

The logo for LB Foster, with 'LB' in red and 'Foster' in white, followed by a registered trademark symbol.

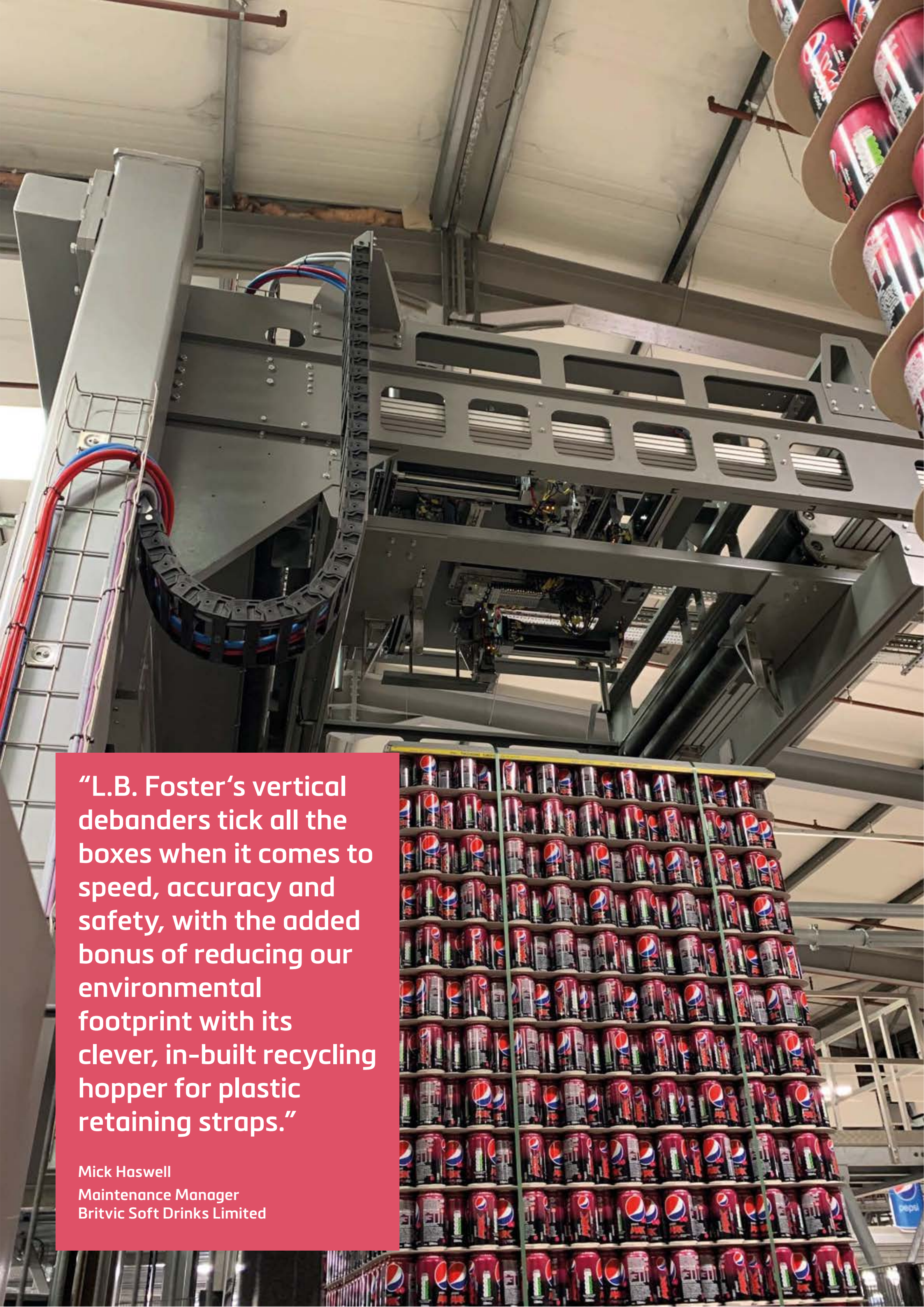
LB Foster[®]

Automation & Materials Handling

Keeping our world moving

through continuous automated production





“L.B. Foster’s vertical debanders tick all the boxes when it comes to speed, accuracy and safety, with the added bonus of reducing our environmental footprint with its clever, in-built recycling hopper for plastic retaining straps.”

Mick Haswell
Maintenance Manager
Britvic Soft Drinks Limited

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Who we are

As part of global engineering group L.B. Foster Company, our Automation & Materials Handling division is the UK's centre of excellence for our industrial automation and materials handling capability.

Centre of Excellence

L.B. Foster Automation & Materials Handling is driven by its passion to deliver innovative and cost effective automation and materials handling systems. We provide solutions to companies in the manufacturing and logistics industries that are responding to the ever increasing pressures to optimise throughput, whilst offering increasing flexibility.

Our commitment to meeting our customers' needs has led us to achieve trusted partner status with a number of the UK's most successful companies. System solution proposals are developed at our 'Centre of Excellence', which was launched in 2017 to bring together the complimentary talents of our sales, engineering, controls, software and project management teams from a single source is the key to providing integrated solutions

L.B. Foster Automation & Materials Handling Centre of Excellence is based nearby to our group manufacturing facility and offers the opportunity to our customers to prototype system concepts and test the equipment prior to installation, to ensure it meets their specification and performance criteria.

Following a successful commissioning of a system we continue our commitment to the customer by ensuring the availability of spares and a maintenance and service team.

Reputation

Our capability brochure features a wide range of conveyor products developed and proven from more than 50 years experience of successful installations. The strength of our product range enables us to build our solutions based on a modular design.

However, we also have an open mind as to what is the "Best fit" to meet our customers needs and we can call on our automation engineers who will design and supervise the production and commissioning of equipment that provides a customised solution to the most exciting of processes.

"I congratulate L.B. Foster on its initiative developing automation in materials handling, which will no doubt bring significant productivity gains through engineering."

David Carnell
East Midlands Regional Parliamentary Officer
Institution of Mechanical Engineers

Institution of
**MECHANICAL
ENGINEERS**

Our capability to provide solutions to meet the ever increasing disruptive forces impacting on our customers is considerably enhanced by our creating and leading several collaboration clusters composed of partners who offer innovative technology led solutions to improve performance monitoring, process optimisation through analysis of the collected data.

The success and growth of our business can be attributed to our parent company, L.B. Foster Company. It operates a strategy of acquiring and integrating companies with aligned capabilities and closely related disciplines, which when combined offer our customers the assurance that their complex needs will be met - 'Right first time'.

Our history

1999

Portec Rail Group acquires Conveyors International



2006

Acquisition of Kaybe Conveyors



2010

L.B. Foster Company acquires Portec Rail Group and its subsidiaries



2015

L.B. Foster acquires Nottingham-based Industrial Automation to create L.B. Foster Automation & Materials Handling



1982

Conveyors International established



2002

Acquisition of Quodeck



2007

Conveyors International, Kaybe Conveyors and Quodeck merge creating CI Logistics



2013

CI Logistics changes its name to L.B. Foster Materials Handling



2017

L.B. Foster Automation & Materials Handling opens Centre of Excellence in Nottingham

Our customers

Food & Beverage



Automotive



Custom built



Logistics



Conveyors

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Quick guide to Conveyors

for all applications

A conveyor system is a common piece of mechanical handling equipment that moves materials from one location to another. Conveyors are especially useful in applications involving the transport of heavy or bulky materials.

We specialise in the most efficient and effective method of moving products from A to B in storage, distribution and manufacturing facilities.

Our conveyor systems allow quick and efficient transportation for a wide variety of materials. We use our depth of design expertise and engineering experience to create conveyor systems tailored to fit the exacting requirements of each individual project. Below is a list of the standard conveyor types that we supply. For specialist or bespoke configurations, please contact us.

Floor Conveyors



Belt conveyors

Belt conveyors offer a simple reliable method of transporting a large variety of products. Available as either straight or bends, they can be arranged horizontally or inclined to move between levels using either incline or spiral belts.



Pallet conveyors

A pallet floor conveyor is a heavy-duty materials handling system used to carry large or weighty products mounted onto pallets. It is a durable and versatile transportation device that can move a wide variety of load weights and sizes with relatively high throughput rates.



Chain conveyors

A chain conveyor transports products from one place to another. Normally floor mounted, it can handle extremely heavy products and usually works in a horizontal straight line.



Powered roller conveyors

We offer a wide variety of powered roller conveyors – from simple lineshaft driven systems up to heavy duty chain driven pallet conveyors.



Gravity conveyors

Gravity roller conveyors offer an unrivalled way of moving goods and speeding up production flow all the way from goods-in to goods-out.



Slat conveyors

Slat conveyors comprise fixed plates mounted between two chains, effectively creating a continuous surface. These are used in the automotive and manufacturing industries.



Towline conveyors

A towline conveyor runs along the ground and is used widely in the automotive and manufacturing industries. The conveyor can either be mounted on the floor or within a pit, using floor plates to cover the gap.

Overhead conveyors



Manual conveyors

Manual overhead conveyors are a cost effective solution for process applications within manufacturing.



Power & free conveyors

Power and free conveyors are typically used to transport parts along an assembly line from one process to another.



Power conveyors

Enclosed track overhead powered chain conveyors are used across a range of industries, including automotive, product finishing and assembly lines.



Inverted power & free

An inverted power conveyor uses a single enclosed track, combining the power chain and the free trolleys. The power and free system uses fixed chain dogs that engage the pivotal free trolleys to move them through the system.

Vehicle loading conveyors



Vehicle loading

Mobile and static telescopic boom conveyors have revolutionised the loading and unloading of vehicles.

Heavy & awkward solutions



Barrel handling

Bespoke conveyor, materials handling and automated solutions for the distillery and brewery industries.



Heavy & awkward

High performance, heavy duty materials handling solutions for industrial manufacturing applications.

Sectors



Automotive

Production line handling capability for large, heavy and awkward parts.



Food & beverage

Pallet handling solutions for loaded pallets, pallet stacking, pick and place, food packing and sorting.



Warehouse, logistics & distribution

Our range of conveyors and specialist pallet handling machines provide a total solution range for the warehouse environment.



Aviation

Text



Manufacturing

Our range of solutions from entry to exit are used across the manufacturing industry.



Belt conveyors

Belt conveyors offer a simple method of transporting a large variety of products on continuous conveyors.

