



SF Fish Processing Solutions

Focused on quality, throughput and yield

Improved yield
Increased hygiene & safety

Reduced labour
Superior pack presentation



SF experience built into every fish processing line

SF Engineering provides high-quality process line solutions for fish processing plants across Europe, offering solutions that are reliable, easy to operate and efficient, helping to minimise waste & improve efficiency

Moving to an automated solution will bring your fish processing facility to the next level, offering increased throughput and

greater product quality from product intake through to packing and product inspection.

Our solutions give white fish, salmon and shellfish processors the ability to capture and record staff efficiencies and monitor and trace each product batch, making for a more efficient solution with yield return through detailed information.



Proven increase in yield

Within fish 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 fish 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 customers return time and time again.

After many years serving the fish 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 raw material intake to retail packed product

- Weighing
- Batchers & Graders
- Filleting & Trimming
- Portion Cutters
- Packing Solutions
- Multihead Weighing
- Tray Packing & Handling
- Quality Control & Labelling
- Industrial Washing & Hygiene



SF Fish Processing Solutions

Weighing

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 fish industry.

Our flow scales operate at normal production speeds and can be incorporated at specific intervals in your production line to provide operator verification checks, yield checks, and ensure accurate batch or pack weights are met.

Bench scales and Floor scales can be used as standalone installations where required.

Batchers & Graders

SF offers a range of batchers & graders to integrate multiple steps of the production line, to provide a total solution that ensures your raw product is weighed, divided and sorted correctly.

Our state-of-the-art technology creates highly advanced accurate and fast grading solutions for whole product, portioned product, fresh or frozen.

We offer a full range of batchers and graders to meet all requirements that can withstand the harsh environment of a fish processing facility.

Filleting & Trimming

Our filleting and trimming solutions focus on yield, speed and traceability. By utilising intelligent software, our yield data capture functionality can then be used to report on the individual filleter performance and overall production. The reports feature real-time graphical monitors of filleter KPIs and can record overall filleting yields per ITN (Individual Traceability Number).

Time is of the essence in modern food processing and we've ensured that intelligent distribution is a basic element of our solution. Our distribution system means each operator never has to wait for product. Each holding hopper is automatically populated while filleters process the fish.

With traceability being a common concern for the modern processor, SF Engineering's solutions allows for supplier and product details to be stored at the beginning of each production run so that individual fish can be uniquely traced from its originating batch, dynamically or statically weighed and tracked through the filleting process.

Portion Cutting

The PORTIO, a high-precision portion cutting machine is suited to fresh products such as fish fillets and whole fish, cutting to fixed thickness or fixed weight portions.

It is capable of up to 1000 fixed weight cuts per minute and will always intelligently decide the best possible cutting pattern to minimise by-products.



Packing Solutions

Our range of flexible packing solutions are designed to increase process efficiency and ensure optimum product flow. They are available in various configurations and meet all stringent hygiene standards.

The optimal design of the overall solution enables process times to be minimised while maintaining maximum output, contributing to low operating costs and an optimised line footprint.





Multihead Weighing & Distribution

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

These multihead weighing and batching lines are suitable for fresh and frozen fish and seafood 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 labellers. 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 of odour and fish scale contamination 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 fish 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 fish 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

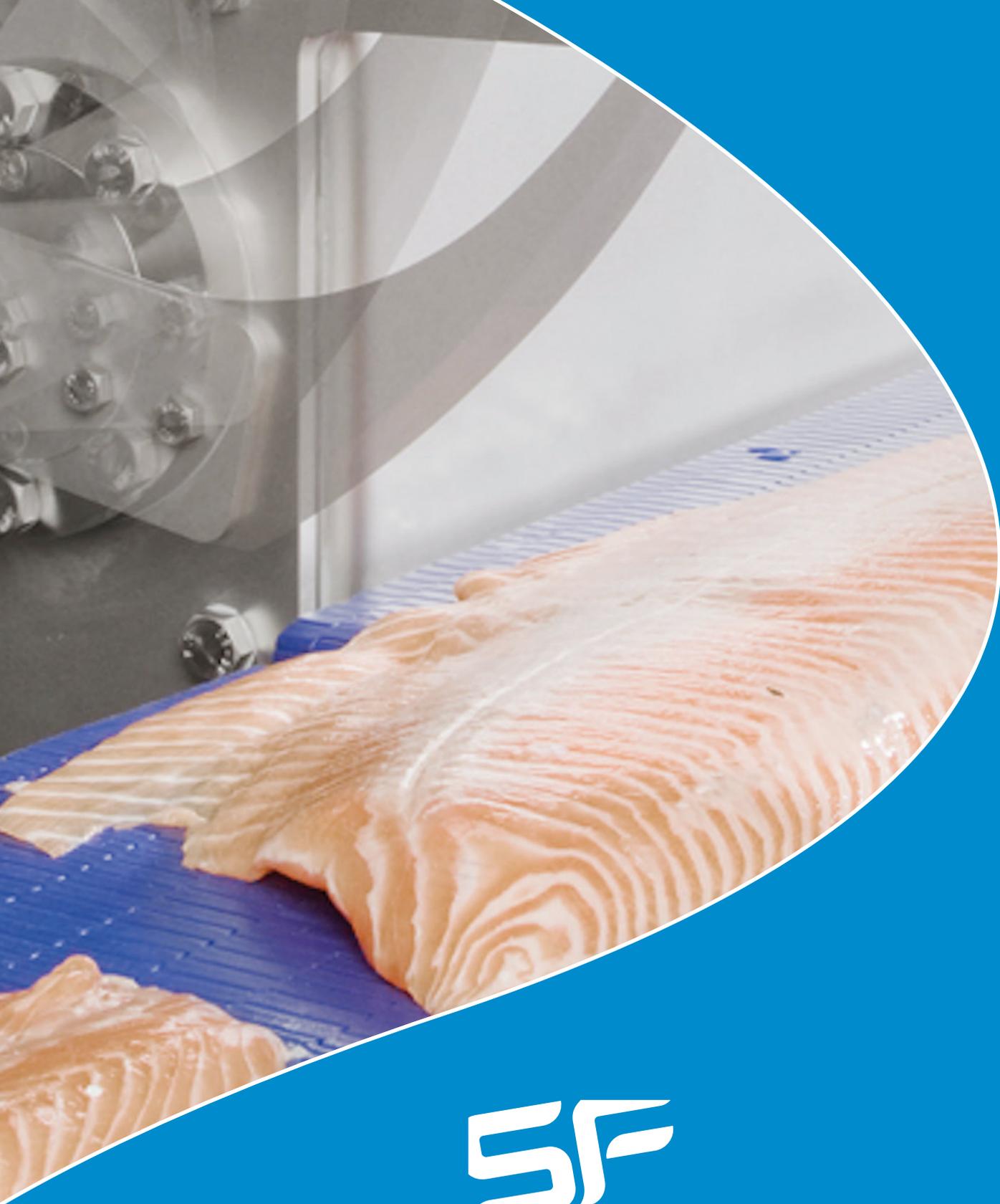
Our Service Team are here to support you through the life-time of your equipment. Yet, we still prefer to prevent problems before they happen. We highly recommend carrying out regular calibration, verification and preventative maintenance checks as well as staff training to ensure you can get the best 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**

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





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

Tel: +353 (0) 71 9163334
Email: 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

www.sfengineering.ie