

SF Standard Products

Functional design and innovative thinking

Processing Line Solutions
Conveyor Systems
Platforms & Accessories

Feed Systems
Distribution Systems
Packing Solutions







At SF we believe that food processors of all sizes can be competitive and that innovation should not be exclusive.

We know that the best food processing solutions are built in partnership with customers, whatever their scale of operation. By recognising their needs and understanding their people, only then, through experience and innovation, can processes and equipment be put in place that maintain product quality and freshness and deliver the best return on investment. In turn, this results in a more competitively priced and safer product.

With state-of-the-art manufacturing facilities located both on the West coast of Ireland and in the East of England and with a Projects and Installation team in Central & Eastern Europe, our established and integrated network is perfectly positioned to serve the food industries operational needs around the world.

These manufacturing and logistical sites are well connected with the latest communications technology and offer a synergy of strength and expertise to deliver and support, local, national and international customers.

"A passion for what we do and how we do it has underpinned the business for many years. Our talented and experienced engineers design and manufacture advanced processing & packaging solutions that enable global foods companies to capitalise on the true value of their product. We work in sync with our customers' needs, understanding their processes and optimising their production sites."

**Seamus Farrell
Managing Director**



Contents

Platforms & Accessories	Multihead (CCW) Platform	6
	Goal Post Support Frame	7
	Optional Extra - Washwalls	7
	Fresh Food Weigher Gantry	7
Conveyors	Easy Clean Multihead (CCW) Feed Elevator	8
	Easy Clean Straight Conveyor	8
	Easy Clean Radius Conveyor	8
	Low-Care Multihead (CCW) Feed Elevator	10
	Low-Care Radius Conveyor	10
	Low-Care Straight Conveyor	10
Feed Systems	Screw Feed Conveyor	12
	Bulk Elevator	12
	Fresh Food Weigher Feed Elevator	13
	Grader Infeed	13
Distribution Systems	Rotobatcher	14
	Batch Distribution System	14
	Distribution System	15
	Chain & Peg Tray System	15
Packing Solutions	Trimming Station	16
	Packing Station	16
	Pace Packing	16
	Boning Hall Packing Station	17
	Rotary Tables	17
	Roller Conveyor	17
	Project Management & Design	19
More than Just a Solution	Conveyor Belts	21
	Motors, Inverters & Pneumatics	21
	Spare Parts & Service	23





Multihead (CCW) Platforms



Product Description

The Multihead Support and Access Gantry is designed to support Multihead Weighers, allowing operator access to the product feed location for maintenance and cleaning on the Multihead Weigher.

The platform is designed to reduce vibrations through the Multihead Weigher, which improves the accuracy of the weigher and therefore reduces product give-away.

The importance of having an accurate weigher to reduce your product give-away is essential within an increasingly competitive market place.

Specification

- 304 Grade stainless steel construction
- Easy clean construction
- 4.5mm chequered plate decking
- Box section support frame
- 100mm Kick plate
- Access stairs
- 800mm Landing at 3m and above
- 40mm Tubular handrails
- No flat surfaces on steelwork
- Drainage to one side

Features and Benefits

The SF platforms are designed with no horizontal surfaces to prevent product entrapment and hygiene issues.

The decking has a built in slope to ensure that no water pooling takes place during cleaning.

Investing in the correct specification gantry is essential when installing high speed accurate weighing lines to ensure your production lines can achieve the maximum efficiencies and throughput while maintaining low product give-away.

Options

- Under-slung support frame
- Washwalls

Platform Size

Platform height - from 2000mm to 3500mm
+ 1100mm for safety railing.

Overall length - from 5400mm to 8300mm depending on height and stair length.

Applications:

Suitable for all food processing applications.



CCW Optional Extras

CCW Support Frame



Product Description

The CCW Goal Post support frame is used below a platform when vibrator feeders are positioned on the main platform, this guarantees the CCW is isolated from vibrations which may cause a reduction in the accuracy of the weigher. It can be incorporated into layouts in conjunction with access gantries to provide a cost effective solution to the weigher support and weigher access requirements.

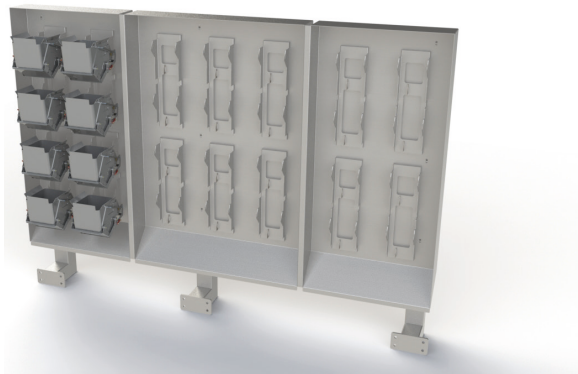
General Dimensions

Width 1500mm x Length 1500mm Height x 2000mm

Specification

- 304 grade stainless steel construction
- 150mm x 150mm x 5mm box section

Wash Walls



Product Description

Our Washwalls are specifically used to mount the Multihead Weigher hoppers during cleaning.

Easily mounted to the side of the platform and designed to suit your multihead weigher, our washwalls give you a hygienic mounting solution, which is perfectly positioned to reduce labour time.