Types of Belt Conveyors:

Straight belt conveyor

Straight belt conveyors offer a simple, reliable method of transporting a large variety of products. They can be arranged horizontally or inclined to move between levels using either incline or spiral belts.



What they say

"We chose L.B. Foster because they had a better understanding of our brief – and that included the price. More than that they also demonstrated a willingness to understand what the job really entailed."

George Kennedy
Operations Director
Fyffes

Belt Curves

Belt curves are available in virtually any configuration and are ideal for general purpose use, including food applications. A positive chain drive prevents belt slip and products are conveyed with a smooth, positive and even movement.

High Speed Merge Conveyor

High speed merge conveyors are designed for merging two conveyor lines. It is a high speed conveyor belt with one end angled (standard angles 30 and 45 degrees). An angled nose bar

allows a continuous conveyor belt to change direction, giving a smooth angular transfer of goods.

Spiral Belts

Spiral belts offer a reliable, continuous transport system between levels with a minimum footprint. Tailored to individual requirements, they provide an easily maintained alternative to ordinary vertical inclined belt systems.

Find out more



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Chain conveyors

Chain conveyors transport products from one place to another. They are purpose designed for handling extremely heavy products and usually operate in a horizontal straight line.

There are two main variations:

- > a chain conveyor (with twin or triple chains)
- > a slat conveyor.



What they say

"It was all up and running in time; the conveyor is a good quality, robust device and it has proved to be completely reliable."

Bill Sant
Assembly Process Engineer
Dana Traction Technologies Europe

Twin or triple chain conveyors

Twin or triple chain conveyors have no tracking problems, are extremely durable and can handle heavy loads. Conveyors can be installed in a variety of lengths and widths depending on load type and weight.

Chain on edge conveyor

A chain conveyor can be turned so that it runs on its side. This is known as a chain on edge conveyor. These can be extremely flexible systems and can be bespoke to any factory requirements.

Short sections of chain conveyor are often used as a chain transfer mechanism, as part of a larger conveying system. These chain transfers are frequently installed to move totes or pallets at right angles from a roller conveyor or for moving pallets in a different orientation to a roller conveyor. Chain conveyors can also be used when the underside of a pallet is not suitable for rollers.

Find out more



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Gravity conveyors

Gravity roller conveyors offer an unrivalled way of moving goods and speeding up production flow - from goods-in to goods-out - in the warehouse and logistics and food and beverage sectors.

We have an extensive range of gravity conveyor rollers, ranging from simple, light duty models to heavy duty applications. As well as the wide range of sizes, our systems are available with high-impact plastic rollers, plastic 'skate' wheels or extra heavy duty steel rollers.

Types of Gravity Conveyors:

Flexible Conveyors

Extendable gravity conveyors are ideal for conveying loads in a production assembly plant, warehouse or between loading points. Virtually any shape of conveyor track can be achieved.

Units are lightweight and maneuverable and can be simply folded away when not in use. Flexible conveyors are a low maintenance and versatile gravity conveyor and are available in four track widths and six lengths, with a choice of rollers or wheels.



What they say

"It has been critical to maximise the efficiency of our sortation and despatch processes in order to maintain our high level of customer service."

Dave Hackett
Operations Manager
Peacock's Stores



Telescopic gravity roller conveyors

Telescopic gravity roller conveyors are ideal for transferring loads between vehicles or for use in warehouse and production areas. Featuring scissor-jack adjustable height 'H' section supports, with heavy-duty castors, they are available in two standard widths (450mm and 600mm) and in two, three or four-section options.

Heavy duty gravity roller conveyor

Heavy duty gravity roller conveyors are suitable for high specification applications and are designed specifically to meet the specialist needs

of the woodworking and panel industries.

Comprising steel rollers fitted with high quality precision bearings mounted in robust angle side frames, the heavy duty gravity roller conveyor has a wide range of support stands, turntables and mobile trolleys.

Find out more



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Pallet conveyors

Pallet conveyors are a durable and versatile transportation device for moving a wide variety of load weights and sizes, with relatively high throughput rates.

The versatility of pallet conveyors allows them to be used in almost any industry. They can be adapted to various shapes and sizes, reaching nominal roller speeds of up to 10-12m per minute. The throughput rate of the pallets is determined by the user and is dependent on the spacing required between pallets on the conveyor.

Pallet conveyor applications include simple gravity storage lanes, in-feed and out-feed lanes to other machinery and strappers, or as an integrated handling system. They provide a cost



What they say

"They designed an extremely practical solution which could be delivered in the right timescale and at the right cost."

Andrew Marris
Asset Care Manager
Smith & Nephew



effective alternative to forklift trucks.

Empty pallet return conveyor systems are also available. These are usually the same type of conveyor but either built to run on a separate loop or running underneath the main line using twin levels. A chain conveyor can be turned so that it runs on its side. This is known as a chain on edge conveyor. These can be extremely flexible systems and can be bespoke to any factory requirements.

The height of materials used on a pallet conveyor can almost be unlimited but standard industry heights are 1000mm and 1800mm. The maximum weight used on a pallet conveyor is 1500kg per pallet.

Pallet conveyors are available in gravity and powered versions and can be manufactured using two main types of conveying medium: roller conveyors and chain conveyors. Turntables, chain transfers and transfer cars can be used to create a bespoke system.

Find out more



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Powered roller conveyors

Powered Roller Conveyors, including heavy duty chain-driven pallet conveyors, are the perfect solution for moving heavy and awkward goods.

Our lineshaft driven rollers are based on a unique polyurethane belt and roller principle, giving an inherent accumulation characteristic. The modular design enables complex systems to be achieved both quickly and cost effectively.



What we say

"A really flexible, robust and efficient way to distribute and divert goods across multiple levels, helping optimise production and warehouse space."

L.B. Foster Automation & Materials Handling

Types of powered roller conveyors:

Zero line pressure conveyors

Zero line pressure conveyor systems are available where delicate handling and/or accurate positioning of items are required.

Powered flexible conveyors

Powered flexible conveyor solutions deliver all the advantages of the standard flexible conveyor, but with powered rollers it provides fully controlled load movement.

Pallet conveyors

Pallet conveyors are available in a wide range of modules, complex systems can be easily created that are capable of handling up to 1500kg loads as standard. See page 13 for more details about our range of Pallet Conveyors.

Visit lbfooster.eu to read about our Slat conveyor solutions.

Find out more

Call or email our technical sales team for more information.



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Visit lbfooster.eu to read about our Powered roller conveyor solutions.



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Slat conveyors

Slat conveyor solutions consist of fixed plates mounted between two chains, effectively creating a continuous surface, and are used largely in the automotive and manufacturing industries.

Slat conveyors can be mounted on the floor or within a pit, if a flush finish is required. Products can be carried at a fixed pitch either directly on the slats or on jigs. Conveyors move in a straight line and can be continuously running or alternatively indexing (stop/start).

Slat conveyors can be single or double slat with overall widths designed to suit the particular application, dependent upon the product being transported. Options are also available on the slats including steel or plastic. Drop slats are also available for automotive applications.



What we say

“Great for applications where belt or roller conveyors are not suitable, such as in high-temperature environments, moving heavy products or operating in dirty and difficult conditions.”

L.B. Foster Automation & Materials Handling

Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Slat conveyor solutions.

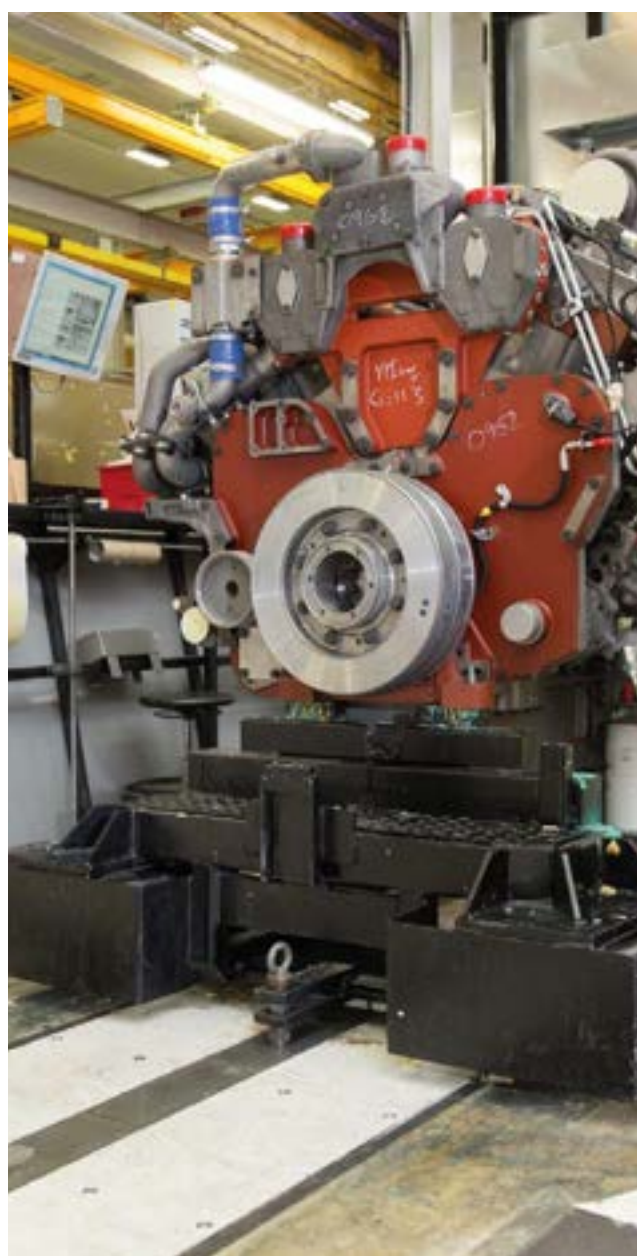
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Towline conveyors

A towline conveyor is a transportation device that runs along the ground and is used widely in the automotive and manufacturing industries.

Towline conveyors can be mounted on the floor or within a pit using floor plates to cover the gap. They can be engineered to utilise bi-planar chain, precision chain or drop forged chain depending on the weight being towed.



What they say

"Being robust, the conveyor requires low maintenance which is important for long term cost efficiency."

Neil Adams
New Model Project Engineer
Honda

Towline conveyor circuit design:

Towline conveyor circuit design can be tailored to fit factory needs so it can either run in a single straight line or in a loop. Depending on the process required, the operation can be continuously slow moving or it can be indexing (stop/start).

