

FOSS



MeatMaster™
Know what's in to get the best out

Dedicated Analytical Solutions



Make it simple ...

The fat content in meat trimmings has traditionally been measured by periodic tests with 'butcher's eye' or by chemical analysis methods. MeatMaster™ offers you a complete picture of all the meat trimmings passing through your production. It gives you accurate information about fat content, weight and foreign object data for every production unit - even for frozen and packaged raw materials.

A complete picture helps you stay 100% in control. Measuring everything with MeatMaster helps you achieve a product consistency that your customers will appreciate. Efficiency and cost savings follow through improved standardisation of production.

MeatMaster measures meat and trimmings at a rate that keeps pace with your production at up to 22 tons per hour. It can also simplify your control procedures by avoiding any routine sampling procedures and their associated running costs.

One solution, many advantages:

- **Meet customer expectations by making the fat content of end products consistent to an accuracy of 1% or better**
- **Improve production efficiency by avoiding out-of-specification products**
- **Make optimal use of raw material by getting fat content just right all the time**
- **Reduce the analysis burden on the laboratory**
- **Benefit from receiving check weight information together with each fat result**
- **Improve Food Safety and avoid machine damage by spotting metal, bone and other foreign objects**



MeatMaster™ Compact

MeatMaster™ Standard

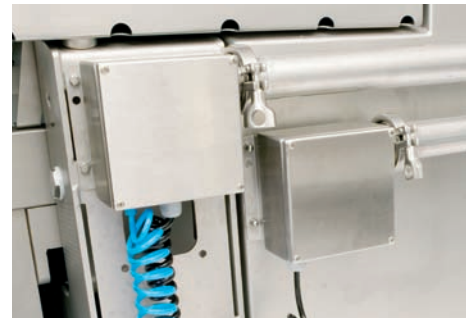
- measure it all!

MeatMaster™ is robust – built for the meat industry environment

MeatMaster has a built-in conveyor belt and can fit directly in your production line. Fresh meat, frozen meat or meat packed in sealed plastic or cardboard boxes is conveyed through the instrument and analysed for total fat content and scanned for metal, bone etc. The meat can be in the form of whole cuts, minced meat or trimmings.

Dual source – high accuracy

MeatMaster™ uses two individual x-ray sources, which compared to systems using one x-ray source, will result in the highest accuracy for fat determination. With the dual source system used in MeatMaster you avoid the “noise” problem, which single x-ray source systems often is faced with and which has a negative effect on accuracy.



New and improved curl cords for easy clean-up.



MeatMaster™ metal protection curtain.

Integrated into your production

MeatMaster is designed to fit seamlessly into your process and has the capacity to measure fat content at production speed. FOSS has the expertise and technical know-how to integrate your new MeatMaster with immediate process optimisation benefits. Pre-calibration containing pork, beef and poultry data allows you to put MeatMaster to work on a wide range of applications with only minimal calibration adjustment for local conditions.

Examples of how MeatMaster can become an integrated, value-adding part of your process include:

- Chemical lean measurements of meat in cardboard cartons
- Control of incoming and outgoing raw meat
- Sorting of meat in trays into defined categories
- Fat standardisation for hamburger and sausage production
- Simultaneous fat determination and Foreign Object detection in cardboards for export
- Solutions available for integration with bar code readers, printers and rejector systems

Performance

Measurement range, fat: 2 - 85%

Capacity:

- Up to 22 tons/hour depending on application

Accuracy:

- Fat content is measured at an accuracy of 1% or better
- Weight is measured at an accuracy down to 1% relative or better
- Metal is detected down to 2 mm
- Bone, glass and other foreign objects can be detected

Dimensions

MeatMaster™ Standard measures 2.85m/5.24m/1.60m (112.2 x 206.3 x 62.3") (H/W/D) and requires 5.24m/3.5m (206.3 x 142") (W/D) of space.

MeatMaster™ Compact measures 2.85m/3.34m/1.60m (112.2 x 131.5 x 62.3") (H/W/D) and requires 3.34m/3.5m (131.5 x 142") (W/D) of space.

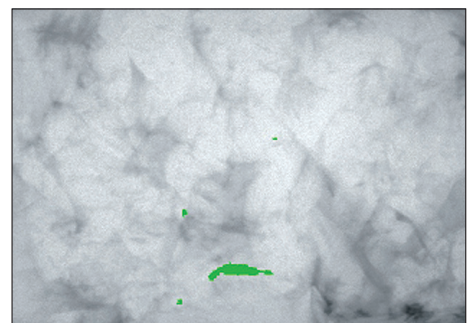
The tunnel through which samples pass measures 25cm/65cm (9.8 x 25.6") (H/W).

Precalibrated

MeatMaster is ready for use. Only a few adjustments according to local conditions are necessary.



Measure meat in trays, boxes or loose on the conveyor.



MeatMaster™ detects bone fragments and other foreign objects.



The software measurements from a MeatMaster™ allow automatic production of meat portions with a standardised fat content, for example, for use in burgers and sausages.

Continuous monitoring - automatic control

Continuous measurements delivered by MeatMaster™ add value by keeping your products in line with customer expectations.

MeatMaster measurements can be used by production staff to make timely adjustments to production. Alternatively, you can let your computer system do the job.

In the setup below, two feeders are used in the production of sausages. One feeder contains 90% lean meat and 10% fat and the other contains trimmings with a ratio of 60% lean meat to 40% fat. Using an open interface, MeatMaster sends results from the two feeders directly to the computer system for automatic monitoring and control. This enables fully automated standardisation of batches of meat prior to further processing.

Not only does this ensure product consistency, it also helps you make optimal use of lean and fat meat.



*Meat for further processing
MeatMaster™ integrated between grinders and mixers.*

Control trimmings – and tell your customers about it

MeatMaster allows you to take full control of your trimmings and provides records that you can show your customers.

Measuring entire batches of trimmings to an accuracy of within 1%, MeatMaster lets you standardise trimmings into different qualities for onward sale. Plus, boxes can be labeled with reliable information about the lean/fat content.



*After cutting and deboning
Meat in plastic trays, cartons or loose on the conveyor.*

About FOSS

FOSS is unique in offering a range of dedicated analytical solutions based on both indirect and reference methods.

Your partner in analysis, FOSS helps you to achieve significant savings and quality improvements in your meat production. You can get continuous information about fat content for optimum production control. You can detect foreign objects. You can do rapid at-line checks on key parameters such as protein, fat, moisture, collagen and salt content. Microbiological quality checks can be performed in time to stop any sub-standard products reaching the supermarket shelves or entering the production process. And, in traditional laboratory analysis, safe and reliable FOSS solutions help you to give reference analysis results with speed and accuracy.

An established leader in the field of dedicated analytical solutions, FOSS is a privately-owned company employing over 1100 worldwide. FOSS has manufacturing and research and development facilities in Denmark, Sweden and the USA.

Solutions are sold and supported through FOSS sales and service companies in 21 countries and by more than 75 dedicated distributors.



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