The walls are manufactured with an angled area to the bottom to ensure run-off water is held within the platform area.

By fully welding the hopper spines we have reduced food traps and minimised audit times.

Fresh Food Weigher Gantry



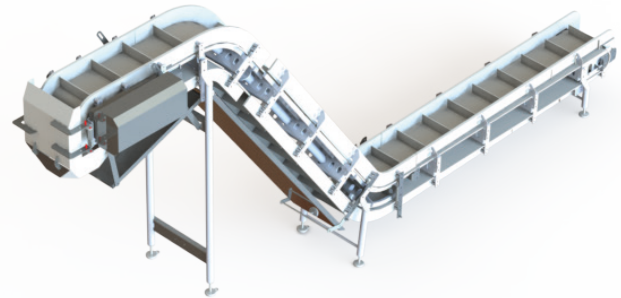
Product Description

The High-Care Fresh Food Weigher Gantry is designed to support the Ishida range of Fresh Food Weighers and to allow operators access to the product feed locations on the FFW.

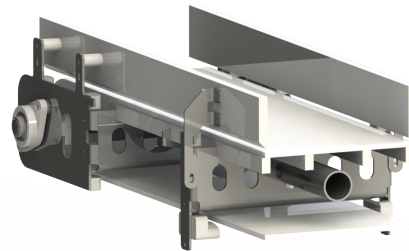
The platform is designed to reduce vibrations through the FFW which improves the accuracy of the FFW and therefore reduces the product giveaway. By installing a superior weigher on an inferior gantry the competitive advantage gained can be wiped out.

Easy-Clean Conveyor Range

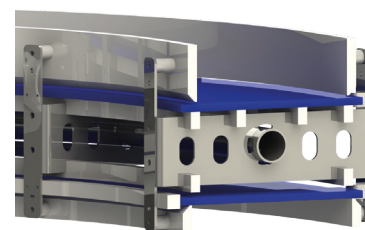
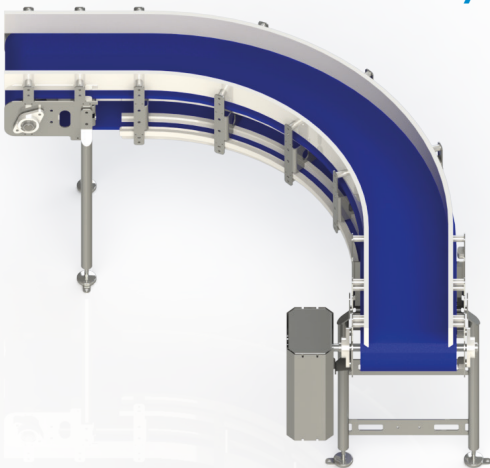
Easy Clean Elevator Conveyor



Easy Clean Straight Conveyor



Easy Clean Radius Conveyor



Easy-Clean Conveyor Range

Features and Benefits

The open tubular construction allows for easy access to all parts of the conveyor without the need to lift up or remove any components.

Cleaning times can be reduced by up to 40% as a result of eliminating flat surfaces where product debris can build up and our easy-access design.

The conveyors are designed using components that have been proven to last in a 24/7 production environment. Through collaboration with our suppliers we have designed superior performing conveyor systems with easy to clean features to ensure that the cost of ownership for the end user is minimised.

All the conveyors are modular in construction so that in the event that a production line needs to be changed to meet a customer's requirements it can be done with minimal disruption and cost.

Specification

- 304 Grade Stainless steel construction
- 60mm Tubular spine
- PE 1000 Plastic wear components
- Intralox modular belting
- Lenze motor and gearbox
- Hingeable drip tray
- Quick release hingeable side guides
- 650mm In-feed height on elevator conveyor
- 950mm Working height on straight & radius conveyors
- Stainless steel control panel
- Variable speed control
- Wash down mode on control panel

Product Description

The Easy-Clean Conveyor Range is designed to transport product within a hygienic food production area where reliability is a necessity.

Easy-Clean Multihead Feed Elevator

The Easy-Clean Multihead Feed Elevator is designed to transport product from a low level production line to a Multihead Weigher where the product is weighed and the portion is dropped into the packing equipment.

The elevator is synchronised with the Multihead to ensure that the product feed is consistent and accurate weighments can be achieved. The elevator is also smooth running to prevent vibrations being transferred to the weigher.

Standard Belt Widths

- 356mm
- 456mm
- 600mm

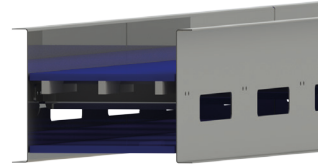
Applications:

Suitable for all food processing solutions within a hygienic food production area. Belt specification subject to application.

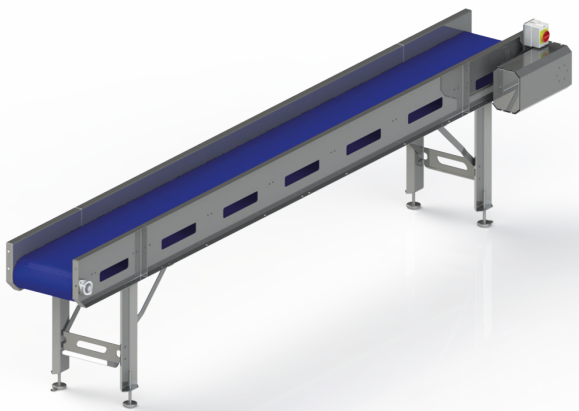


Low-Care Conveyor Range

Low-Care Elevator Conveyor



Low-Care Straight Conveyor



Low-Care Radius Conveyor



Low-Care Conveyor Range

Features and Benefits

The modular belt design affords easy to access replacement parts, enabling maintenance staff to easily complete scheduled maintenance, preventing costly production downtime.

