



SF Red Meat Processing Solutions

Primal breakdown to retail packing

Proven increase in yield
Focus on ergonomics, hygiene & safety

Reduction in highly-skilled labour
Superior product & pack presentation



Increasing profit return through custom-built design and proven innovation

In today's global marketplace, red meat processing companies are often facing low-profit margins due to fluctuating supply from farmers on one side and pressure from influential retailers and consumers on the other.

Red Meat companies are thus increasingly looking for smarter ways to compensate for diminishing labour supply and increasing costs of raw materials. Likewise, they also search for methods to meet consumer demands for higher quality

products and diversity in a timely and cost-effective manner. Answers to smart processing and meeting consumer demands lie in automation and efficiently controlling, monitoring and measuring virtually every aspect of their operations from slaughtering to packing. Factors such as data management and improving efficiency have increased focus on key performance indicators (KPIs), monitoring how effectively their plant is running e.g. yield, throughput, control, traceability, food quality, safety, flexibility, and cost efficiency.



Proven increase in yield

Within red meat 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 the dependency on skilled labour is a key factor in the right solution. By introducing pace deboning, portion cutting and inline fat analysis, you can achieve consistently high-quality products at increased production speeds with less qualified 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

After many years serving the red meat industry, we know that the best food 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 maintain product quality and freshness and deliver the best return on investment.

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

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

From raw material intake to retail packed product

- Deboning & Trimming
- Trim Management
- Portion Cutting
- Weighing Scales
- Batchers & Graders
- Meat Preparation
- Handling & Packing
- Multihead Weighing
- Tray Packing & Handling
- Quality Control & Labelling
- Industrial Washing & Drying
- Hygiene Solutions



Boning Halls

Raw material Intake to packed product

Deboning & trimming

All of our deboning and trimming solutions can be customised to suit your unique product specification, process, throughput and trimming requirements. With built-in, real-time data monitoring of yield, operator efficiency and giveaway, managers are able to see live reports on key performance indicators during each production process.

By introducing a streamlined deboning and trimming process you can save up to 30% on processing time in comparison with traditional table boning. Each operator performs a specific task in the deboning process as the meat passes them on the conveyor. This method of deboning spreads the workload equally and as each operator consistently performs the same process, it is possible to achieve more efficient, uniform deboning with less qualified personnel.



Trim Management

Trim from the deboning and trimming process is usually further processed for convenience products. Before being sent to meat preparation for processing into sausages or burger products, the trim passes through the SF Trim Management System for a real-time, accurate measurement of chemical lean (CL) content. In doing so, the product is simultaneously checked for foreign body contamination including bone.

Based on the CL analysis, the trim meat is automatically sorted and batched according to the required specifications for grinding and mixing.

Portion Cutting

SF offers portion-cutting solutions for the high-speed production of fixed weight or fixed thickness boneless products. The PORTIO is a high-precision yet economic portion cutting machine suited to fresh meat. It offers the highest quality of the cut, accuracy, capacity and obtained yield gain which have consistently proven to offer our customers a fast return on investment.

Designed to comply with the demand for high capacities in the meat processing industry, the PORTIO 3D is a dual lane machine featuring 300mm belts and lateral cameras for maximum scanning precision. The two lanes are integrated into one machine which run completely independent from each other increasing throughput whilst maintaining a small operational footprint.



Weighing

We provide a range of stainless steel hygienic weighing scales to suit your processing requirement including dynamic checkweighers, bench and portion control scales, easy clean lift-up and lift-top floor scales, pit mounted dormant scales and low profile drive in's and drive troughs with 1 or 2 ramps that provide easy access for dolavs, pallet trucks and cages.

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



Batchers & Graders

There are many benefits to fixed-weight batching. It is especially important for meat processors to keep giveaway minimal while packing products and ensuring that an exact target weight is delivered to the customer.

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 packaged correctly.

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



Meat Preparation

Our ability to incorporate fat analysis technology into the unique processes of each butchery and processing plant sets us apart from similar systems.

The SF Pallet Build solution allows meat processors to inspect and grade incoming meat, ensuring purchased meat was accurately priced and allowing pre-production grading by %CL value before mincing and blending.

The SF Recipe Formulation System is a turnkey solution that enables processors to formulate meat recipes containing one, two or more meat types whilst achieving a consistent and accurate CL value.



Handling & Packing

Our handling & packing solutions connect all operations in the processing plant. We can integrate solutions into existing production management systems, or offer completely new solutions including full destination control.

We focus on solutions that increase process efficiency and ensure optimum product flow to meet your needs, budget and floor space.

Retail Packing

With a focus on speed, accuracy and quality, we provide complete solutions that fulfil the retail requirements, as specified by the end customer.

Along with our own systems our portfolio of world-class leading solution partners; Ishida, Marelec and CEIA provide key elements to the packing process.



Multihead Weighing & Distribution

Multihead weighers are pivotal in the improvement of efficiency on a production line. For sticky products that can't efficiently be moved by vibration or gravity alone, the Screwfeed Weigher offers a fully automatic weighing solution.

Alternatively, a Fresh Food Weigher line offers a semi-automatic solution. Both options are ideal for cooked, chilled, fresh or frozen meat products including diced meat, sausages, burgers, bacon.

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

Industrial Washing & Drying

We understand the constant challenge of dried meat, blood, fat and foaming during the cleaning of equipment. Our industrial washers and dryers are built to suit your exact pollution requirements. Our solutions include:

- Deboning glove washers
- Fully automated logistic washing systems
- Crate, trolley, tunnel or cabinet washers
- Blowers & dryers



Tray Packing & Handling

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.

Hygiene Solutions

Our hygiene equipment helps prevent the risk of contamination. We have a range of solutions from:

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



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 meat 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 red meat 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





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