stroke to achieve the most ergonomic height for the operator to work at.

- · Extendable sides to increase the width of the table from 1350mm when closed to 1950mm when fully out
- Fully guarded design to make it the best in the market
 - · Also available as a wooden or steel table



HOT GLUE BRIDGE



HOT GLUE BRIDGE

Enables the build up of the various layers of the mattress after applying hot glue onto the underside of the next layer through the conveying of the layer onto the Hot Glue Bridge before laying it onto the already compiled layers waiting on a straight line belt conveyor to allow accurate alignment.

- Full CAD design layout visualisation of your production line available to view and understand the conveyor line proposal
 - Full electrical control circuit project management
 - High quality motor drive
 - Fully CE certified Low noise



TAMPTEK



MATTRESS TAMP

Once all layers of the mattress are layered, the TampTek presses all layers together to secure them and allow the glue to ensure that they are held together securely.

- Full CAD design layout visualisation of your production line available to view and understand the conveyor line proposal
 - · Full electrical control circuit project management
 - · High quality motor drive
 - Low noise Fully CE certified



STACKERTEK / DE-STACKERTEK





MATTRESS STACKER / DE-STACKER

Designed to assist with the stacking and de-stacking of multiple mattresses, and foam products, easing the strain and need for operators to lift.

- · High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products
 - · Full electrical control circuit project management
 - · High quality motor drive
 - Low noise Fully CE certified



BMCTEK



MATTRESS BORDER CUTTING MACHINE

Designed to mark and cut a range of material widths depths and lengths, including materials up to 300mm wide, 50m long and an uncompressed height of upto 35mm.

A fully automated machine with a manual operation mode built in for bespoke cuts, testing or maintenance purposes, designed to make the operating process easy and efficient with low maintenance. It can mark the border material, measure out your desired length of your chosen material and provide a fast and effortless guillotine cut.

Suitable for batch processing and includes run-off and cut sensors

MMCTEK



DIVAN BORDER CUTTING MACHINE

A high quality automated material 'notching' machine, the MMCTek pulls a long length of material down its bed using electronic linear actuators, in unison with a motor driven toothed belt system and a pneumatic guided material arm.

This process happens quickly, at the press of a button. Your desired material is pulled to your desired length and 'notched' at intervals to suite your application using a pneumatic powered industrial press.

Typically used to create corner 'notches' in divan bed borders, greatly aiding the operators in getting a flawless finish when attaching the fabric to the base.



Full Service Automation Solution

Specialising in the design, manufacture, installation and maintenance of mattress making machinery, MattressTek has the expertise to help you improve the overall operational performance and productivity of your business.

Services Include

- Technical Support Installation and Setup
- · Bespoke Machine Designs
- Maintenance
- · Machine Parts
- · Hardware Support
- Warranty and Lifetime Support

Committed To Excellence

- · We adopt a 'customer-centric' approach backed by complete technical support.
- · We are dedicated to delivering a reliable, consistent and high-quality service at all times.
- This philosophy enables us to develop valuable long-term relationships with customers for whom we offer extensive support and technical expertise.

All our machines are wholly designed and built on site in modern, purpose-build premises just outside Manchester, UK.



Conveyors

Focused on high performance, only using leading suppliers and high-quality components to reduce downtime and improve efficiency,

MattressTek machines are designed to be maintenance friendly. Mechanical and electrical assemblies can be easily replaced and simply plugged in, reducing the need for an electrical/mechanical technician.

CTEK STRAIGHT LINE BELT DRIVEN CONVEYOR • Can be added onto any existing conveyor line for full factory automation • High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products • Full CAD design layout visualisation of your production line available to view and understand the conveyor line proposal • Full electrical control circuit project management · High quality motor drive Fully CE certified Low noise **CITEK BELT DRIVEN CONVEYOR** Designed to flawlessly merge with all of our other conveyors • Can be added onto any existing conveyor line for full factory automation • High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products • Full CAD design layout visualisation of your production line available to view and understand the conveyor line proposal • Full electrical control circuit project management · High quality motor drive · Low noise • Fully CE certified STRAIGHT LINE BELT DRIVEN CONVEYOR FOR DIVAN **CTEK-DIVAN** • Can be added onto any existing conveyor line for full factory automation · High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products • Full CAD design layout visualisation of your production line available to view and understand the proposal • Full electrical control circuit project management · High quality motor drive Fully CE certified · Low noise **GRAVITY ROLLER CONVEYOR GRAVTEK** A high quality straight line roller-driven conveyor, designed to transport heavy products to areas of the factory facility. Bespoke sizes available to flawlessly fit into current existing conveyor line. • Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor Fully CE certified · Low noise