The conveyors are designed using components that have been proven to last in a 24/7 production environment. Through collaboration with our suppliers we have designed superior performing conveyor systems with easy to clean features to ensure that the cost of ownership for the end user is minimised.

All the conveyors are modular in construction so that in the event that a production line needs to be changed to meet a customer's requirements it can be done with minimal disruption and cost.

Specification

- 304 Grade stainless steel construction
- 2.5mm Side panels
- PE 1000 Plastic wear components
- Intralox modular belting
- Lenze motor and gearbox
- Fixed side guards
- 650mm In-feed height on elevator conveyor
- 950mm Working height on straight & radius conveyors
- Stainless steel control panel
- Variable speed control

Product Description

The Low-Care Conveyor Range is designed to transport product within a packing area where reliability is a necessity and the product is not in direct contact with the conveyor belt.

Low-Care Multihead Feed Elevator

The Low-Care Multihead Feed Elevator is synchronised with the CCW to ensure that the product feed is consistent and accurate weighments can be achieved. The elevator is also smooth running to prevent vibrations being transferred to the weigher.

Through collaboration with our suppliers we have designed superior performing conveyor systems so that the cost of ownership for the end user is minimised.

Standard Belt Widths

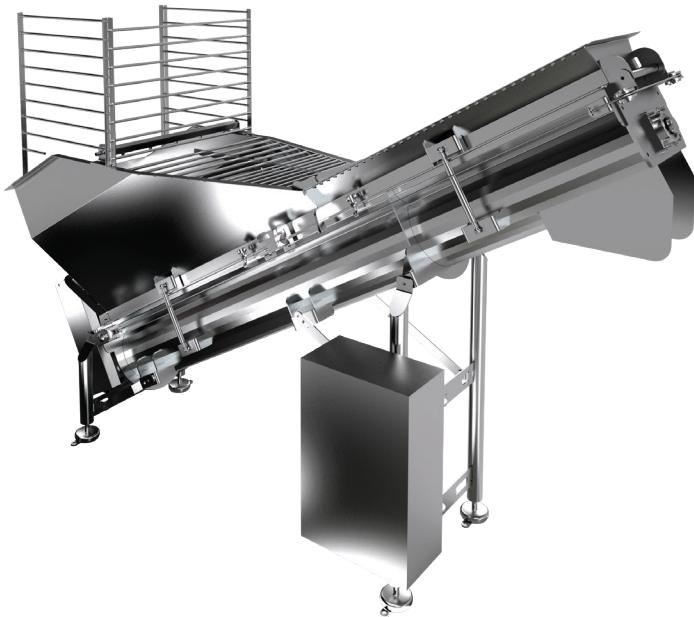
- 356mm
- 456mm
- 600mm

Applications:

Suitable for all food processing solutions where product is not in direct contact with the conveyor belt. Belt specification subject to application.



Feed Systems



Screw Feed Conveyor

The Screw Conveyor has an intake hopper to allow 200 litres of product to be loaded from a tote bin and stored in the hopper. The hopper can also be fed from a production line and used as a buffer when the downstream equipment stops. When the production line is started, the product is metered out at a constant pace to suit production requirements.

Specification

- 304 Grade Stainless steel construction
- 200 Litre Hopper
- 350mm screw body
- PE 1000 Plastic wear components
- Intralox modular belting
- Lenze motor and gearbox wired to an isolator
- Interlocked hinged covers
- Interlocked hinged hopper with gas struts

Bulk Elevators (200-1000 Litre Variations)

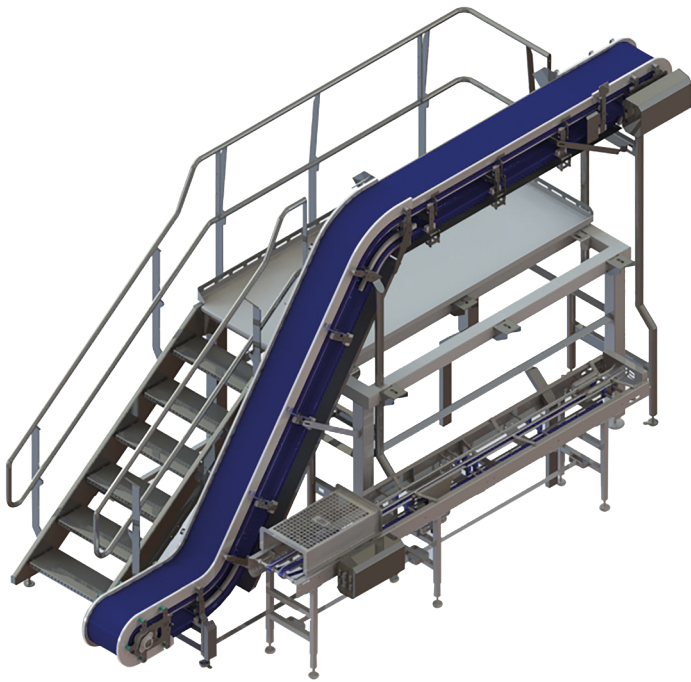
The 200 -1000 litre bulk elevators have an intake hopper to allow product to be loaded from a tote bin and stored in the hopper. The hopper can also be fed from a production line and used as a buffer when the downstream equipment stops. When the production line starts, the elevator runs and the product is metered out to suit downstream production requirements.

