



# SF Poultry Processing Solutions

Delivering greater product quality & flexibility

Improved yield  
Increased hygiene & safety

Reduced labour  
Superior pack presentation



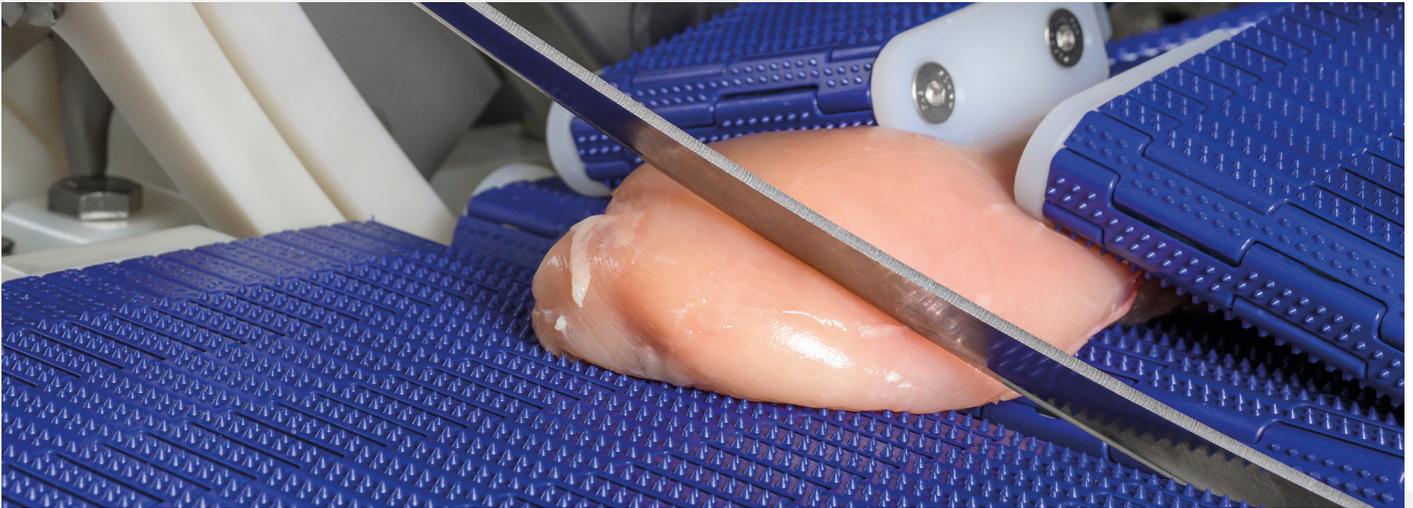
# SF experience built into every poultry processing line

Prospects for growth in the poultry sector remain promising with poultry providing a valuable, nutritious source of protein. As the world population continues to grow, the global market for poultry rises and an increase per capita in protein consumption.

Some markets have turned to centralisation and an upscaling of automated production in order to produce a wider choice of end products.

As labour costs increase and natural resources deplete, producers look for greater efficiency with a reduction in costs. This means production needs to run without any glitches and the highest possible up-time to achieve the greatest returns.

The emphasis is on adding value to poultry as effectively as possible. Food safety and quality, producing in an ethical and socially responsible way are all key. Consideration for animal welfare, full traceability, water and energy consumption and the raw material are key focus areas.



## Proven increase in yield

Within poultry processing operations, even small fluctuations in giveaway can have a significant impact on revenue. That's why each of our solutions focuses on eliminating guesswork and maximising yield, resulting in higher profits throughout your business.

## Focus on ergonomics, hygiene & safety

Our line solutions are ergonomically designed with operative health and safety in mind. We are always considerate of work station heights, reducing heavy lifting and manual handling, conveyor pinch points, and allowing easy access to reduce clean down times.

## Greater efficiency with lower running costs

Running costs are key to production efficiency. Energy efficient components are key in all of SF Engineering's designs. We offer up to 90% efficiency with all our motors.