BUNPUSHER

90 DEGREE ROLLER CONVEYOR



- Designed to flawlessly merge with all of our other conveyors
- Can be added onto any existing lines for full factory automation
- · High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products
- Full CAD design layout visualisation of your production line to view and understand the proposed conveyor
 - Fully CE certified
 - Low noise



C90TEK

90 DEGREE MATTRESS TURNING CONVEYOR



A high quality multi-directional belt and roller driven conveyor with two high powered efficient motors to drive in X and Y direction and powerful pneumatic cylinders to lift the 3 centre belts and drive the product off at 90 degrees in either direction.

- Designed to flawlessly merge with all of our other conveyors
- Can be added onto any existing lines for full factory automation
- High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products
- Full CAD design layout visualisation of your production line to view and understand the proposed conveyor
 - Fully CE certified
 - Low noise



FLIPUPTEK

FILL IN CONVEYOR



A simple way of creating a gap in a conveyor line to allow operators to get to the other side. Two large pneumatic cylinders raise and lower the conveyor into its horizontal / vertical position with safety legs to hold it.

When the conveyor is in the horizontal position it acts like an extension of the standard conveyor 'CTEK' it is attached to.

- Can be added onto any existing conveyor lines
 - · High quality specialised efficient, reliable
- Full CAD design layout visualisation of you production line available to view and understand the proposed conveyor



BRIDGETEK

HEAVY DUTY MATTRESS ROTATING CONVEYOR



Our unique walkway conveyor acts as a straight line belt driven conveyor that can open up a gap of over 3m to allow factory traffic to pass through.

It has 2 belt drive conveyors powered by 2 powerful 0.75Kw motors and capable of moving in forward or reverse. The machine is designed to be

strong and robust with 4 large rotating motors / gearboxes to ensure reliability and safety of the lifting mechanism.

- · Heavy duty rotation drives to lift the conveyors to vertical position
 - High quality specialised efficient, reliable



180FLIPTEK



MATTRESS FLIP CONVEYOR

Automatically flips any mattress up to 2.1m x 2.1m.

Comprising two powered conveyor belts, a large robust rotation motor / gearbox and pneumatically operated rear gate.

We offer numerous mattress flipping / 180 turn conveyor units, to accommodate any manufacturers need. This machine will flip a mattress 180 degrees and removes the need for two operators to flip.

- Can be added onto any existing conveyor lines
 - · High quality specialised efficient, reliable
- Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor
 - Fully CE certified



CATEK



CENTRE ALIGNER

Central alignment conveyor automatically conveys a product onto the machine, detects the size and squares the product into the centre, then feeds it onto the next conveyor or machine in the mattress line.

Perfect for aligning different size mattress products centrally.

- · Can be added onto any existing conveyor lines
 - · High quality specialised efficient, reliable
- Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor
 - · Full electrical control circuit project management
 - · High quality motor drive
 - Fully CE certified



BROTATETEK



ROTATION CONVEYOR

A heavy duty product / mattress conveyor capable of lifting over 500kg rotating in intervals of 90 degrees (e.g. 90° / 180° / 270° / 360°).

- · High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products
 - Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor
 - Full electrical control circuit project management
 - · High quality motor drive
 - Fully CE certified



ROTATETEK



HEAVY DUTY ROTATION CONVEYOR

A heavy duty product / mattress conveyor capable of lifting up to 750kg. X frame rotates it in intervals of 90 degrees (e.g. 90°/180°/270° / 360°).

With 4 belt drive conveyors powered by 2 powerful 0.75Kw motors capable of moving in forward or reverse.

- Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor
 - Full electrical control circuit project management
 - · High quality motor drive
 - Fully CE certified



BC90

HEAVY DUTY ROTARY CONVEYOR



Designed to use the latest engineering materials and techniques to create a simple to operate vet highly functional and reliable conveyor.