Specification

- 304 Grade stainless steel construction
- Relevant hopper size depending on required volume
- 60mm Tubular spine
- PE 1000 Plastic wear components
- Intralox modular belting
- Lenze motor and gearbox wired to an isolator
- Hingeable drip tray



Feed Systems

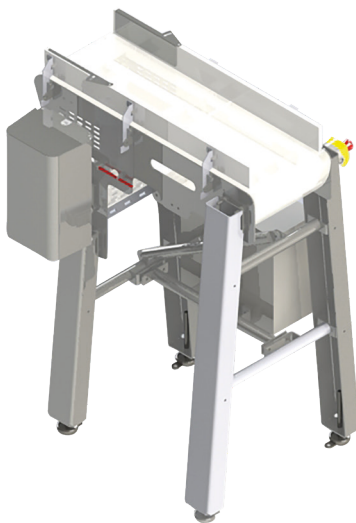


Fresh Food Weigher Feed Elevator

The Fresh Food Weigher feed elevator is designed to feed a continuous flow of product from a production line to the operator feeding the Fresh Food Weigher. The elevator can also be loaded manually at low level by an operator. The elevator eliminates the need for product to be carried up onto the platform.

Specification

- 304 Grade Stainless steel construction
- 60mm Tubular spine
- PE 1000 Plastic wear components
- Intralox modular belting
- Lenze motor and gearbox
- Quick release hingeable side guides
- Stainless steel control panel
- Variable speed control
- Wash down mode on control panel



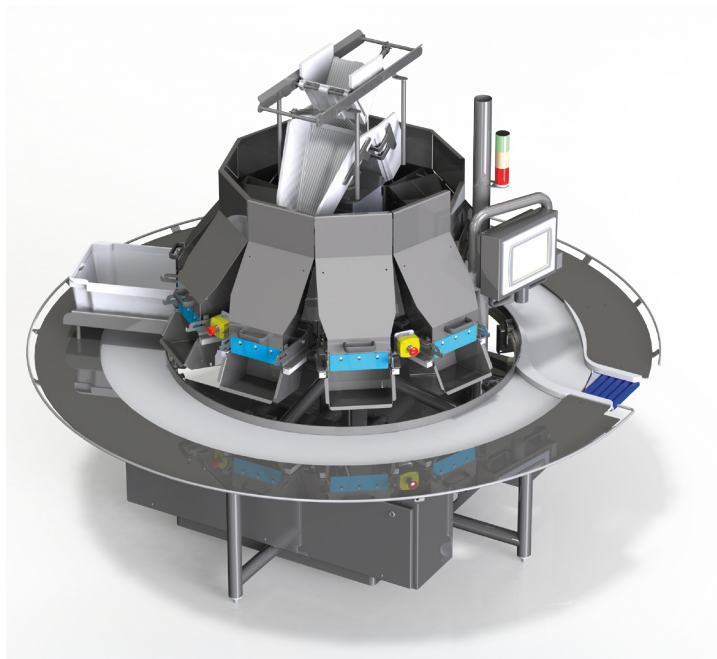
Grader Infeed

The grader infeed's are used to create the required spacing for products being fed onto an Ishida Grader. The conveyors are controlled from the grader control panel and the E-stops and power signals are pre-wired to a junction box.

Specification

- 304 Grade stainless steel construction
- PE 1000 Plastic wear components
- Intralox modular belting
- Lenze motor and gearbox wired to an isolator

Distribution Systems



Rotobatcher

The Rotobatcher is designed to deliver product to and operator to allow them to style the product in a retail tray.

The Rotobatcher has 7 off packing stations with product bins and a buffer shelf to ensure product is always available to pack. It also has a reject chute to handle overweight's and error rejects to minimise rejects downstream.

The styled product is placed on a circular tray takeaway conveyor for delivery to downstream equipment.

The Rotobatcher can run at production speed up to 50 packs per minute.

Batch Distribution System

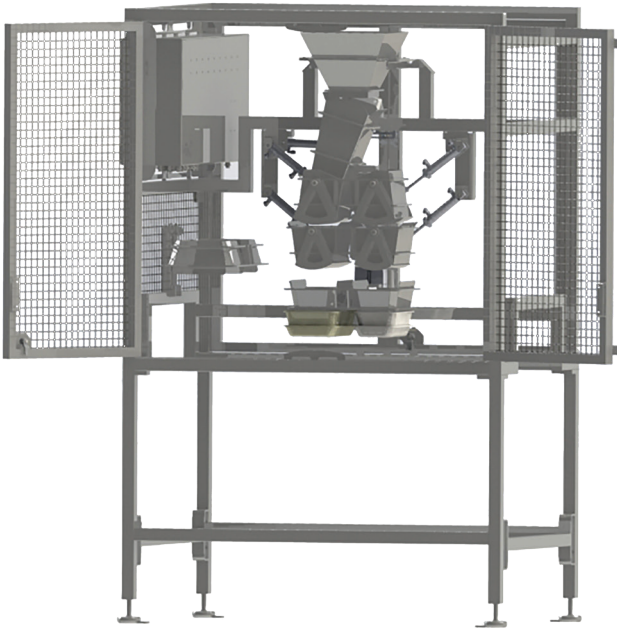
The Batch Distribution System is designed to deliver product to and operator to allow product to be styled in a retail tray. The Batcher can be configured to have 8, 12 or 16 stations with product bins and a buffer shelf to ensure product is always available to pack.