A trolley can be designed to transport a variety of components and the system can transport any weight from light plastic parts to 12 tonne earth moving vehicles.

Find out more



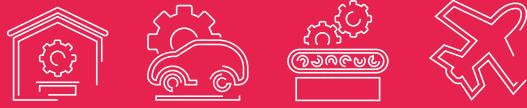
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Manual overhead conveyors

Manual overhead conveyors are a cost effective solution for process applications within manufacturing.

Manual conveyor systems use the same track format as our powered overhead conveyor system, without a motorised chain. This allows operators to manually



What they say

"The L.B. Foster team is experienced in this type of installation and they were willing to share their skill, knowledge and expertise with us to provide a purpose built solution to meet both our current and future needs."

Phil Houghton
Business Implementation Manager
Clipper

pull and push the load on the overhead rail.

Individual trolley capacities are available from 45kg upwards. Trolley capacities can be easily increased by simply linking the trolleys together with load bars. Components include vertical and horizontal bends (varying radii and angles), switches, merge junctions and lift and lower stations. These provide a variety of circuit design opportunities.

Find out more



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Powered overhead conveyors

Power overhead conveyors are based on a single track arrangement. The chain is enclosed within the track which is driven by a drive unit. Loads are carried directly from the chain at defined pitches.

Our enclosed track, overhead conveyor range includes powered chain conveyors with a continuous chain and a series of



What they say

"The new radiator paint line overhead conveyor is brilliant. It has transformed the speed, accuracy and efficiency of our production."

Manufacturing customer

pendant chain attachments, all driven by a motor powered drive unit.

The innovative modular design allows for easy reconfiguration and extension of existing installations. Components include vertical and horizontal bends (varying radii and angles), spinners, indexers and automatic loading and unloading devices. These allow virtually any process requirement and routing configuration to be created.

Capacities can be increased by linking

the pendants together with load bars. Individual pendant capacities range from 22kg up to 150kg. In addition to our range of enclosed track power only overhead conveyors we also offer the heavy duty I-Beam monorail systems in 3", 4" and 6" track heights.

Power conveyors are suitable for use in a range of industries and applications, including automotive, product finishing and assembly lines.

Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Powered overhead conveyor solutions.

Call or email our technical sales team for more information.



Power and free conveyors

Power and free overhead conveyor systems can transport weights of up to 8,000kg using multiple trolleys.

Our range of power and free overhead chain conveyor systems allow our customers to handle light, medium and heavy products. They are based on a twin track arrangement, with the drive chain track mounted above a free-running load-carrying trolley track.

Single trolley capacities are available



What they say

"...this has enabled us to increase our productivity and therefore realise a faster return on our investment"

Martin Wragg
Cluster Production Manager
BOC

from 100kg up to 500kg. Capacities can be increased to transport greater product weights by using multiple trolleys and crossbar linkages. Our innovative system design enables trolleys to be engaged or disengaged from the power chain for process or accumulative storage. They can be re-engaged and carried to the next process as required.

Components include vertical and horizontal bends, switches, merge junctions and lift and lower stations. Computerised control systems allow an array of individual circuit configurations to be created.

Power and free conveyors are suitable for us in a range of industries and applications, including automotive, paint and finishing lines, and assembly lines.

Find out more



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Visit lbfoster.eu to read about our solutions for BOC.

Call or email our technical sales team for more information.



Inverted power & free conveyors

Inverted conveyors offer a high degree of stability and precise positioning of products, with all moving parts situated below the customer's components ensuring cleanliness in operation.

They are ideally suited to demanding industrial environments that require a high degree of flexibility and accuracy. Inverted power and free conveyor



What we say

"A great solution for production areas or delivery systems that require accumulation, such as general assembly, body shop, painting and oven drying."

L.B. Foster Automation & Materials Handling

systems provide the unique ability to stop individual loads without stopping the entire production line, and accumulate loads for a specific period of time before inducting the loads back into the system.

An inverted power and free conveyor uses a single enclosed track combining the power chain and the free trolleys. The power and free system uses fixed chain dogs that engage the pivotal free

trolleys to move them through the system. Disengaging the free trolley from the chain dog allows for free trolley accumulation.

Areas of use include production areas or delivery systems that require accumulation such as general assembly, body shop, painting and oven drying.

Find out more



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Visit **lbfoster.eu** to read about our Inverted power & free conveyor solutions.

Call or email our technical sales team for more information.



Fixed & mobile vehicle loaders

A vehicle loader is an automated materials handling system that is used to make vehicle loading and unloading quick and easy. It can either be specified for a fixed location or mobile, for maximum flexibility.

Telescopic boom

Telescopic booms are available in two sizes, to suit up to 40' trailers. The special continuous belt system allows loading or unloading to take place with constant adjustment of reach depth and working height inside the vehicle via operator push buttons on the boom end.



What they say

"One of the main reasons they were selected was the exceptional level of response they gave us during the long tender process."

Phil Houghton
Business Implementation Manager
Clipper Logistis

Static boom

Mobile vehicle loaders are ideally suited for a range of applications, such as multiple locations or occasional use. Easily positioned by one operator, the unit can be moved to precisely where it is required. When not in use it can be stored safely out of the way.

Accessories

A range of optional accessories is available which enhances the versatility of a boom loader. These include a high level chassis and in-feed belt, powered traversing chassis.

Find out more



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Barrel handling

Whisky casks offer a unique and important materials handling challenge by the very nature of their variable size and shape. As an essential part of the whisky production process, finding safe and efficient means of moving barrels during the drain and fill process is a materials handling challenge.

Draining and filling whisky casks demands an exceptionally heavy duty conveyor specification. In some instances, this can include the capability of handling double stacked pallets, as well as different pallet sizes.



What they say

"The Drain and Fill Line is at the heart of our production. With the help of L.B. Foster's team of expert engineers a number of innovations were designed into the final solution. These included the capability to handle some serious weight - up to 5000 kg. We are very pleased with the final outcome and it is on view to the thousands of visitors we get at the distillery each year."

Project manager
Distillery

Due to the hazardous manufacturing environment within which whisky is produced, heavy barrel handling conveyor systems are also required to be ATEX rated.

The ATEX Directive consists of two EU directives describing what equipment and working conditions are allowed in an environment with an explosive atmosphere. Brewers and distillers handle flammable (explosive) materials

so must comply with ATEX 1999/92/EC Directive or in the UK DSEAR 2002 Regulations. These ensure workplaces are safe from fire and explosion risk.

Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Barrel handling solutions.

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Manufacturing

A manufacturer of high-performance diesel engines approached L.B. Foster when they were designing the manufacturing process for their new engine. The new line would be a new concept to the manufacturer where operators would work in assembly cells surrounding the engine.

Assembling large engines on the move requires a clear understanding of the scope of the project - from conveyor and turntable loading to workstation layout, ergonomics and health and safety considerations.

The 12 station L-shaped engine assembly line for a manufacturer of high-performance diesel engines encompassed a complex requirement to move part-assembled engines on a



What they say

"This was all about collaborating to achieve the best possible solution - both mechanically and for the welfare and wellbeing of our operators. The 'proof of concept' model that L.B. Foster's team developed sealed the project for us as it showed in real-time the benefits of the conveyor and workstation solution."

Project manager
Manufacturer



series of conveyors and turntables through each work station.

Work stations needed to be designed to maximise working efficiencies, identifying the particular engine specification via an RFID reader and automatically configuring tooling at the station to the correct settings, whilst ensuring operator safety and comfort.

Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Heavy & Awkward solutions.

Call or email our technical sales team for more information.



“Without a doubt, one of the keys to the success of this project has been the design skills of L.B. Foster’s engineers. L.B. Foster has delivered a quality product that worked from day one. I would not hesitate to recommend them to any of our other Caterpillar facilities.”

Peter Roberts
Senior Manufacturing Project Specialist
Caterpillar

Automated production

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Quick guide to Automation

for all applications

We are experts in the design, manufacture, testing and deployment of smart, fully automated assembly, test and robotic technologies for a wide range of manufacturing industries.

We possess a remarkable track-record in creating bespoke industrial automation solutions for some of the biggest names in the automotive and food and beverage sectors. Our automated manufacturing solutions include flywheel assembly for Bentley, cake conveyors for Premier Foods and door seal testing rigs for BMW. Our horizontal and vertical debanders are used widely by some of the best known drinks brands, including Britvic.

The technique, method or system of operating or controlling a manufacturing process by highly automatic means.

Automation



Automotive trim

Automotive trim machines deliver correct components / component placing and ensure a uniform force is applied across all areas of the bond.



Chassis drill & tap

Automated bespoke chassis drill and tap cells manipulate automotive A frames to multiple stations for flow drilling and tapping.



Auto riveting

Automated riveting machines provide accuracy and repeatability, whilst also benefiting from the cost savings associated with automating a manual process.



Exhaust leak test

Automated leak test machines test vehicle exhaust systems for leaks and provide accurate assembly control, component checking and component engraving.



Bumper assembly

Automated bumper assembly equipment control the assembly, testing and data logging of front and rear bumpers, whilst ensuring no degradation to the bumper A surface.



Headliner assembly

Fully automated headliner solutions comprise a comprehensive range of equipment, from initial press tooling and robot based ultrasonic cutting and trimming systems to operator assist displays, gluing integration and full assembly and quality checks.



Tailgate assembly

Automated tailgate assembly equipment for carrying out assembly, deburring and inspection processes, whilst ensuring no degradation to the tailgate assembly.



Rubber door seal

Automated bespoke chassis drill and tap cells manipulate automotive A frames to multiple stations for flow drilling and tapping.



Wheel & tyre handling

Robotic tyre and wheel handling systems manage the handling of tyres and wheels from transportation offload, production/assembly operation handling and transportation reloading.



Auto mould cleaning

Automatic mould cleaning machines increase efficiency and improve the process of mould cleaning, reducing costly scrappage rates.

“This really was a case of starting with a blank piece of paper. We worked closely with L.B. Foster Automation to create a smart engineering solution that automates the door assembly and, at the same time, delivers a range of complex inspection checks.”

Peter Phillips
IAC Group Limited

Sectors



Automotive

Production line handling capability for large, heavy and awkward parts.



Food & beverage

Pallet handling solutions for loaded pallets, pallet stacking, pick and place, food packing and sorting.



Warehouse, logistics & distribution

Our range of conveyors and specialist pallet handling machines provide a total solution range for the warehouse environment.



Aviation

Text



Manufacturing

Our range of solutions from entry to exit are used across the manufacturing industry.