The BC90-TEK is a versatile conveyor capable of conveying heavy loads in any angular direction, full 360 degree capability.

- Can be integrated and linked with any existing conveyor line.
 - Full integration and turnkey solutions can be offered to suit the customers needs.
 - High quality specialised efficient, reliable
 - Low noise
 Fully CE certified



ICONTEK

INSPECTION CONVEYOR



Makes inspecting mattresses easy, quick and safe with lifting arms to raise the mattress by 90 degrees in order to flip it over with minimal labour.

- High quality specialised efficient, reliable, high speed non-marking conveyor belt that can be used on taped and non-taped products
 - Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor
 - Full electrical control circuit project management
 - · High quality motor drive
 - Low noise Fully CE certified



ROLLPACK

POCKET SPRING BED ROLL PACKER



The Roll Pack feeds beds of pocket springs into a roll of packing paper ready before being wrapped and pushed onto a pneumatic positioner which raises the packed roll and stands it up onto a pallet.

Comprising a Straight Line Belt Conveyor with Flip belt, the bed of pocket springs feeds into the compressor which flattens it to roll onto and around the rotating roll of paper. Once rolled, the paper can be cut and taped to seal before being pushed off the rod onto a waiting structure which supports the roll with a pneumatic rise and supports it to stand up at a 90 angle ready for palletisation. Allows wrapping of 8 beds per session.

- · High quality specialised efficient, reliable
 - Fully CE certified



SHUTTLETEK

HEAVY DUTY BELT CONVEYOR ON TRACK



The Shuttle Conveyor feeds multiple belt conveyors, from the foam cutting saw, using a Heavy Duty CTek straight line belt conveyor which runs along a track.

We offer a range of conveyors that are used to transport, rotate, turn and flip foam blocks and buns for a variety of industries.

- Can be added onto any existing conveyor lines
 - · High quality specialised efficient, reliable
- Full CAD design layout visualisation of your production line available to view and understand the proposed conveyor
 - Full electrical control circuit project management
 - · High quality motor drive
 - Fully CE certified



across the world.

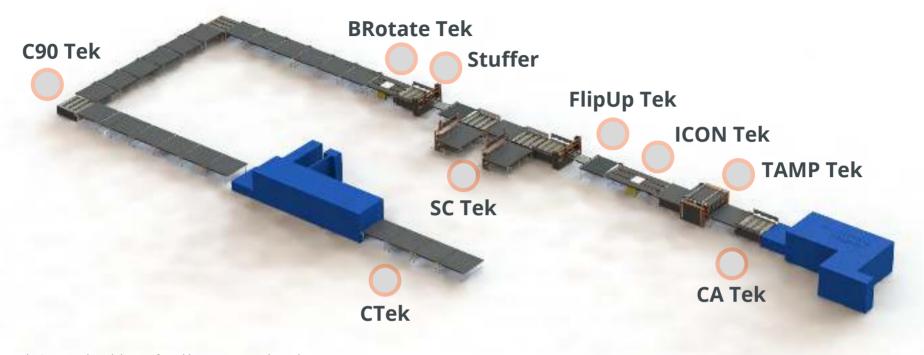
Export and International Trade



Including: California, Denver, Mississippi, North Carolina, Mexico, UK, Europe, Asia

Australia: Brisbane, Beard, Balwyn

CASE STUDY: Full Automated Glue Lamination Line



There was a desire to reduce labour of, and by, operators along the production line, as well as increasing capacity and speeding up production, whilst ensuring minimal health and safety risks.

They also wanted to minimise space.

We presented our range of machines that meet those needs and found that they could also benefit from:

- Loading into line automated to a programmed time sequence
- Producing 450+ on each 8-hour shift
- The addition of sock closers to the side of the main line, between being filled by the fire sock stuffer and cover stuffer, to prevent delays and reduce slowing down production as this is the element that takes the longest
- Label adding before mattresses are rolled and packed for transportation.



This was the 7th line we have installed for this client.

