

Spektron Meat Optimiser



spektron



**Reduce your Raw Material Costs up to 5%
with Inline analysis and Least Cost Formulation**

Prediktor 



Spektron Meat Optimiser

Spektron Meat Optimiser provides fast and reliable analysis of chemical composition (fat, protein, moisture etc.) in fresh and frozen ground meat. The combination of an industrial inline instrument and the specially designed software system allows full control of your product composition and raw material cost.

The Spektron Meat Optimiser solution visualizes real time measurements and batch averages as numbers and graphs, allowing operators full control of a product batch. The speed of Spektron enables you to take immediate actions to correct for raw material variation.

Spektron Meat Optimiser consists of a compact but advanced NIR instrument located at the outlet of the grinder or over a conveyor belt, an operator screen and a PC server.

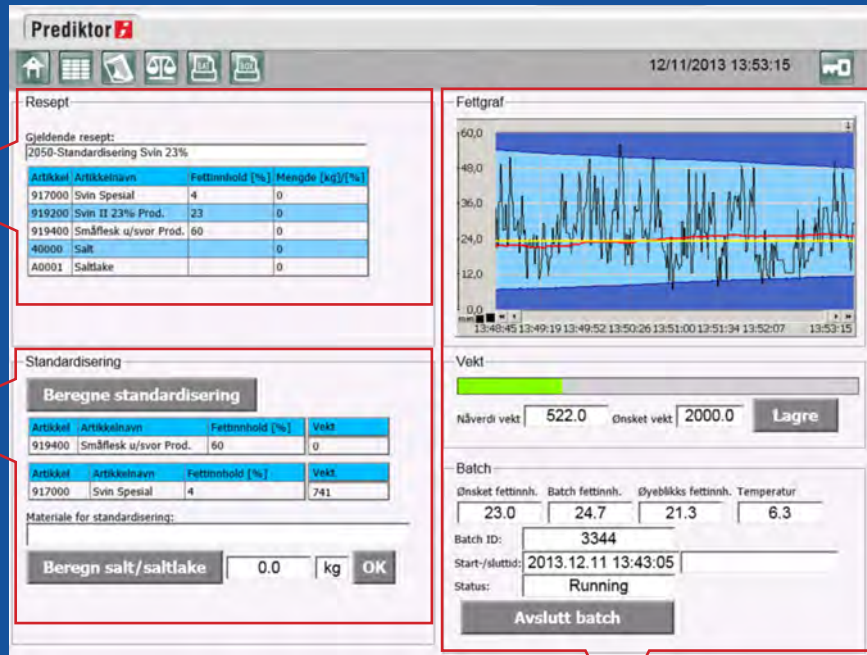
NIR (Near Infrared Technology)

Spektron Meat Optimiser utilizes NIR (Near Infra Red) technology. NIR technology has been used for fast and reliable laboratory, at-line and inline analysis of a wide variety of food and feed products for decades. The Spektron instrument needs no extra floor space and can be adapted

to any new or existing grinder/mixer setup. The Spektron Meat Optimiser allows true in-line, instant analysis of ground meat instead of time consuming at-line laboratory analysis.

Using the system

The Operator touch screen allows the operator full control of a product batch. Before starting a batch the operator chooses a recipe from a drop down menu in the operator interface. The recipe contains information of type and amount of raw material to be used in the batch, as well as target value for fat. The instrument measures and presents result continuously during grinding of a batch. The system assists the operator in reaching the target fat value by standardization calculations or real time Least Cost Formulation. Information about ingredients or suppliers may be entered and stored in the system for traceability purposes. Access to reports is possible from all computers on the factory computer network through password-protected login. Spektron Meat Optimiser gives you real time knowledge of your product. If you want to monitor it – measure it.



Recipe system

Standardisation/
Least cost Formulation

Graphical and numerical display

Spektron Meat Optimizer operator interface

Recipe system

The Prediktor Meat optimizer software contains a recipe module that allows management to register standard recipes, product characteristics (like standard batch size and chemical composition) and production orders (PO). Recipes and POs can automatically be updated through communication interface to the ERP system.

Operators choose predefined recipes from drop down list. The recipe with product characteristics are automatically set in the operator interface, ready for production.

Measurements

Key properties of the product and actual batch under production are presented both graphically and numerically in real time in the right hand side of the operator interface.

The graphical display allows the operator to monitor in real time the individual measurements (black line), current batch average (red line) compared to recipe fat target value (yellow line). The horizontal green bar indicates current batch weight compared to target batch weight.

Tracking of ingredients

The operators have the option to track the ingredients used during production of the batch. Ingredients and suppliers can be chosen from drop down lists, and measurements of these ingredients are shown separately in reports.

Standardisation / Least Cost Formulation

During processing, the operator gets guidance on how to compose the remaining part of the batch to reach the batch target. The system will calculate type and amount of meat needed reach the batch target, either by standardisation or by least cost formulation.

Reporting

All recorded data on raw material and product batches can be used in reports for management purposes. Commonly implemented reports include batch reports, supplier surveillance reports, traceability reports and raw material cost reports.

Our Competence

Software

- Data collection
- Real time systems
- Communication
- User interfaces
- System design
- Programming and databases
- PLC and DCS
- Microsoft ASP .NET/MS SQL
- SharePoint Foundation 2010

Control Optimization

- Mathematical and statistical optimization
- Control engineering and theory
- Instrumentation
- Information analysis
- Multivariate data analysis
- Model based Process Control (MPC)
- Process Analytics Technology (PAT)

Business & Branches

- Solar PV industry
- Oil & Gas industry
- Renewable energy production
- Chemical engineering
- Processing technologies
- Lean manufacturing
- Business and work processes
- Management systems
- Food & feed industry
- Building automation industry

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