

## SF Fat Analysis Solutions

For fresh, frozen, bulk or packed meat

Accurate Real-time CL Calculation  
Less Lean Giveaway

Built-in Contamination Detection  
Improved Process Flow





**Fat content or chemical lean (CL), as it is commonly known is one of the most important parameters to control in the meat industry; it is as important for cutting and boning plants as it is for manufacturers of processed meat products.**

With CL percentages used by the meat industry to establish product pricing, knowing the actual lean point of recipe batches and meat portions enables meat processors to capitalise on the true value of their product.

**Fat Analysis**

At the center of each solution is the Eagle Fat Analyser. Using Dexa Technology the machine is capable of inspecting 100% of throughput in real time, providing in-depth reportable analysis within +/- 1CL. This non-invasive system provides lab accuracy at the speed of normal production.

**Built-in Contaminant Detection**

The Fat Analyser also works as a contaminant detector, alerting you to a wide range of hazardous materials including metal, calcified bone, stone and glass.

**Flexibility**

Unlike other methods of Chemical Lean testing, the SF Fat Analysing solution is not limited to boneless, ground meat. The system is capable of inspecting all meat - whether fresh, frozen, bulk, blended or packed in cartons. In addition to this the technology is not affected by freeze/thaw plant conditions, foil or metalised film or meat conductivity.

**While it's an undeniable fact that Fat Analysis is a valuable resource to the meat industry. It's the custom-made line solutions that are designed, manufactured and installed by SF that enable our customer's to really maximise the potential of the machine. It's our ability to incorporate this technology into the unique processes of each butchery and processing plant that sets us apart from similar systems.**

**Our Customer's Experiences**

- Reduction in lean meat giveaway with savings varying from £100k - £500k per annum, depending on volume.
- Up to £7k per week decrease in lean meat giveaway during sausage recipe formulation.



# Trim Management

## For Butcheries & Slaughterhouses

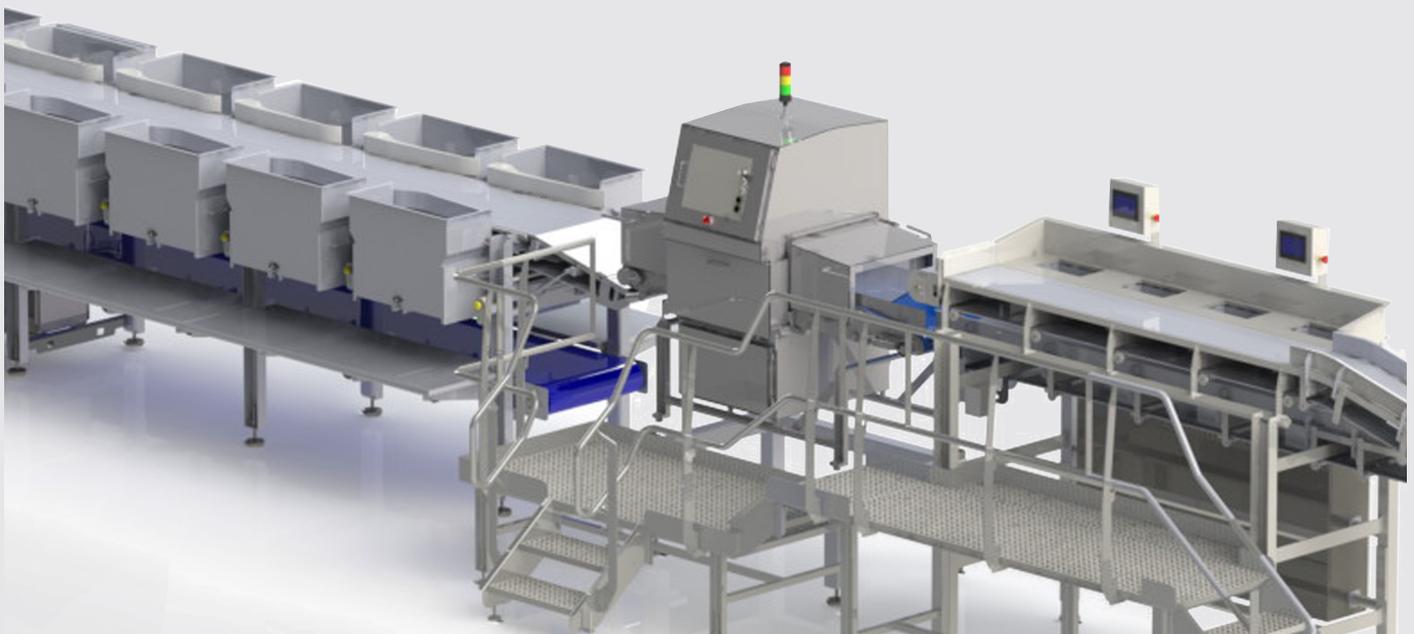
The SF Trim Management System allows you to accurately analyse the CL ratio of red meat and manage your trim into batches of a pre-determined target fat percentage.