The Batch Distribution System can be fed with multiple CCW's allowing mixed products to be packed into the same tray or bag using multi-dump software on the CCW.

There is also a bulk gate to allow product to be manually bulked packed and weighed. The styled product is placed on a tray takeaway conveyor for delivery to downstream equipment. 2 target weights can be packed simultaneously and delivered to different end of line packing equipment depending on the configuration of the batcher.



Distribution Systems



Distribution Systems

The Distribution System is designed to suit the tray format required and is a 2 x 1 format.

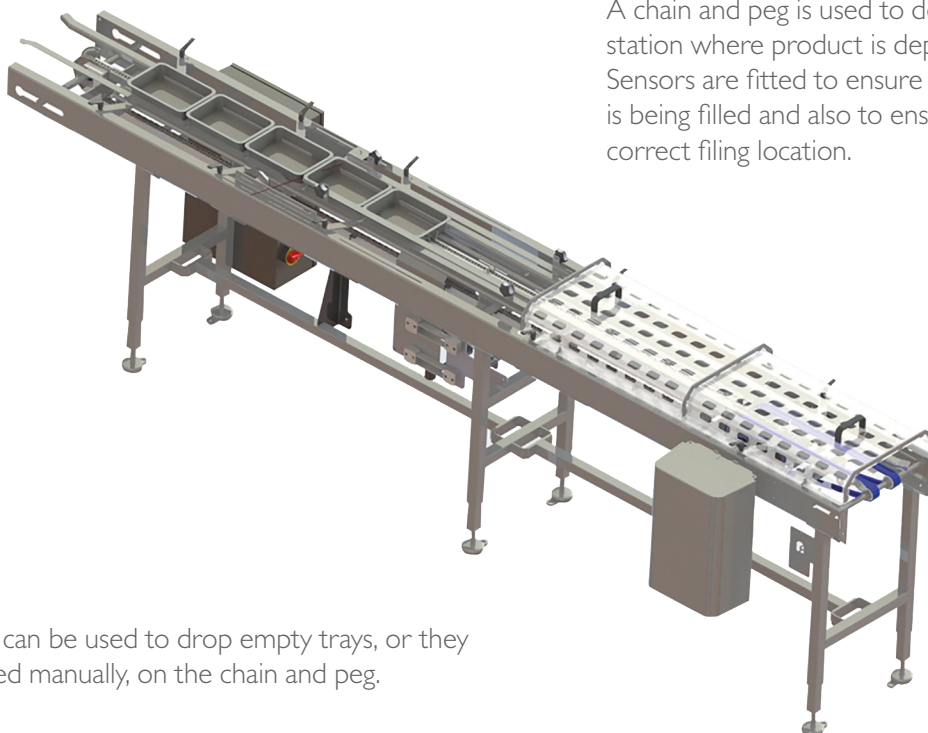
The Distribution System is fully guarded with mesh guarding with interlocked access doors. All the contact parts are clip in to allow for easy removal during cleaning.

Included

- Swing chute
- Product holding hoppers
- Product pool hoppers
- Dipping funnel
- Festo pneumatics
- C4 contact parts

Chain & Peg Tray Filling

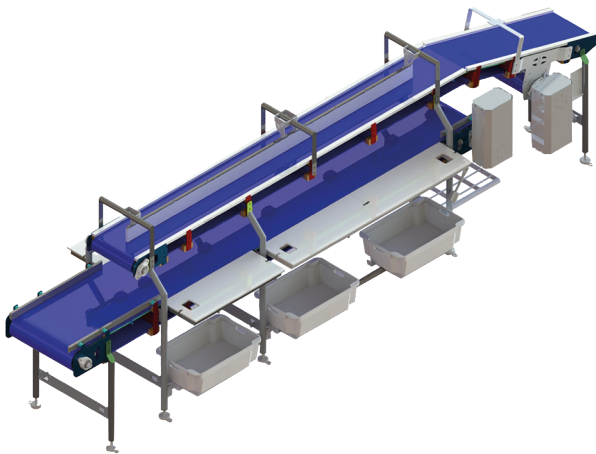
A chain and peg is used to delivery trays into a filling station where product is deposited into the retail trays. Sensors are fitted to ensure a tray is in place when it is being filled and also to ensure that the tray is in the correct filing location.



A denester can be used to drop empty trays, or they can be placed manually, on the chain and peg.

Packing Equipment and End of Line Solutions

Trimming Stations



The Trimming Station is designed to assist trimmers in detecting bone and contaminants chicken fillets.

There is a light under the trimming board which is illuminated with an 18w light which helps highlight any foreign bodies and pieces of bone.