The machines they have include:

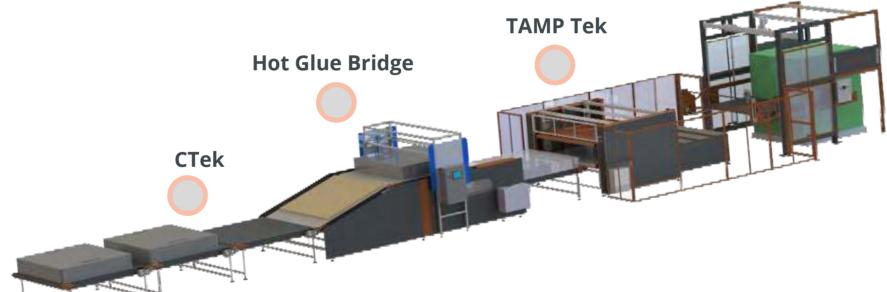
CTek Belt-driven Straight Line conveyors
C90 90-degree conveyors
BRotateTek
2x STFTek Stuffers
2x SCTek Sock Closers
1x FlipUpTek (with Rollers) – Fill In/Drop down conveyor
ICONTek Inspection quality control conveyor
180FlipTek 180 Flip/Rotation conveyor.

CASE STUDY: Hot Glue Melt (Hybrid) Spring Layer Automation Production Line

There was a desire to reduce labour of, and by, operators along the production line, as well as increasing capacity and speeding up production, whilst ensuring minimal health and safety risks. They also wanted to minimise space.

We presented our range of machines that meet those needs and found that they could also benefit from streamlining the whole line with programmed automating, with the only operator input being the feeding of foam layers onto the belt-driven straight-line conveyors ready to be sprayed with hot glue, layered on the Hot Glue Bridge, pressed by the TAMPTek before Centre Alignment and being stacked ready for an operator to move the pallet.

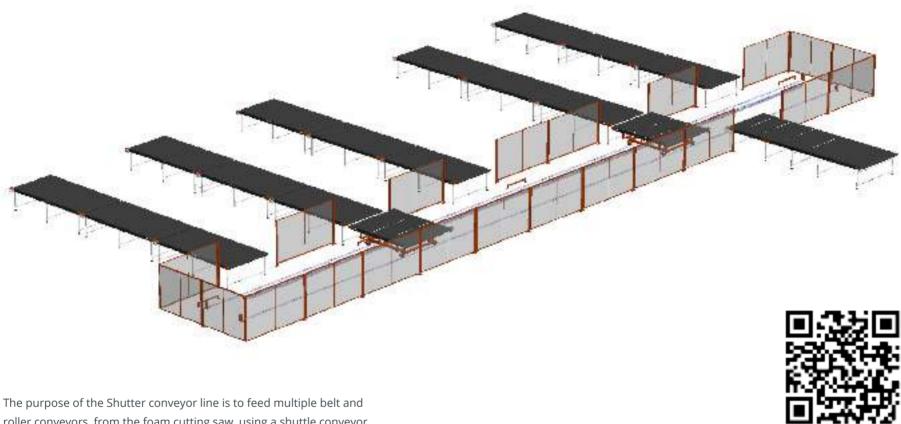




The machines they have include:

CTek Belt-driven Straight Line conveyors
Hot Glue Bridge
TAMP Tek
CA Tek
Stacker.

CASE STUDY: Foam Block Saw Shuttle Conveyor Line



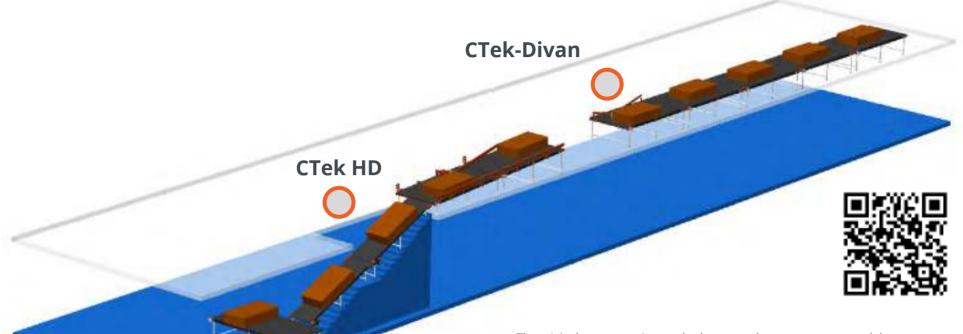
roller conveyors, from the foam cutting saw, using a shuttle conveyor which runs along a track.