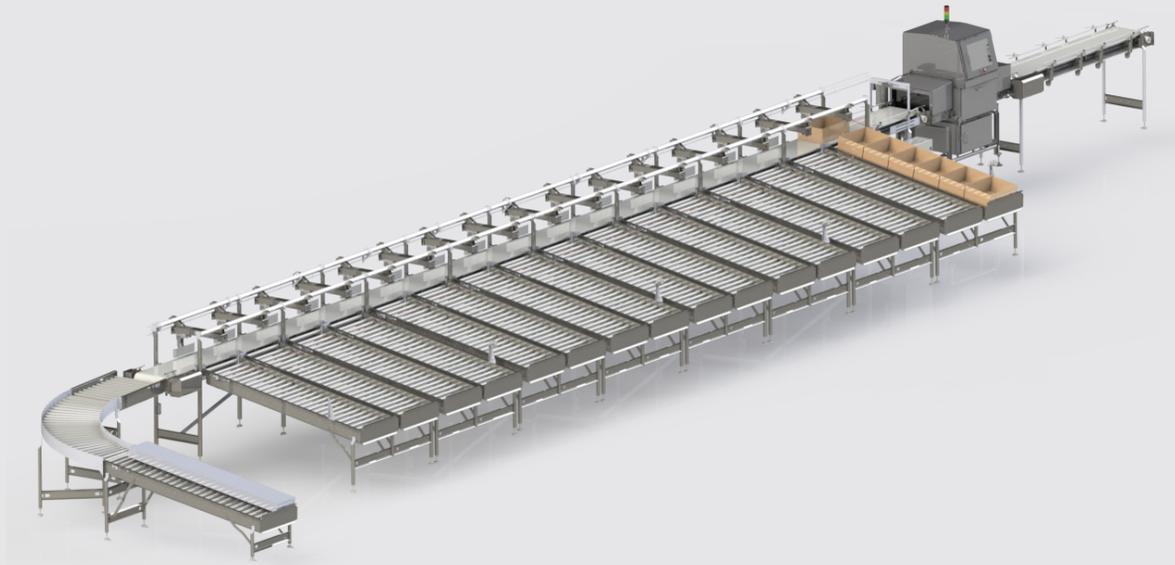
1. Trim and Flanks are transferred from the deboning line.
2. In-feed operators visually grade into portions of 2.5kg-15kg depending on product type.
3. The Fat Analyser will inspect 100% of product within +/-1%CL in real time. Providing lab accuracy at the speed of normal production.
4. The built in contamination detection will ensure hazardous batches are removed from the line before grading.
5. The SF Grading Solution will gently grade trim to a target batch of a predetermined CL value.

6. Remote and local management interface for controlled batch configurations.
7. Grading station buffer hoppers will allow for continuous grading whilst boxes/crates are replaced.

### Benefits of the System:

- Achieve real-time results.
- Less lean giveaway.
- Improved process flow.
- Foreign object contamination detection with automatic rejection.
- Live operator feedback with managerial reporting.
- Capitalise on the true value of your product.





# Pallet Build System

## For Meat Processors

### Incoming Inspection & Grading

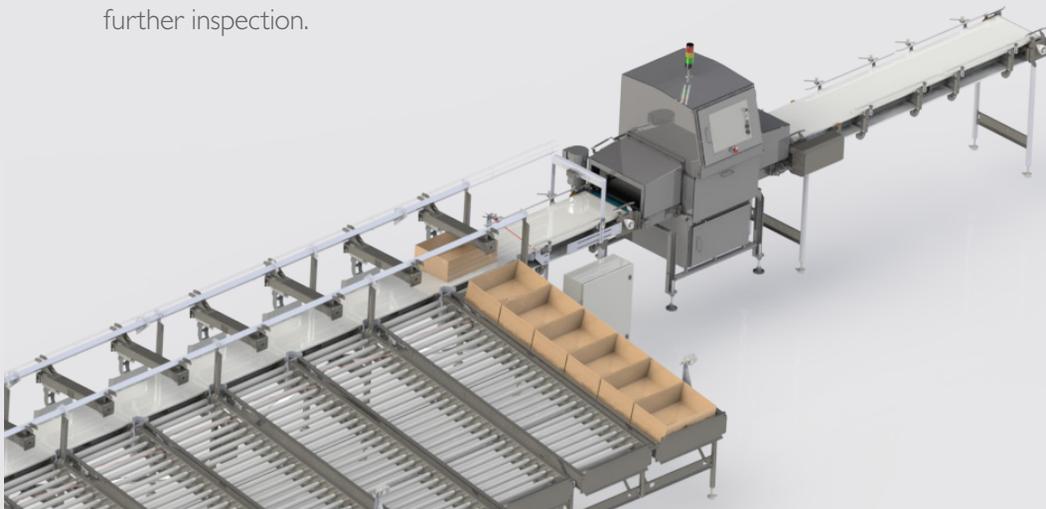
Meat processors can benefit from inspecting incoming meat, ensuring purchased meat was accurately priced and allowing pre-production grading by %CL value before mincing and blending.