Crate holders are fitted under the trimming tables to collect the waste product.

Trimming Stations can be design for 8, 12 or 16 operators.

Packing Stations

The packing stations are designed to pack products into cases in an efficient manner.

The packing station includes a product infeed conveyor and a carton/crate outfeed conveyor with integrated packing tables.

An empty case shelf can be fitted to store empty crates or cartons above the product conveyor.



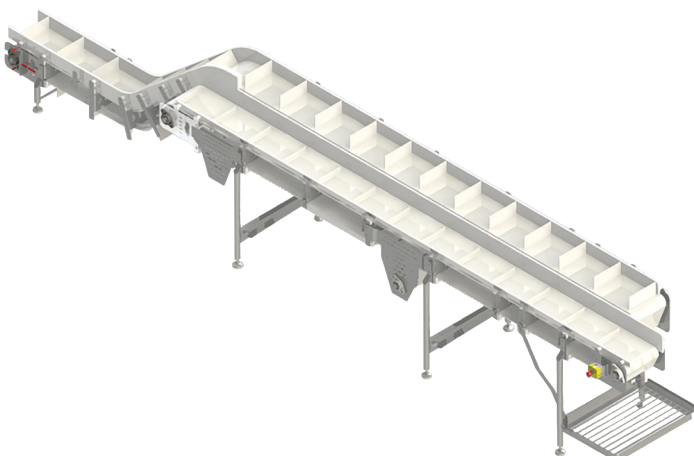
Pace Packing

The pace line can be fed from a CCW, or a FFW.

Product is delivered between flights on the product conveyor and the other lane is used to carry retail trays.

The tray and product travel along the conveyor side by side and operators can carry out a pre-designated portion of the styling required.

All the product must be transfer from the product belt into the retail tray before the retail tray is transferred onto the downstream equipment.



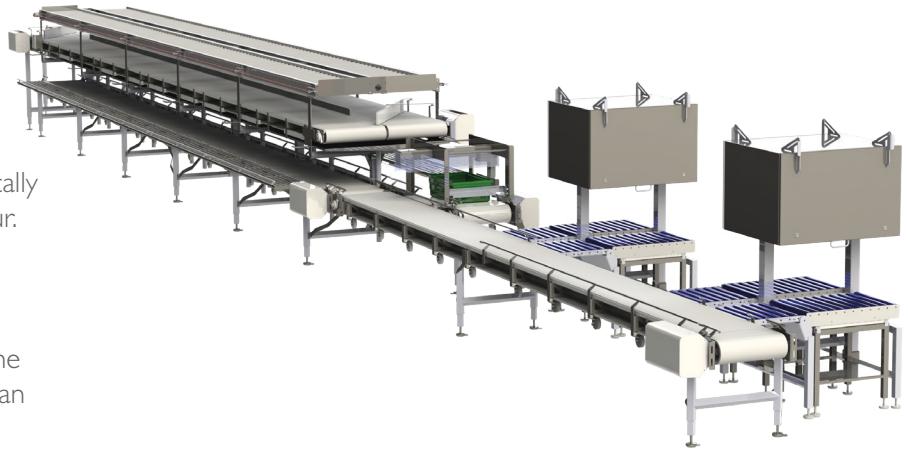
Packing Equipment and End of Line Solutions

Boning Hall Packing Stations

These carousel style packing stations can be custom designed to suit your site.

These efficient packing systems are ergonomically designed to assist the packer and to save labour. After packing, the empty boxes/crates are fed away on a separate conveyor.

The easy clean sturdy design saves valuable time during the cleaning process. The packing line can be modified to feed OCM stations.



Rotary Tables

The Rotary Table is designed to buffer packaged product to suit the packing requirements of a food production facility. The products are delivered to the table where they can rotate until a packing operative is available to pack the product into a box or crate.

The rotary table is 1.2m diameter and is fitted with an HDPE table top.