Working with the operations team, we liaised via video calls to establish their requirements and matched this with a to-scale virtual walkthrough of their current line to identify how the machines would fit into the existing line and where they could use other conveyors from our range. Our designers instigated the seamless addition to the line by ensuring minimal space wastage and the placement of multiple machines along the line to speed up various aspects. This assisted the installations for the fitters on-site.

Our conveyors are designed and made to handle the processing and transportation all sizes of foam block and foam buns.

The machines we installed include: Heavy Duty CTek Belt-driven Straight Line conveyors and Shuttle conveyor

CASE STUDY: Full Automated CTek-Divan Bed Base Conveyor Line



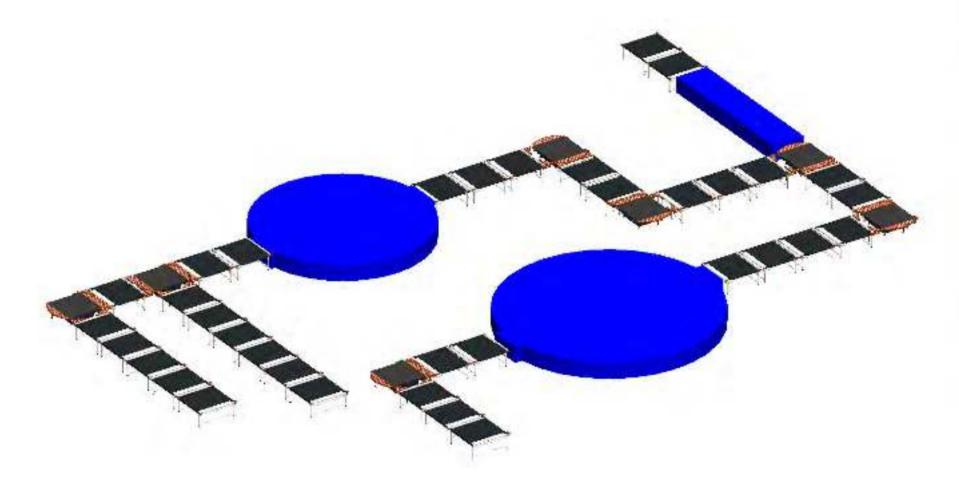
The machines they have include:

CTek-Divan Belt-driven Straight Line conveyors CTek-Divan HD Straight Line conveyors Downward incline adjustment and directional guidance guards The original transportation method to move the mattresses around the facility and production line and down to the lower floor, for loading into logistics, was the use of wooden planks to slide them over a downward staircase with no guided directional guards to reduce injury to operations and damage to the site. This also risked damage to the products themselves too.

There was a requirement to ensuring minimal health and safety risks, reduction of labour of, and by, operators, as well as increasing capacity and speeding up transportation, along with best use of space and ease of automatically guiding the mattresses to where they needed to be.

We presented our range of machines that meet those needs and found that they could also benefit from automatic in-feed and we were able to adapt our CTek for Heavy Duty use and CTek-Divan Belt-driven Straight Line conveyors to deal cater to the steep downwards incline of the staircase, as well as the addition of alignment guiding guards to accurately position the divan bases onto the downward conveyor.

CASE STUDY: Foam Block Saw Conveyor Line

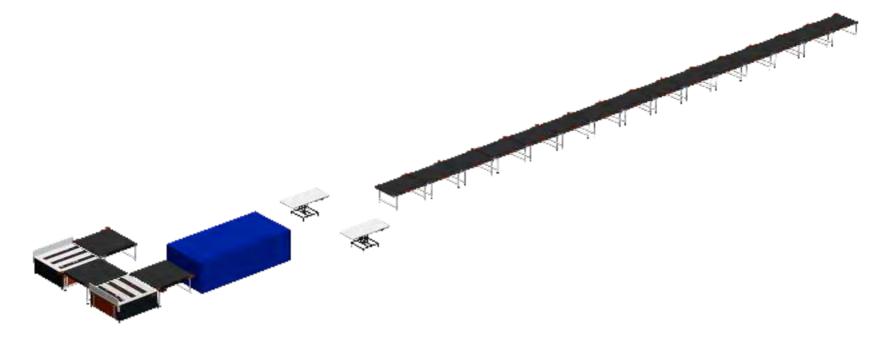


There was a desire to reduce labour of, and by, operators along the production line, as well as increasing capacity and speeding up production, whilst ensuring minimal health and safety risks. They also wanted to make best use space.