Automotive trim

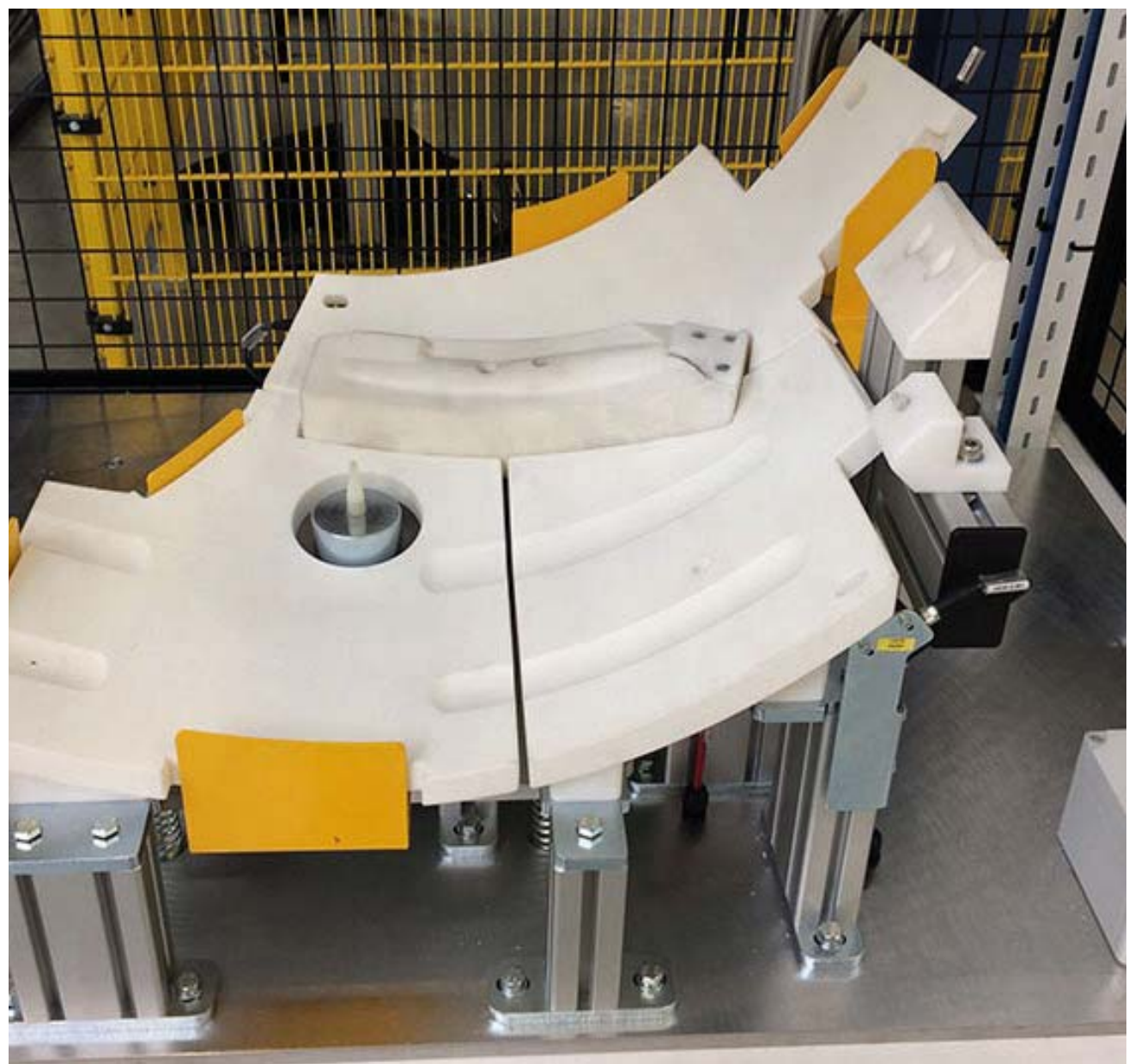
Our automotive trim machines deliver correct components / component placing and ensure a uniform force is applied across all areas of the bond.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Component variant identification
- > Alignment clarification
- > Uniform bonding force.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Automotive trim solutions.

Call or email our technical sales team for more information.



Auto riveting

Our automated riveting machines provide accuracy and repeatability, whilst also benefiting from the cost savings associated with automating a manual process.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Letterbox operator loading station
- > Universal tooling deck allows for future product evolution
- > Automatic rivet feed system.



Find out more



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Visit lbfoster.eu to read about our Auto riveting solutions.

Call or email our technical sales team for more information.



Bumper assembly

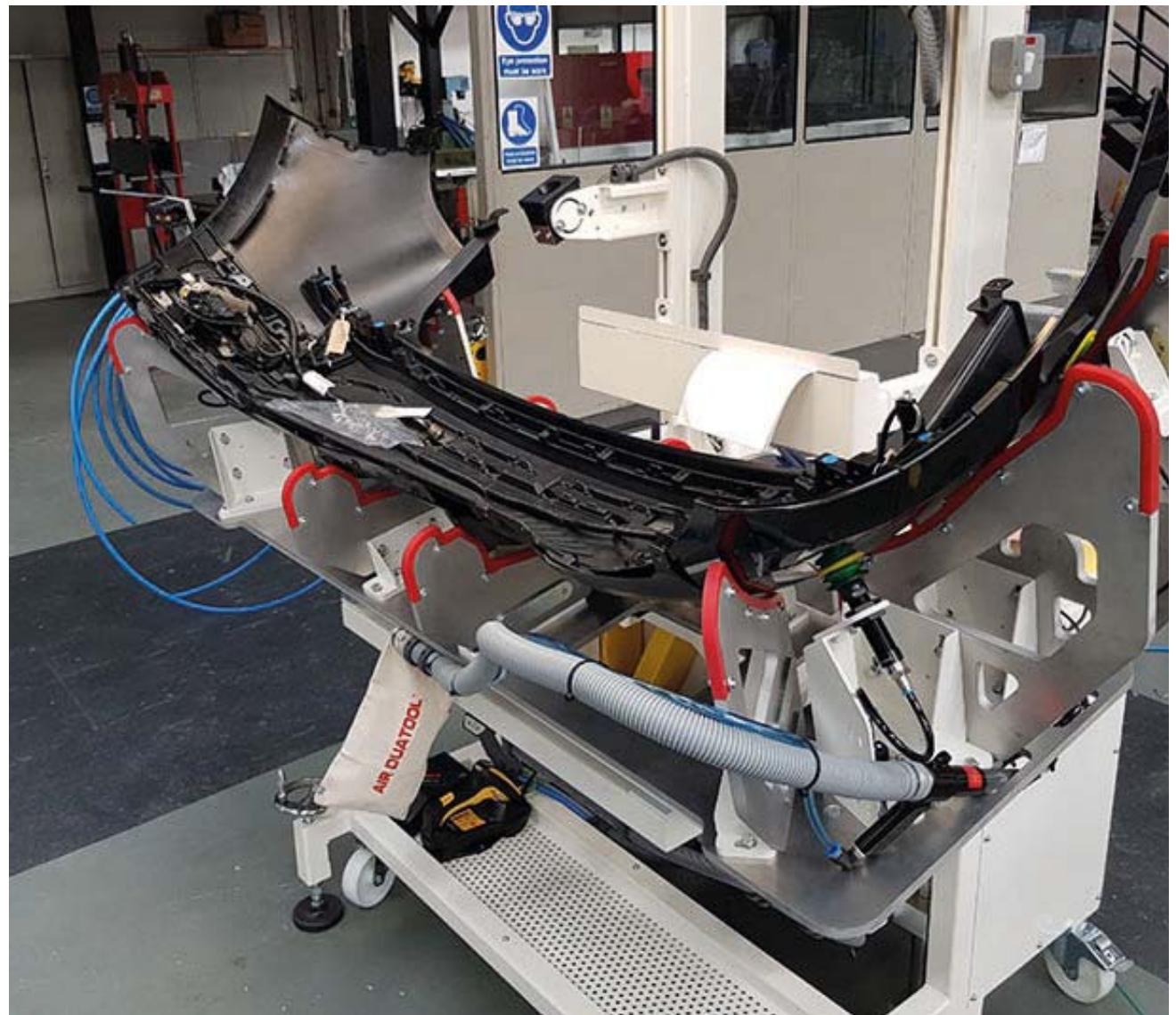
Our automated bumper assembly equipment allows customers to fully control the assembly, testing and data logging of front and rear bumpers, whilst ensuring no degradation to the bumper A surface. The system comprises multi sensor, RFID scanning, vision checking and pick by light systems.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > RFID Scanning allows automatic selection of component variant program
- > Vision checking of component placement
- > Soft edge support tooling.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Bumper assembly solutions.

