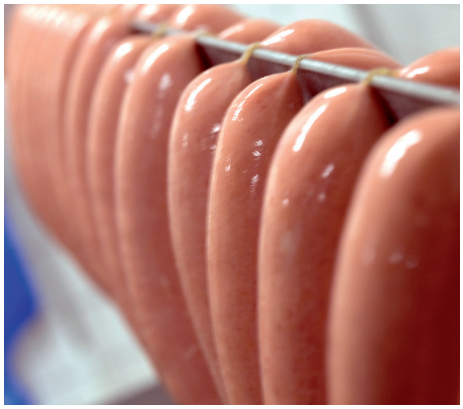
FOSS

FOSS MeatScan™

MeatScan™ is a robust, simple-to-use and accurate instrument, using near infrared transmission technology to penetrate meat samples and measure fat in raw meat and meat products. The MeatScan is a flexible and cost effective solution for routine fat analysis for any meat producer. It can be used by anyone and used anywhere in the production process, from checking incoming raw material to final product control, with results in less than 45 seconds. The MeatScan is ready to use with a global fat ANN calibration that has received national approvals for the measurement of key quality parameters.

Sample	Parameters
Any type of ground or homogenized meat sample	Fat and moisture





Perfect products every time

With MeatScan™ it is easier to keep fat content on spec and build consistency of finished products around your ideal. Customers will be delighted and regular testing of incoming raw material keeps suppliers on their toes too, leading to a reliable, high quality intake.

MeatScan™ helps you to achieve:

- More profitable production of quality products
- Batch standardization and process control
- Final product control

MeatScan™ measures fat in raw meat and meat products.

Savings for any size of production

MeatScan™ can help you standardise batches and avoid over use of expensive raw material, reducing risk of lean meat giveaway. At the same time, you can control supplies by assessing fat content of incoming raw material.

Reliable results with rapid analysis

The instrument comes pre-calibrated with a powerful ANN calibration allowing you to cover many different products with just one calibration.
A single measurement and little or no sample preparation is required. The tests are non destructive so you can re-test the sample.

With a logical, user-friendly software interface, anyone working in the plant can operate the MeatScan™. No chemicals are involved. The compact and robust analyser can be placed close to the production line. A test takes less than 45 seconds. You can test as often as you like with no additional cost.

Measurements are based on a database of over 20,000 reference meat samples securing high accuracy and performance. The samples have been accumulated by FOSS through decades of experience in supplying routine analysis solutions to the meat industry.

Technology

The FoodScan technology is based on Near Infrared Transmittance, NIT, which is an advantage when measuring in-homogeneous products. The NIT-principle, where light is transmitted through the sample, is a major reason for the success of MeatScan™. The NIT-principle secures a higher accuracy of meat analysis, compared to methods, where the result is based on light reflected from the surface of the meat.

The data (absorbencies at different wavelengths) generated by MeatScan are subjected to a mathematical function, a calibration model, in order to calculate the predicted value.

FOSS ANN meat calibration - the key to reduced calibration costs

MeatScan is equipped with an artificial neural network (ANN) calibration making it a "plug & play" solution. It is ready to run immediately so there is no need for gathering many samples as required for a typical PLS calibration. The ANN calibration covers nearly all type of meat and meat products, from raw meat to finished products.

The calibration has a huge advantage compared to other calibration techniques. A very robust calibration can be developed, with no limit as to how many samples can be included in the calibration. With one ANN calibration it is possible to cover many different products. This means reduced calibration maintenance costs, as less reference analyses are required.

ANN
Artificial Neural Networks

The ANN Meat calibration was developed using approximately 20,000 spectra collected globally from the more than 1.000 FOSS dedicated meat analysers installed worldwide since 1989. The huge number of spectra makes the FOSS ANN Meat calibration very robust and offers excellent transferability between instruments.

Features & Benefits

- Accurate, reliable meat analysis
- No chemicals or costs for consumables
- On-the-spot analysis whenever you want it
- Results in less than 45 seconds
- Can be operated by anyone in production
- No waiting for results from an external lab
- Low maintenance
- Unique internet connection facility ensures that the system is always up to date
- Ready-made global calibration for fat in meat and meat products

Easy to use

Anyone can make measurements with the MeatScan.

Place prepared sample in sample holder

Select sample type

Press start

Await result

A Foss expert always at hand

MeatScan can be supported by Foss remote instrument surveillance software.
This allows Foss experts to monitor and maintain the MeatScan on-line so that you can focus on testing and using the results.

Specifications

Technical specifications	
Analysis time:	45 seconds for 15 sub-samples
Self test:	Approximately 10 minutes at room temperature
Sample weight:	200 g
Measurement mode:	Transmittance
Wavelength range:	850 - 1050 nm
Detector:	Silicon Linear Array
IP Class:	42
Software package:	Mosaic software

Installation requirements	
Power supply:	100-240 V AC, 100 VA *), 50-60 Hz, Class 1, with protective earth
Ambient temperature:	5 - 35 °C
Storage temperature:	-20 °C to 70 °C
Ambient humidity:	< 93% RH, cyclic up to 100% RH
Weight:	11.4 kg
Dimensions (W × D × H):	230 x 390 x 420 mm
Environment:	Stationary, light industry
Software package:	Mosaic software

Standards and approvals

MeatScan™ is CE labeled and complies with the following directives:

- EMC (ElectroMagnetic Compatibility) Directive 2004/108/EC
- LVD (Low Voltage Directive) 2006/95/EC
- Packing and Waste Directive 94/62/EC
- RoHS (Restriction of Hazardous Substances) Directive 2002/95/EC

PC requirements for Mosaic software

- Windows XP SP3 or Windows 7
- Internet Explorer 7 or 8
- 2 GHz CPU speed (minimum)
- 1 GB RAM
- 4 GB free disk space
- SVGA at 1024*768, min. 16-bit colors. 1280x1024 recommended
- Internet connection

FOSS

FOSS
Foss Allé
DK-3400 Hilleroed
Denmark

Tel.: +45 7010 3370
Fax: +45 7010 3371

info@foss.dk
www.foss.dk

P/N 1026642, Issue 1GB, December 2012