## Reduction in highly-skilled labour

Reducing labour dependency is a key factor when we design our poultry processing lines. We offer a range of fully-automated or semi-automated line solutions that ensure you can achieve high-quality products consistently at increased production speeds with fewer personnel.

## Superior product & pack presentation

Control, accuracy and speed are key to achieving superior pack presentation and increased shelf life. We offer a range of world-class leading weighing, packing and sealing technology to ensure your product is presented at its best as it leaves your processing facility.

## Environmental awareness

SF Engineering's green approach helps to make our customers' facilities more profitable. Through our innovative conveyor design, incorporating 70% more open space, our customers can make huge savings on less chemical use, water use and labour.





## Scalable solutions with customisable capability

Our scalability and customisation capability is what gives SF a unique advantage and is the reason why customers return time and time again.

After many years serving the poultry industry, we know that the best processing solutions are built in partnership with customers, whatever their scale of operation.

Before introducing new processes or manufacturing equipment, we take our time to understand our customers' business needs, to ensure solutions are put in place that deliver the best return on investment.

Because our solutions can be tailored to a number of processors' needs we are able to make the benefits of our technology accessible to a wider range of processors.

## From secondary processing to retail packed product

- Inspection & Trimming
- X-ray Bone Detection
- Portion Cutters
- Weighing Scales
- Batching & Grading
- Multihead Weighing
- Tray Handling & Packing
- Quality Control & Labelling
- Washers & Hygiene Solutions



# SF Poultry Processing Solutions

## Inspection & Trimming

The flexibility of the SF Inspection and Trimming lines allow processors to select those cuts necessary for achieving optimum product value and keeping loss to a minimum. Manual trimming is performed on back-lit trimming boards to ensure operators are alerted to the presence of bone fragments.

The solution can be designed to incorporate manual tray packing or alternatively a takeaway conveyor can transport the product to further downstream processes.

## X-Ray Bone Detection

The Ishida G2 X-Ray Dual Energy Sensor detects what other inspection systems miss making it ideal for the detection of bone in bulk product before further processing.

It has the most effective X-Ray detection of low-density objects, including bone, shell, metal, glass and rubber. Offering pinpoint detection of foreign bodies under 0.6 mm thanks to its enhanced G2 technology. From shell and stone, to metal and bone.

## Portion Cutters

The PORTIO, is a high-precision portion cutting machine, capable of up to 1000 fixed weight cuts per minute. The blade can be set to an angle of 0 to 30 degrees or 45 degrees to achieve a natural look on sliced poultry portions.

Specialised programmes ensure the best decision is made prior to cutting to maximise yield.

Once portioned, we offer a range of solutions to ensure the product and trim is efficiently sorted including a retractable belt outfeed, blow-off separator and outfeed product holder.

To optimise yields, an In-line grader can be used in combination with the outfeed product holder and weighing unit. Multiple target weights can be programmed on the PORTIO and same weight batches are brought back together once graded.

## Weighing Scales

We provide a range of weighing scales to suit your processing requirement including flow scales, bench top scales and floor scales.

All scales provide high levels of accuracy and are robust enough to match up to the heavy demands of the poultry industry.

## Batchers & Graders

SF supply a range of flexible batching and grading solutions to suit your needs throughout the processing operation, whether the product is whole, portioned, fresh, frozen, or marinated. Each solution helps to reduce labour requirements and also speed up the processing operation.

Depending on the requirement, our batchers and graders can operate as stand-alone units or can be fully integrated into a complete packing line. When working in-line with our portioning equipment, yields can be optimised and giveaway is minimised through intelligent programming and accurate batch building.

SF graders are capable of grading products by size, weight or quantity. These efficient solutions eliminate human error and minimise product giveaway, guaranteeing higher levels of accuracy, hygiene and traceability.





## Multihead Weighing & Distribution

We design & build fully-automated multihead weighing and distribution processing lines which are perfect for a high throughput poultry processing operation

These multihead weighing and batching lines are suitable for fresh and frozen poultry products.