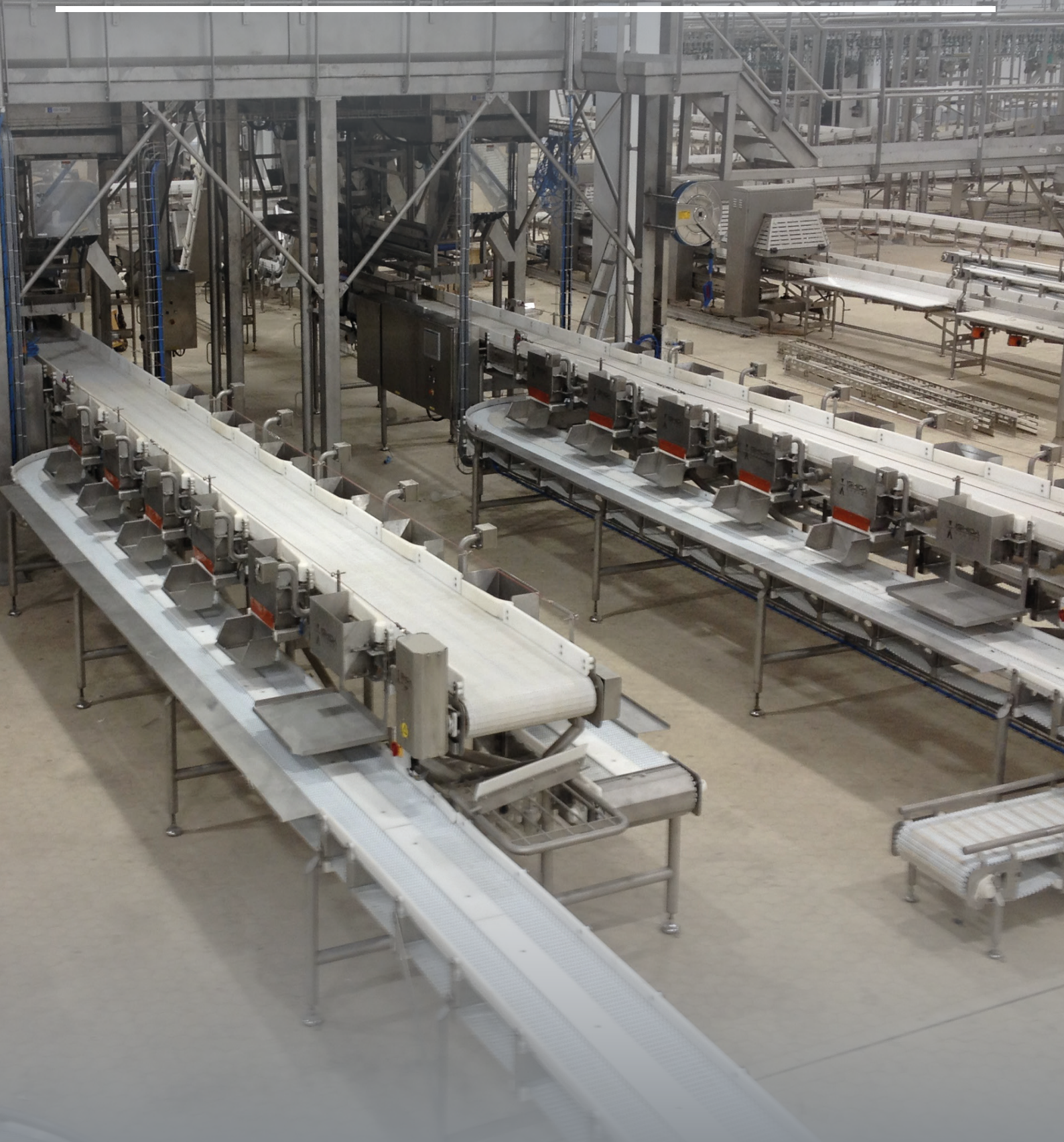
Roller Conveyors

The Roller Conveyor can be used to transport and accumulate packed product.

The roller conveyors are fitted with spring loaded PVC rollers and are manufactured to 300mm wide with 30mm dia rollers or 500mm wide with 50mm dia rollers as standard.



Why an SF Solution?



More Than Just a Solution

Food Industry Experience

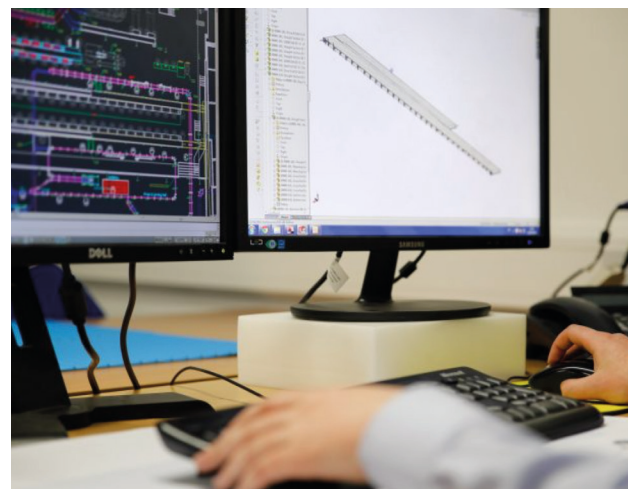
SF have been designing and manufacturing conveying and handling systems since 1983. Over the years we have implemented a world class manufacturing programme, heavily invested in state of the art production facilities and spent time continually training and developing our highly skilled workforce.

This experience and knowledge allows us to build solutions with advanced automation and control. From a standalone piece of equipment to a fully integrated line solution, each SF customer receives industry leading advice and a solution that offers a quick return on investment.

Process Design Expertise

SF Engineering offers development and design services to fit your production requirements. Be it a single stand alone application that needs to be fitted into an existing process or a complex tailor made processing system, we have the experience and expertise to fulfil your requirements.

Our designers are experts at optimising production, increasing efficiency and helping you maximise yield with the best layout and fit for your facility. Our design and consultancy services cover the entire production process and we work hand in hand with your team to make design and installation a smooth process.



Project Management Reassurance

SF Engineering delivers high quality projects on time and to budget. Our project planning and management process encompasses design, engineering, electronics, part and product selection, on-site implementation and ongoing maintenance. Our skilled Project Management teams use proven project management techniques and methodologies to ensure the seamless integration of equipment and innovative production line solutions.

We offer pre-delivery inspections at our fully equipped manufacturing sites to ensure complete operational satisfaction of your unique processing line prior to installation.

Continued Investment in Research & Development

With a continued investment year-on-year in research and development, SF continues to make bold automation advancements that deliver more profitable and efficient processing lines, helping our customers achieve the competitive edge.