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Chassis drill & tap

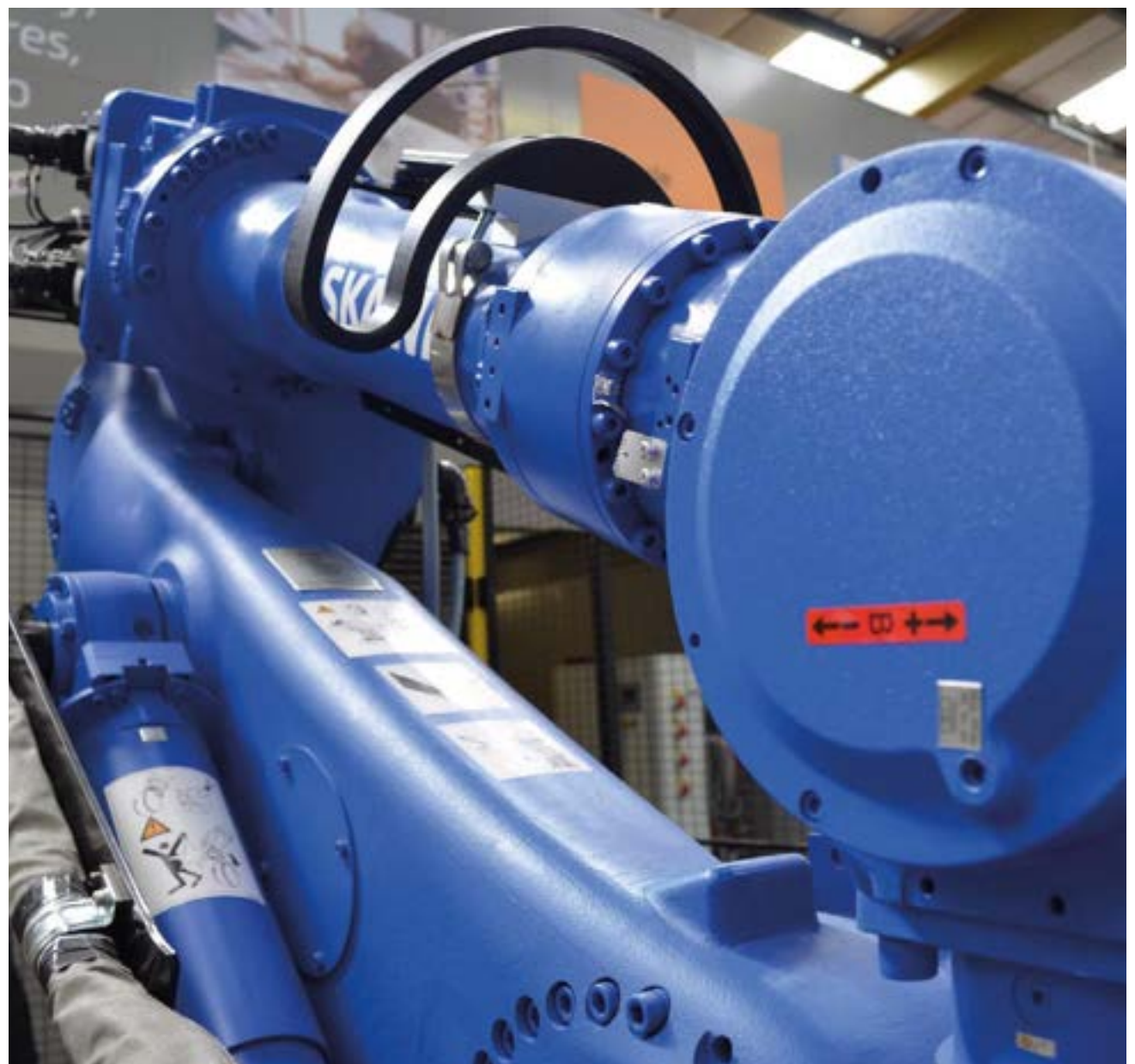
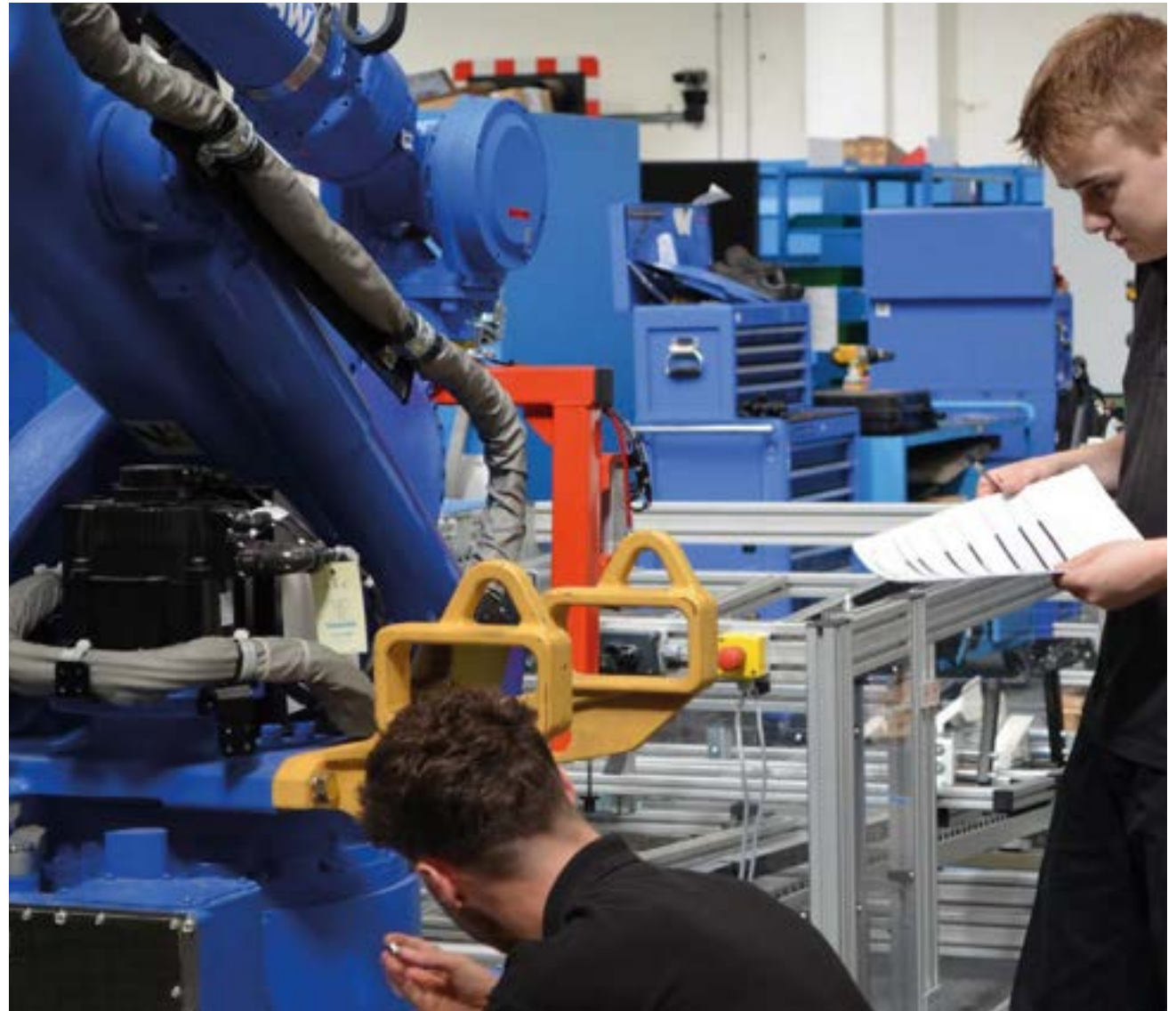
Our automated, bespoke chassis drill & tap cells allow you to manipulate automotive A frames to multiple stations for flow drilling and tapping.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Fully automated production cell
- > Robotic loading
- > Robust design.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Chassis drill & tap solutions.

Call or email our technical sales team for more information.



Exhaust leak test

Our automated leak test machines test vehicle exhaust systems for leaks and provide accurate assembly control, component checking and component engraving.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Leak testing and reporting
- > Data capture
- > Part marking.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Exhaust leak test solutions.

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Headliner assembly

Our fully automated headliner solutions comprise a comprehensive range of equipment, from initial press tooling and robot based ultrasonic cutting and trimming systems to operator assist displays, gluing integration and full assembly and quality checks.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Gluing integration
- > Quality checks
- > Operator assist displays.



Find out more



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Visit [lbfooster.eu](https://www.lbfooster.eu) to read about our Headliner assembly solutions.