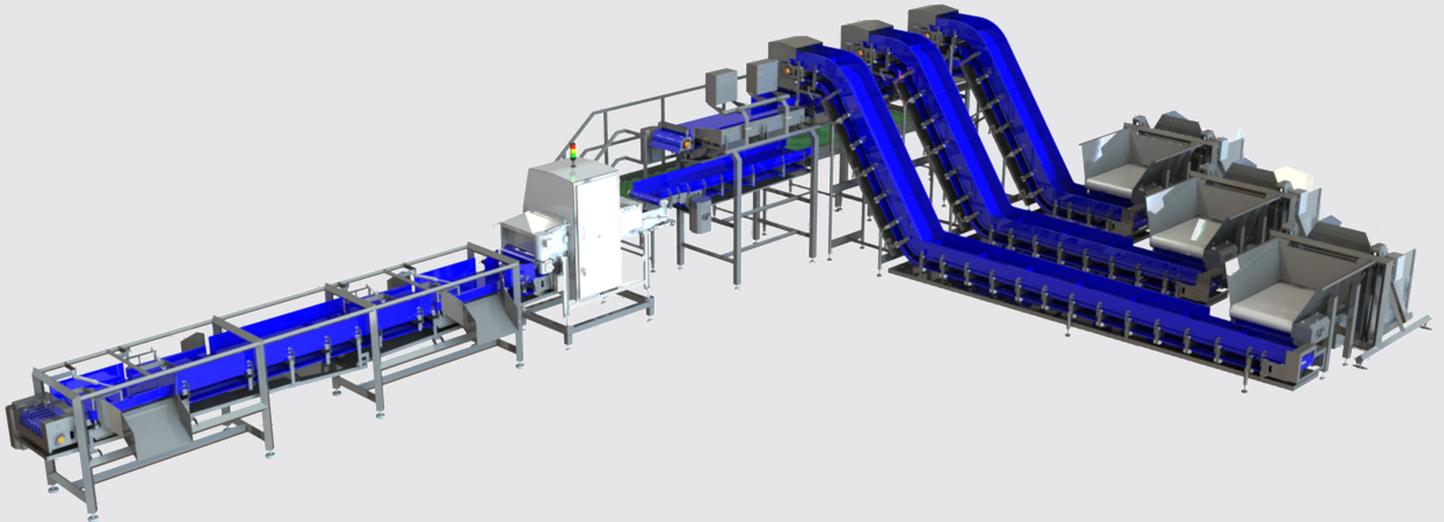
1. Boxed product travels on the in-feed conveyor, through the Fat Analyser.
2. The Fat Analyser will inspect 100% of boxed product within +/-1%CL in real time whilst simultaneously checking for foreign body contamination.
3. Real-time inspection data can be transferred to an in-house software system. This information can verify supplier pricing was correct and initiate product tracking information.
4. Boxes are graded into individual lanes according to the CL value of their contents.
5. Rejected boxes continue to the reject station for further inspection.

The SF Fat Analysing Solution is simple to integrate into many in-line applications and enables processors to benefit from accurate product grading before starting production.

### Benefits of the System:

- Verify purchased meat was accurately priced.
- Ensure the best possible batch combination is selected before recipe formulation.
- Optimise meat in-take labour requirements.
- Identify preferred suppliers.
- Foreign body detection & rejection.
- Access product tracking information quickly for supplier or customer feedback.





# Recipe Formulation

## For Meat Processors

### Recipe Formulation

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

1. Product is dispensed from dolav to hopper conveyor and slowly fed onto elevator belt.
2. Product is conveyed to operator loading area.
3. Operator inspects and loads batches into the weigh hopper, following the exact instructions on his individual terminal.
4. Weighed batches are fed through the Eagle Fat Analysing machine where CL is calculated and product is inspected for contamination.
5. Inspected batches are transferred to the grader which selects the appropriate exit to dispense the product.
6. Software calculates amount of additional fat required and prompts operator to add, ensuring an accurate CL value before mixing and blending.
7. Optional blood reclamation pumps draw blood from drip trays to maximise yield.

### Benefits of the System:

- Turnkey solution
- Lean meat giveaway reduction
- Achieve accurate blending targets and eliminate downgrading
- Eliminate any re-works of recipes
- Consistent product quality
- Additional yield from reclamation of blood
- Increase line efficiency
- Achieve real-time results
- Reduction in manual handling
- Identify preferred suppliers
- Foreign body detection
- Access product tracking information quickly for supplier or customer feedback



## TRIAL THE FAT ANALYSER IN YOUR OWN FACILITY

We invite you to schedule a demonstration of the Fat Analyser and test your own products with your own production team in your own facility. You and your team will get valuable hands on experience and expert guidance throughout your trial. All results are documented and presented for your review at the end of the process.

These trials have already been undertaken by a number of large meat processors with very positive results.

To discuss a trial or a site visit, contact our sales team on:

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## SERVICE

**“It’s not just about the equipment,  
it’s all about the service”**

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 customer needs.



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