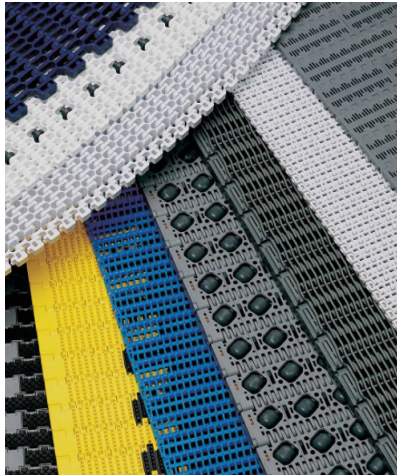
We operate to the highest standards in relation to efficiency, health and safety. All the materials we use are fully compliant with industry rules and regulation ensuring the integrity and safety of equipment and finished solutions from point of sale to project hand over.

World Class Components

With installed projects in every continent, SF work only with the best component suppliers that can match our commitment to delivering top quality solutions.



Industry Leading Conveyor Belts

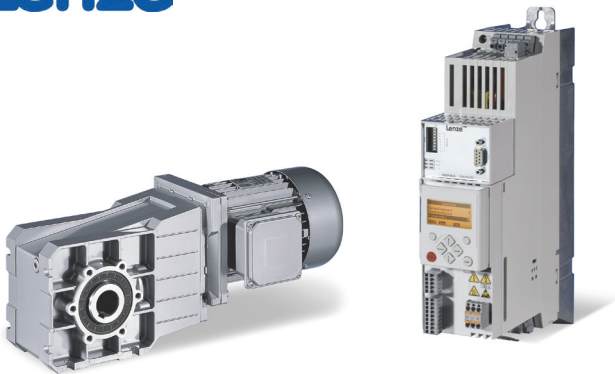


We have carefully selected the industry leading belt supplier, Intralox, the original inventor of the modular belt, whose range of self-tracking, durable and easy to clean modular and PU belting is second to none.

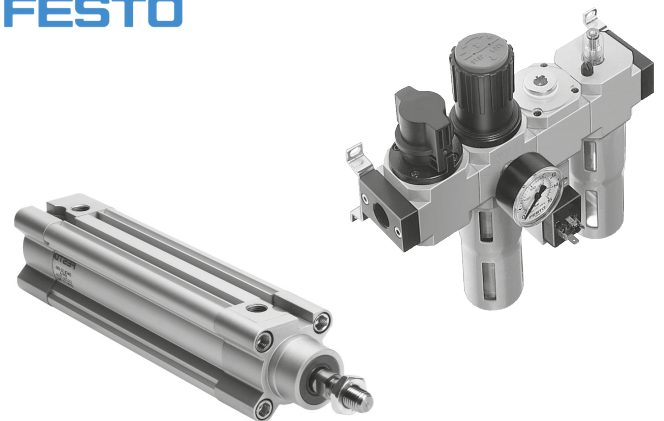
Intralox have a solution specific to almost every application within the food industry and our skilled engineers will help select the one that's correct for you.

Furthermore Intralox hold an extensive range of belts in stock, available for next day delivery, helping you to avoid unexpected downtime.

High Efficiency Motors



Top of the Range Pneumatics



Superior control systems



Quality components



Delivering confidence



Service & Spare Parts Support

SF understands that equipment and efficiency are paramount at all times for our customers, in order to produce the highest standard of product. In response to this, SF has a team of service engineers and technicians permanently devoted to meeting our customers machinery needs.

Following installation, calibration and on-site training of your solution our after-sales care support provides peace of mind and dedicated backup to keep you up an running. We offer a recommended spare parts package that will keep you operational with minimal downtime, preventative maintenance training, spare parts and various service packages to suit all requirements.

Services Include:

- Technical support (telephone & on-site)
- Equipment inspection, maintenance & service
- Calibration in line with technical standards
- Troubleshooting
- Dedicated training packages
- Provision of spare parts for preventative maintenance
- Technical compliance assistance



Service Packages

Tailored Service Contracts

Our tailored service contracts are built around your production requirements and can include the servicing of specialist equipment or complete production lines.

X-Ray Service Inspections

X-Ray safety inspections are a legal requirement. If you require support with your safety inspections our trained engineers can offer full service and corrective maintenance advice.

Machine Performance Reviews

Our visual performance reviews are inspections carried out by our trained engineers while your machines are running, leaving you with peace of mind without impacting your production.

Routine Equipment Service

Regular, routine services help spot wear and tear that can prevent problems before they occur. Our routine equipment service can be arranged for single machines or complete production lines.

Routine Verifications

Routine verifications are integral to the functionality of the machine and the safety of the operators. This can include everything from radiation leakage to correct weighments.

Periodic Calibrations

Calibration is vitally important wherever measurements are important. Our annual calibration contracts ensure your machine accuracy is maintained.



SF Engineering
Grange
Co. Sligo
Ireland
F91 YY46

t: +353 (0) 71 9163334
e: info@sfengineering.ie
www.sfengineering.ie

SF Engineering
Ormond House
Nuffield Road, St Ives
Cambridgeshire
PE27 3LX

t: +44 (0) 1487 740131
e: info@sfengineering.co.uk
www.sfengineering.co.uk