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Rubber door seals

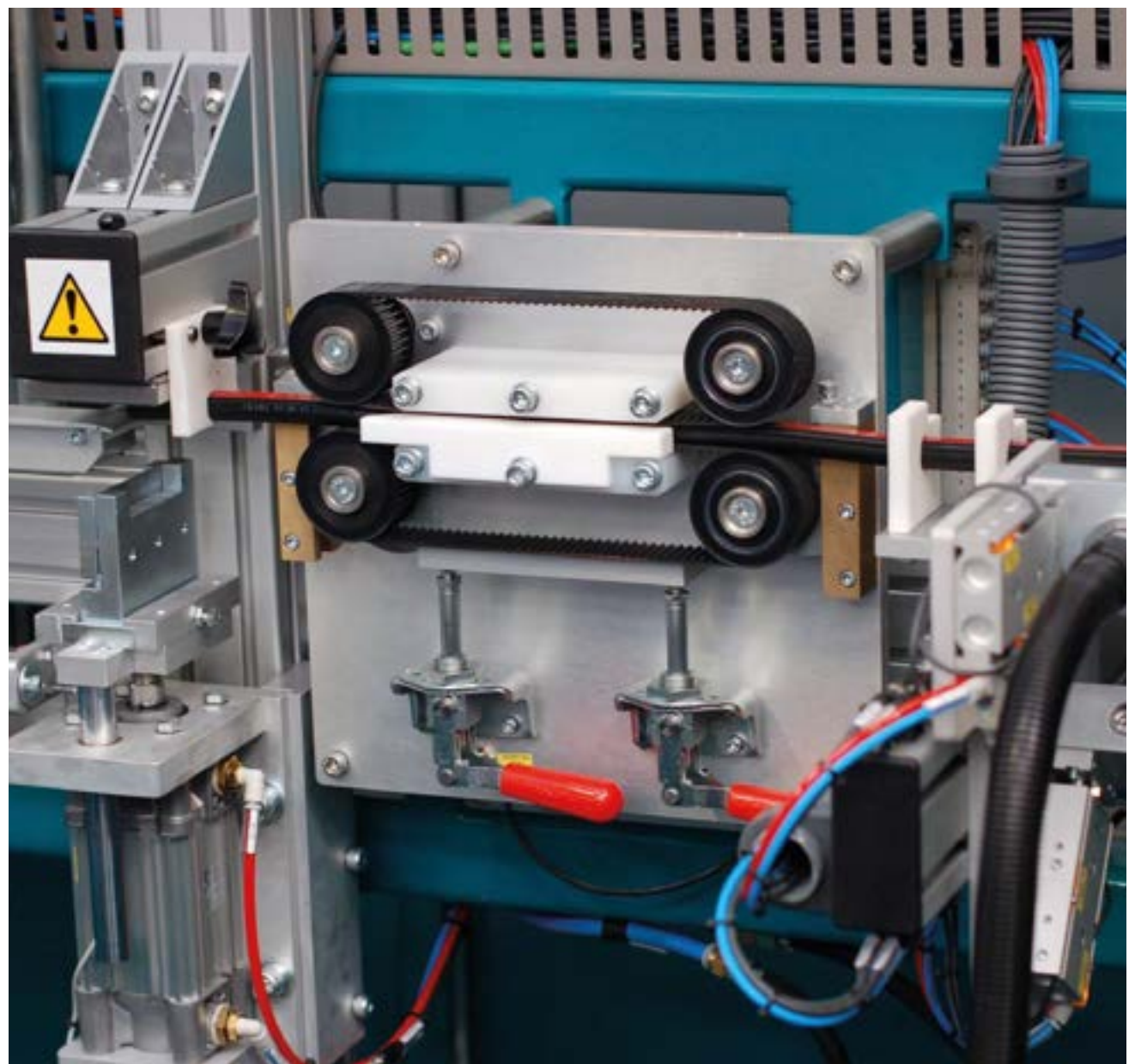
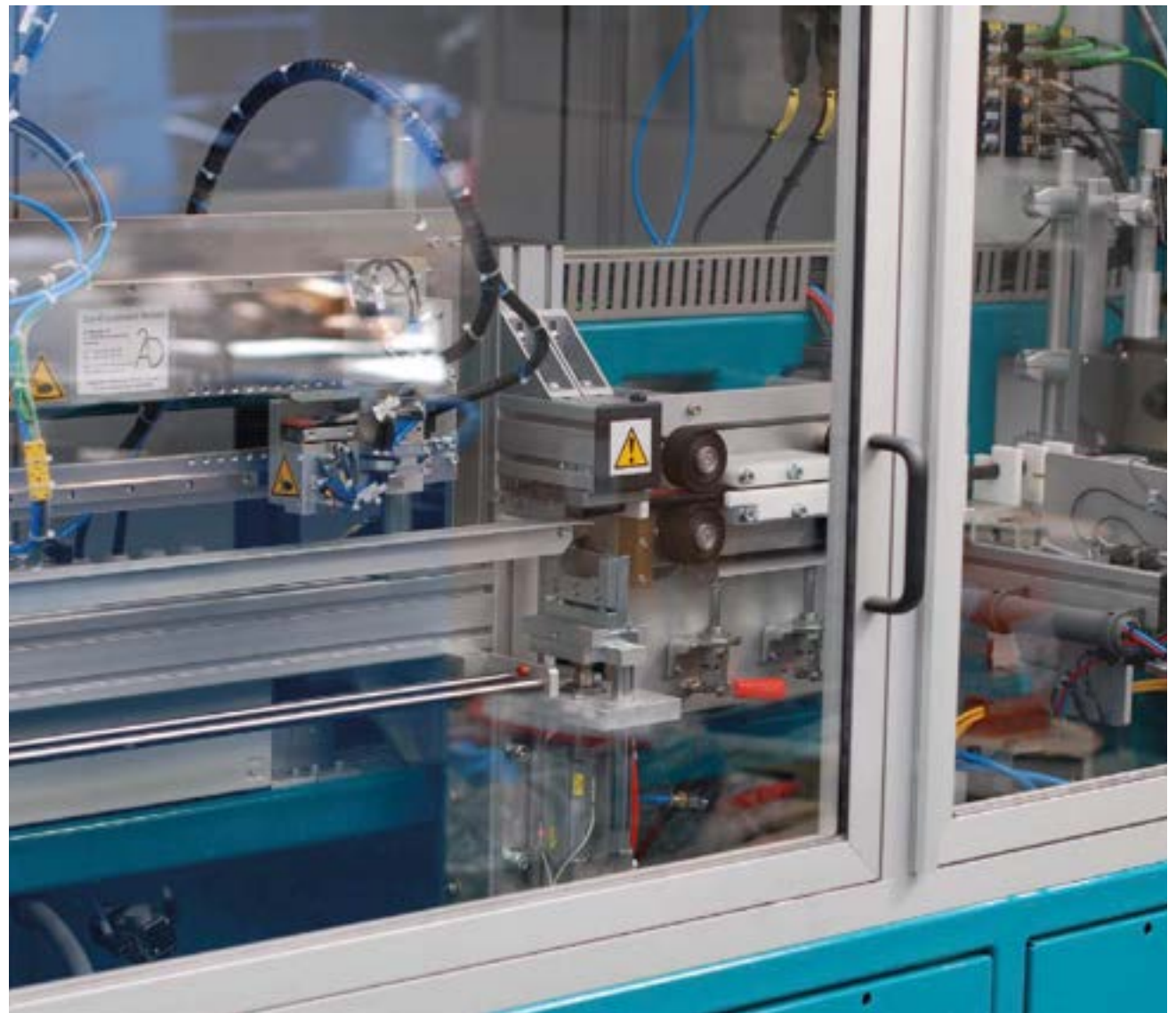
Our automated rubber extrusion solutions are used for the manufacture of automotive door, boot, wing and bonnet seals around the world.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Anti tangle feed system
- > Rugged cam driven design
- > Drill and clip options
- > Safety first design.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Rubber door seal solutions.

Call or email our technical sales team for more information.



Tailgate assembly

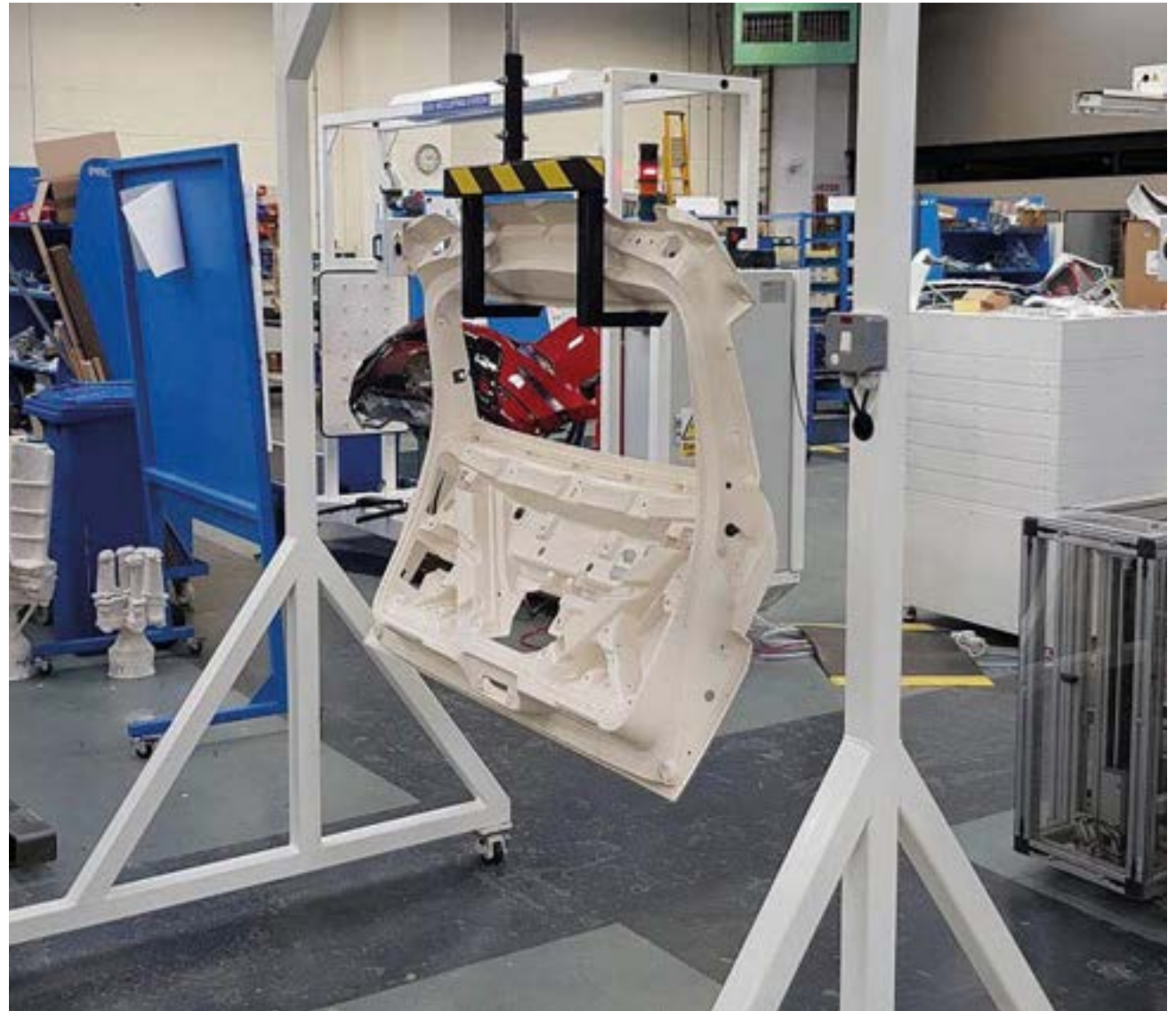
Our automated tailgate assembly equipment is used for carrying out assembly, deburring and inspection processes, whilst ensuring no degradation to the tailgate assembly.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Ergonomic operator height adjustment
- > Soft edge tooling
- > Inspection grade lighting.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Tailgate assembly solutions

Call or email our technical sales team for more information.



Wheel & tyre handling

Our automated tyre and wheel handling systems are designed specifically to suit the customer needs. Our solutions manage the handling of tyres and wheels including transportation offload, production/assembly operation handling and transportation reloading.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Fully integrated material handling system
- > Product traceability
- > Safety first design.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Tyre handling solutions.

Call or email our technical sales team for more information.