The system handles all in-feed, sorting, mixing, and precise weighing requirements to achieve exact weighed batches of product which is then distributed into either an awaiting tray, bag, or directly onto a conveyor belt for delivery to a grading line.

## Tray Handling & Packing

Presentation and speed are fundamental in the tray packing and handling process. We provide solutions that ensure this phase of production is either fully automated or operating with a reduced labour requirement whilst still achieving optimum throughput and superior pack presentation.

For channelling products from multi-lanes into a single lane at optimal speed we offer pack turners, singulators and convergers to ensure correct presentation when the pack reaches downstream processes such as a labeller. We offer a powerful range of advanced Tray Sealing & Denesting solutions that deliver the highest standards of pack appearance, convenience, shelf-life, safety and hygiene.

Whether your requirement is to pack a single product or many different products per shift, whether you operate short, medium or long production runs, there is a tray sealer to meet your production challenges.

## Quality Control & Labelling

Correct quality control checks should be made throughout the packing process to promote customer satisfaction and ensure the strictest legislative requirements are met.

We supply a range of world-class solutions from partners Ishida and CEIA to help you achieve this, including;

- Checkweighers
- Weigh price labellers
- Metal detectors
- X-Ray inspection systems

## Washing & Hygiene Solutions

We understand the constant challenge the poultry industry faces to ensure extreme high levels of hygiene are met when cleaning crates, bins, pallets, dolavs and trays.

Our industrial washers and dryers are built to suit your exact pollution requirements. From stand-alone units to fully integrated, automatic washing and drying solutions, each system saves valuable labour and utility costs, whilst maintaining the highest level of hygiene.

Our hygiene equipment helps prevent the risk of contamination from production personnel and equipment.

We provide a wide range of high-quality solutions including;

- Access control boot and hand washers
- Hand sanitisers
- Knife washers & sterilisers
- Boot washers and storage racks
- Apron Washers





## Customer Partnership Support

SF are here to help you through every stage of your new project. This can often start in the consultancy stage where we offer feasibility studies that can help to increase product throughput or yield, an assessment to reduce product recalls or evaluating a greenfield site for a poultry processing facility.

Once all our assessments are carried out, our Planning, Design and Project Management experts take over to co-ordinate the project right through manufacture, installation and commissioning. All teams are very familiar with the demanding conditions that arise across the poultry processing industry and have gained a vast knowledge of solving complex industry challenges on a daily basis.

- **Consultancy**
- **Planning**
- **Design**
- **Project Management**
- **Manufacture**
- **Installation & Commissioning**

## Service & Spare Parts Support

Our Service Team are here to support you through the life-time of your equipment. Yet, we still prefer to prevent problems before they happen. We highly recommend carrying out regular calibration, verification and preventative maintenance checks as well as staff training to ensure you can get the best from your investment. Should any unexpected technical issues occur, we offer a range of Service Level Agreements including, remote assistance and diagnostics as well as on-site support.

Keeping your production lines running smoothly is our main priority. Our Spare Parts Team supply only the highest standards of genuine parts, including, belts, motors, sprockets, bearings, electrical components and pneumatics from industry leading manufacturers. Offering a quick and reliable service when you need it the most.

- **On-site Service Support**
- **Spare Parts**
- **Preventative Maintenance**
- **Remote Support**
- **Training**
- **Calibration & Verification**

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**SF offer expert support and guidance through the entire planning process and for the life-time of your equipment**

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SF Engineering - Ireland  
Grange, Co. Sligo  
Ireland, F91 YY46

Tel: +353 (0) 71 9163334  
Email: [info@sfengineering.ie](mailto:info@sfengineering.ie)

SF Engineering - UK  
Ormond House, Nuffield Rd, St Ives  
Cambridgeshire, PE27 3LX, UK

Tel: +44 (0) 1487 740131  
Email: [info@sfengineering.co.uk](mailto:info@sfengineering.co.uk)

[www.sfengineering.ie](http://www.sfengineering.ie)