We presented our range of machines that meet those needs and found that they could also benefit from automating most of the line and including machines to rotate foam blocks around, between and feeding into, saws and cutting machines, carousels and convoluter.

The machines they have include: CTek Belt-driven Straight-line conveyors, Heavy Duty Straight-line Incline conveyors, BC90 90-degree conveyors and GRAVTek Gravity Roller conveyors.

CASE STUDY: Divan Bed Base Conveyor Line



This production line transports divan bed bases (of various size) from one end of the factory to two inspection tables before being fed into a wrapping machine, manoeuvred by two 90-degree rotations, through a passage around into the storage area where it moves over gravity roller conveyors ready to be lifted onto racking.

There was a desire to reduce labour of, and by, operators along the production line, as well as speeding up movement and transportation, whilst ensuring minimal health and safety risks. They also wanted to minimise space.

We presented our range of machines that meet those needs and found that they could also benefit from automating the line.

The machines they have include:

Heavy Duty CTek Belt-driven Straight Line conveyors to transport the bases and two C90Tek 90-degree conveyors to navigate the two 90-degree turns into the storge area.

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Heavy Duty CTek Belt-driven Straight Line conveyors to transport the bases and two C90Tek 90-degree conveyors to navigate the two 90-degree turns into the storge area.

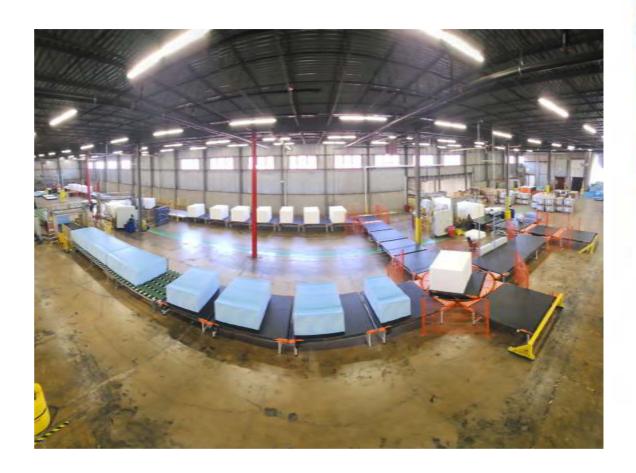
CASE STUDY: Foam Block Processing Line

Transports heavy duty foam blocks and buns (of various size, weight, type and density) onto a choice of two processing lines.

Once blocks are loaded onto the conveyor, the operator is able to decide which line of conveyors the block follows, depending on the type of foam and it's process - a saw, carousel or next step in the production process.

The line replaced the time consuming process used prior of using fork lift trucks and operators to move the blocks between machines. This risked damage to the product, machines and health & safety of operators.

The machines they have include: Heavy Duty CTek Belt-driven Straight-line conveyors and various BC90 90-degree Multi-directional conveyors.





CASE STUDY: Bespoke Round Foam Handling Conveyor Solution



The machines they have include:

Bespoke Belt-driven Shuttle Conveyor

– Bespoke Roller-driven Gravity Conveyor with Pneumatic Cradle

The customer came to us to resolve the problem of loading their round rolled foam bun compressing machine.

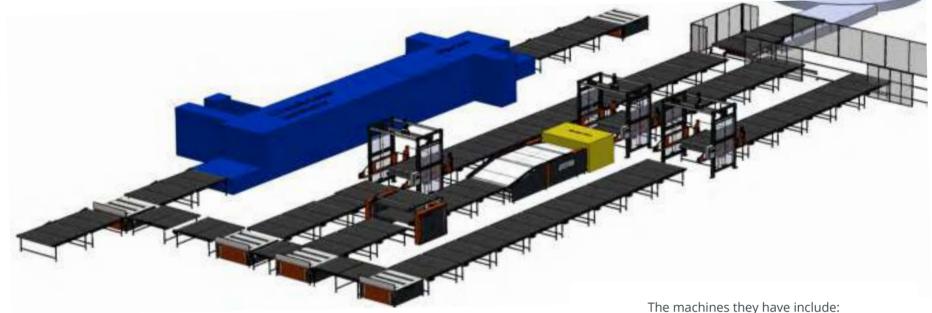
Their previous method was for two engineers to manually load, or use a forklift to load, the rolls of foam into the machine.