Auto mould cleaning

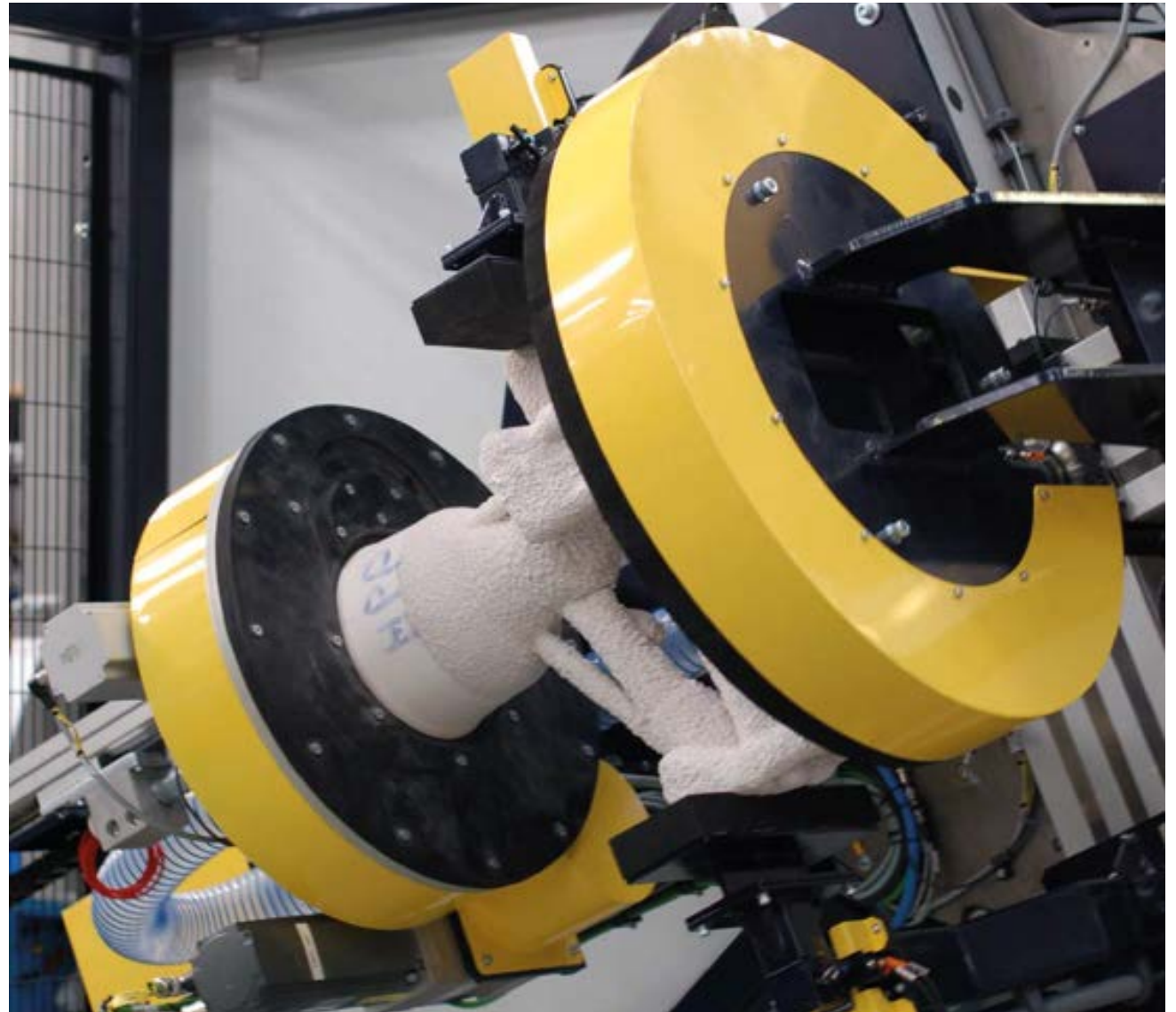
Our automatic mould cleaning machines increase efficiency and improve the process of mould cleaning, reducing costly scrappage rates.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Individual mould variance manipulation programs
- > Fully enclosed industrial extraction system captures mould debris
- > Debris visual monitoring system determines mould cleanliness.



Find out more



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Visit [ibfoster.eu](https://www.ibfoster.eu) to read about our Auto mould cleaning solutions.

Call or email our technical sales team for more information.



Tabbing & framing cell

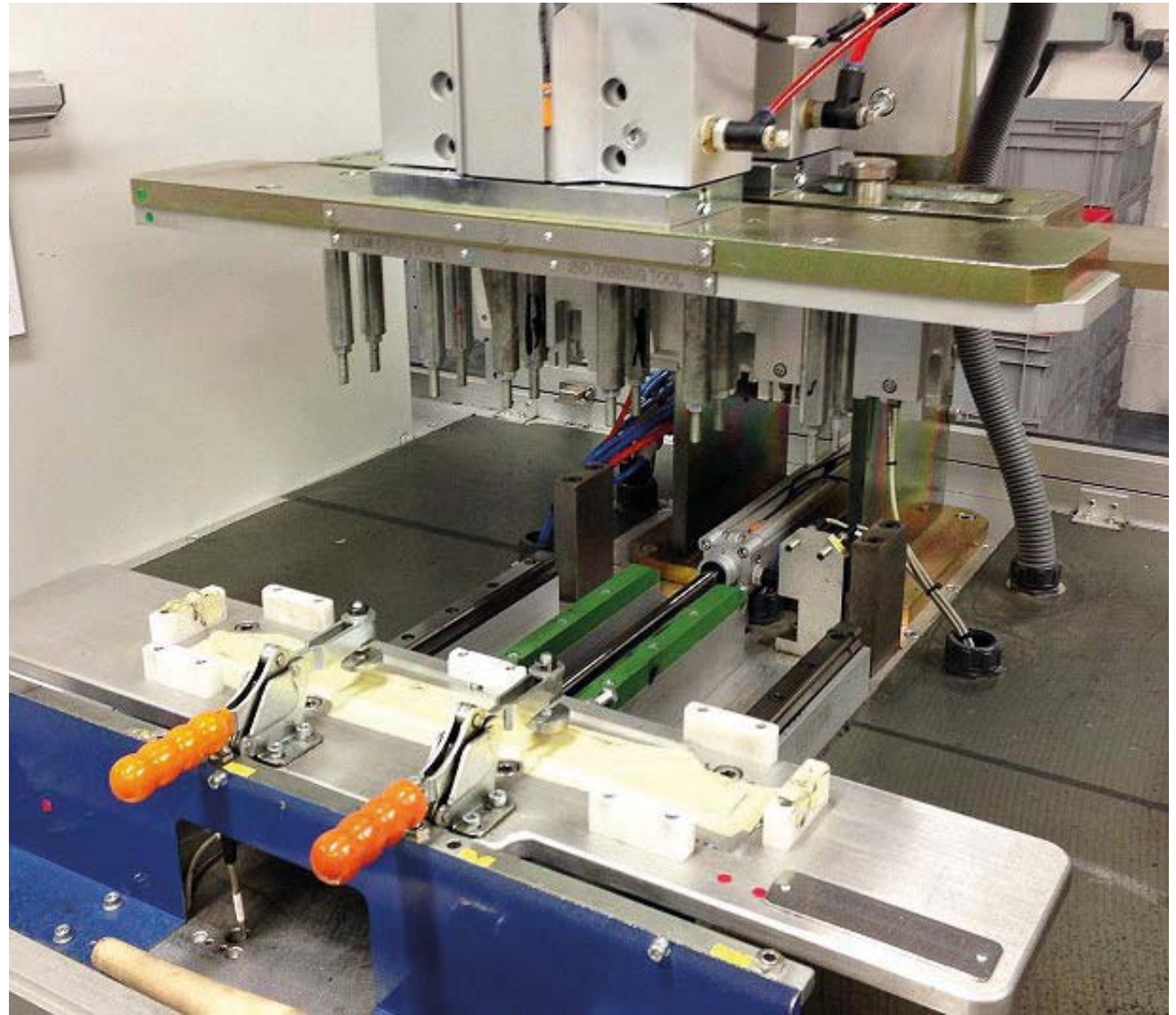
Our tabbing and framing machine allows our customers to fold metal tabs with repeatable accuracy, de-skilling a difficult and time consuming operation.

Benefits

- > Enhanced compliance, quality and accuracy
- > Increased capacity and productivity
- > Improved working environment
- > Reduced labour strain.

Features

- > Universal tooling deck allows for future product evolution
- > Alignment clarification.



Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our Tabbing & framing cell solutions.

Call or email our technical sales team for more information.



Automated door assembly

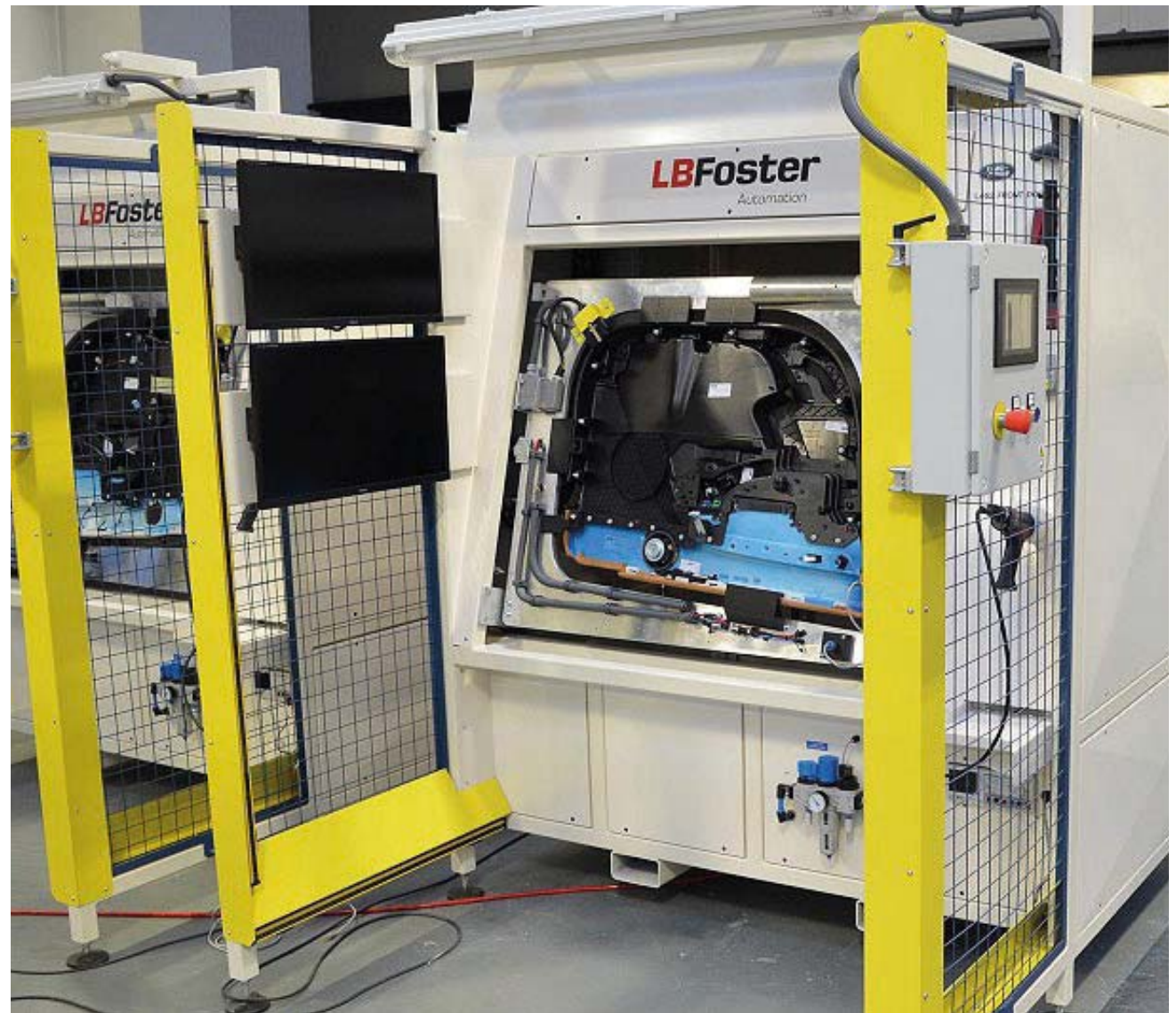
Our bespoke, automated door assembly solutions robotically assemble components and perform inspection checks on vehicle door assemblies.