This risked health and safety issues, meant excessive and unnecessary strain on operators and that the machine would not always be usable without multiple operators. This would also slow down production.

We considered the space and problem and came up with the addition of a shuttle conveyor to match some of the existing ones they use, along with a pneumatic cradle that would raise the rolled foam bun into the belt of the compressor and retrieve it when the roll compression was complete and the wrapped roll, released from the machine.

The cradle then lowers and stablises, before the rear of the cradle rises to an incline to allow the roll to manoeuvre off ready for the next stage.

CASE STUDY: Mattress Foam De-Stacker Line

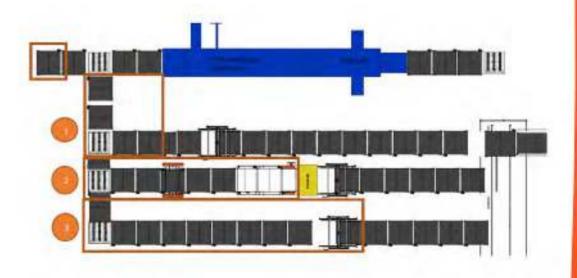


This production line transports piles of pre-cut foam blocks, of multiple thickness, from one end of the factory to another to be layered correctly, using a stacker conveyor machine, to build up the internal components of a mattress.

The line comprises a total of 18 straight-line belt driven conveyors, at least three C90 multi-directional conveyors to turn 90 degrees, two De-Stacker machines and a 180FlipTek rotation conveyor that flips 180 degrees.

This is an addition to the existing production line that relied on a total of 12 operators who were required to endure monotony, heavy lifting/strain and time wastage as they previously used a forklift truck to transport multiple foam blocks (up to an inch thick, up to 14 inches) stacked 40' high, from a saw, 30-40 metres across a facility onto a short conveyor line, after flipping them manually ready to be layered to form the interior of a mattress.

13 CTek Belt-driven Straight Line conveyors to transport foam layers of varying thickness, two C90Tek 90 degree rotation conveyors and a De-Stacker.



CASE STUDY: RollPack Line



This production line incorporates the inclusion of 4 RollPack machines for ease of rolling beds of pocket springs into paper, to be palletised (4-6 rolls per pallet) and stored for later use or transport.

There was a desire to reduce labour of, and by, operators along the production line, as well as increasing capacity and speeding up production, whilst ensuring minimal health and safety risks and better utilisation of space.

We presented our range of machines that meet those needs and found that they could also benefit from automating the line.

Working with the management and operations team, we liaised via video calls to establish their requirements and matched this with a to-scale virtual walk-through of their current line, to identify how the machines would fit into the existing line and where they could use other conveyors from our range.

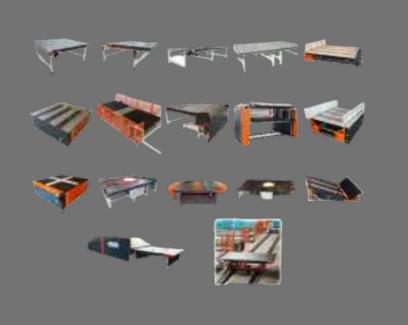
Our designers instigated the seamless addition to the line by ensuring minimal space wastage and the placement of multiple machines along the line to speed up various aspects. This assisted the installations for the fitters on-site and enabled seamless addition to their space, making the process and usage of space more efficient. The addition of the machines to do multiple functions of the process, meant that it was accurate, sped up and increased the amount of layered mattresses produced.



AtoZ Automation is the exclusive US agent for MattressTek, developing and providing both innovative off-the-shelf machinery and custom automation solutions for the mattress, furniture, foam industries and beyond.

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All **MATTRESSTEK** machines are designed, manufactured and built at our premises in the UK, by our team of experienced fabricators and machine builders.

Prior to shipment all machines are meticulously tested and trialled on customer samples.

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