Benefits

- > Bespoke configuration delivers class-leading functionality
- > Designed in safety features protect operatives
- > Innovative automated door rotation function speeds up inspection and assembly process
- > Application of state-of-the-art vision technologies ensures 100% accuracy
- > In-built fail-safe control systems prevent operative error.

Features

- > Robust framework with fork-lift pick-up points
- > Dedicated door handling tooling mounted to a manual rotating frame
- > High-resolution cameras provide all 'A surface' component presence and colour checks
- > An E test block located on the main machine framework for continuity checks when an operator is working on the B surface
- > Control system with operator push button controls
- > Through-beam sensing
- > Powered torque drives
- > Barcode scanner
- > Direct thermal printer
- > Flat screen monitor
- > Automated control system
- > Overhead lighting gantry.



What they say

"This really was a case of starting with a blank piece of paper. We worked closely with L.B. Foster Automation to create a smart engineering solution that automates the door assembly and, at the same time, delivers a range of complex inspection checks."

Peter Phillips
IAC Group Limited

Find out more



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Visit lbfoster.eu to read about our solutions for IAC limited.

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“L.B. Foster is a well-established company in the manufacturing industry with a strong reputation for quality products.”

Project manager
JCB

Pallet handling

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Quick guide to Pallet handling

for all applications

We have developed a family of pallet handling solutions for managing every touch point in your manufacturing, storage and distribution process.

Our solutions are deployed in warehouses, distribution centres, storage facilities and production plants. Our qualified engineers and service specialists deploy our pallet handling solutions for some of the world's largest and most successful companies and brands.

The automatic pallet handling system optimises the processes of moving, accumulation, and distribution of products transported on various types of pallets.

Pallet handling



Debander

Vertical pallet debander automatically locates, cuts and removes vertical plastic straps from stacks of pallets..



Palletiser

Automated solution for palletising low density, high volume products such as snacks, cereals and white goods.



Depalletiser

Depalletisers provide a unique and flexible solution for pallet load transfer of trays or containers in vertical stack arrangements.



Pallet stacker

Automated pallets stackers/destackers reduce fork lift truck movements and manual handling for operators.



Layer palletiser (coldroom)

Fully automatic layer palletising / de-palletising of boxed products in a multi-temperature environment.



“L.B. Foster’s vertical debanders tick all the boxes when it comes to speed, accuracy and safety, with the added bonus of reducing our environmental footprint with its clever, in-built recycling hopper for plastic retaining straps. These are shredded and granules sent for recycling.”

Mick Haswell
Maintenance Manager
Britvic Soft Drinks Limited

Sectors



Automotive

Production line handling capability for large, heavy and awkward parts.



Food & beverage

Pallet handling solutions for loaded pallets, pallet stacking, pick and place, food packing and sorting.



Warehouse, logistics & distribution

Our range of conveyors and specialist pallet handling machines provide a total solution range for the warehouse environment.



Aviation

Text



Manufacturing

Our range of solutions from entry to exit are used across the manufacturing industry.



Debander

Our robotic pallet debanding machines automatically locate, cut and remove vertical and horizontal plastic straps from stacks of pallets.

Plastic straps are used widely in the food and beverage industries to secure goods on pallets during transportation. Safely removing and disposing responsibly of the straps is a challenge facing the sector. Our custom-designed machines remove the retaining straps and, once cut and removed, straps are shredded for recycling.

Benefits

- > Faster processing time than manual debanding
- > Automated removal of vertical pallet straps
- > 24 hour operation
- > Quick and simple installation into new or existing lines
- > Allows recycling of bands
- > Safer debanding operations than manual debanding
- > Automatically granulates the removed bands
- > Variable granulation size to match recycling requirements.

Features

- > Options for the removal of vertical or horizontal straps
- > Full diagnostics on integrated control panel
- > Pallet stack clamping guides
- > Pneumatic operation.



What they say

"In the past, straps were removed manually. That's time consuming and repetitive work, which runs the risk of repetitive stress injury. Robotic debanders automate this task, which is a win/win in terms of safety, productivity and improved working conditions for our operatives."

Mick Haswell
Maintenance Manager
Britvic Soft Drinks Limited

Find out more



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Visit [lbfoster.eu](https://www.lbfoster.eu) to read about our solutions for Britvic Soft Drinks Limited.

Call or email our technical sales team for more information.



Depalletiser

Our fully automated depalletiser offers unique and flexible solutions for pallet load transfer of trays or containers in vertical stack arrangements.

Benefits

- > Reduction of manual product handling and health & safety risks
- > Labour cost savings by reducing the number of operators
- > Simple to operate
- > Efficient load processing with a reliable, robust machine
- > Transfer a pallet load of 30 trays in a single cycle
- > Transfer up to six trays in a vertical stack to an individual dolly
- > Capable of transferring 900kg of product in one operation

Features

- > Robust construction
- > Light guards on product entry and exit
- > Perimeter guarding
- > Heavy-duty hydraulic motors and power pack
- > Compact footprint
- > Quick-change product tooling
- > Cycle time of 60 seconds for a complete pallet
- > Designed for operating in -2°C to 25°C
- > Floor to floor time less than 2 minutes



Find out more



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Visit [lbfooster.eu](https://www.lbfooster.eu) to read about our Depalletiser solutions.

Call or email our technical sales team for more information.



Layer palletiser

Our layer depalletiser for coldroom applications offers fully automatic layer palletising / de-palletising of boxed products in a multi-temperature environment.

Benefits

- > Reliable de-palletising process for frozen storage environments down to -28°C
- > Fast and efficient batch picking of individual layers for consumption or re-palletisation for storage
- > Labour cost savings due to automation and simple operation
- > Reduction of manual product handling
- > Compact footprint easily fits into existing facilities
- > Optimises use of transport and storage space.

Features

- > Robust construction
- > Light guards on product entry and exit
- > Perimeter guarding
- > Heavy-duty hydraulic motors and power pack
- > Compact footprint
- > Quick-change product tooling
- > Cycle time of 60 seconds for a complete pallet
- > Designed for operating in -2°C to 25°C
- > Floor to floor time less than 2 minutes



Find out more



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Visit **lbfoster.eu** to read about our Automotive trim solutions.

Call or email our technical sales team for more information.



Palletiser

Our automated palletiser is ideal for palletising low density, high volume products such as snacks, cereals and white goods.

Benefits

- > Based on an innovative design using simple robust mechanisms
- > Offers a compact footprint combined with an exceptionally low installed height
- > Ideal for applications where optimisation of restricted space is a necessity
- > Creates a stack from the top down, allowing for pallet insertion half way up the stack
- > Finished stacks can be much higher than the machine itself.

Features

- > Machine dimensions: 1650mm (w) x 2700mm (l) x 1200mm (h)
- > Maximum palletised weight: 500Kg
- > Performance: 13-box layer in 30 seconds
- > Machine construction: powder coated mild steel
- > Power requirements: 16A.



Find out more



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Visit **lbfoster.eu** to read about our Palletiser solutions.

Call or email our technical sales team for more information.



Pallet stacker

Our innovative range of pallets stackers/destacking means fewer fork lift truck movements and reduced manual handling risks for operators.

Benefits

- > A 10 second cycle with up to six individual pallets per minute destacked or stacked, with a standard capacity of 10 pallets
- > 24-hour operation to meet requirements of large distribution warehouse facilities
- > Mesh peripheral guarding around the pallet destacker allows the user to see the pallets in the stacker
- > Interlocked light guards on the pallet load/unload access meet necessary safety requirements
- > CE Mark.

Features

- > Interlocked light guards on the pallet load/unload access meet necessary safety requirements
- > Stack or de-stack mode
- > Presents single pallet to operator



Find out more




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Visit **lbfoster.eu** to read about our Pallet stacker solutions.

Call or email our technical sales team for more information.

A vertical stack of seven colorful, ribbed plastic rings (purple, red, orange, green, blue, and dark blue) is shown in a factory setting. The rings are stacked on top of each other, and the background shows industrial equipment and a white metal structure. A white metal ring is visible in the foreground on the left.

“Building a fully sealed, automated metallisation spray cell requires immense precision and considerable engineering know-how, both of which are embedded in L.B. Foster’s brilliant solution.”

Project manager
Aerospace

Aftersales customer support

We believe in keeping your business moving. In fact, keeping your machines moving with great after sales is a big part of how we like to look after your needs, long after our initial installation of your automated or materials handling solutions.

Our belts and whistles sales package includes:

- > Installation and training
- > Remote and on-site service and fault finding
- > Recommended spares offerings for wear and tear, but also breakdown spares for mission critical machines
- > Full range of spares available for legacy Conveyors International/CI Logistics conveyors
- > Annual maintenance contracts.

What's included in my aftersales care package?

- > Priority booking and preferred charges for engineer call outs
- > 5% discount on the cost of all spares and parts you need
- > Free annual health check for your system (no shut down required)
- > Preferred spares stock holding
- > Full manufacturing drawing access via archive.
- > After sales response on 0800 170 0152

Spares

We know the effect that downtime for repairs and maintenance can have on production, delivery and financial targets. That's why we hold a comprehensive spares supply and as part of our after sales service we offer a preventative breakdown service and maintenance contracts.

Our range of spare parts is available for call off from our central distribution centre in Nottingham. Should you wish to hold any stock of your own, we can provide these to order. Parts can be supplied for your own maintenance engineers to fit or we can offer a fitting service, where our qualified engineer will attend your site and carry out the fitting or refurbishment.



Contact us

Call or email our technical sales team for more information on Aftersales or Spares.



0800 170 0152



aftersales@lbfoster.com

Our team

Introducing our experienced in-house engineering team. We are ready to help and support you with your automation and materials handling challenges.



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