

InfraLab e-Series

REF: IL2010-01

PRODUCTS:

- BEEF
- PORK
- LAMB
- POULTRY
- OTHER MEATS



MEASUREMENTS:

- MOISTURE
- FAT
- PROTEIN

APPLICATION NOTE



At-Line Measurement of Meat

The **InfraLab e-Series Meat Analyser** is used to make fast, accurate measurements of meat samples taken from the process. Typical sampling locations include:

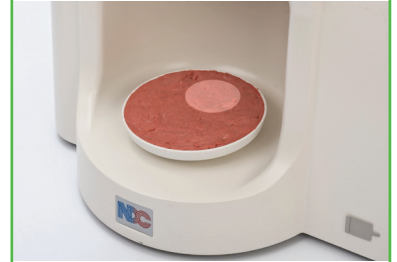
- incoming totes
- after the grinder
- from the blender
- after the former
- prior to packing

enabling the user to optimise batch blending efficiency and product quality by maintaining the fat content, in particular, within desired limits.

The InfraLab is able to operate in a meat processing at-line environment and requires no special operator skills in routine use. Its ability to store up to 200 different product settings means operators can quickly and easily select the relevant product and measure the samples, while at the same time automatically recording the batch number or identifier, product name, operator identity and time and date. On board storage of up to 10,000 sample files and the ability to download to memory stick or remote PC via Ethernet ensures convenient access to results by product, operator or by time.

Samples require homogenisation using a Robot-Coupe™ or similar to ensure uniform product presentation. This also makes it easier to obtain a batch average value, by homogenising a number of pulls and testing a master sample.

BENEFITS:



Benefits of Consistent and Accurate Measurement of meat with the InfraLab e-Series include:

- Reduced Lean Giveaway
- Reduced Laboratory Overhead
- Reduced Operator Dependency
- Improved Batch Consistency
- Improved Traceability
- No lost time waiting for results

Measurements & Algorithms

At-Line Measurement of Meat

InfraLab e-Series Applications Overview

The InfraLab e-Series Meat Analyser is supplied with the following measurements over the ranges indicated. Each measurement is pre-loaded into the InfraLab and can be selected from the drop-down within the user interface. Access to measurement selection is for Administrator or Supervisor level permission only. For details on how to select a measurement, please refer to the user manual, or consult NDC Customer Care department or your local distributor.

Calibration

The InfraLab e-Series measurements (calibrations) as supplied from NDC's factory are linear over the ranges indicated and have been developed using the industry's established primary reference methods such as gravimetric oven or Karl Fischer for moisture, Soxhlet or Werner-Schmidt for fat and Kjeldahl for protein.

However, due to the variation between reference methods, it may be necessary to adjust the calibration locally to obtain agreement with your preferred reference method, which the InfraLab either replaces or complements. The process of calibration adjustment is facilitated by the use of InfraLabXL software, a data viewer and calibration management tool, provided with each InfraLab e-Series.

InfraLabXL enables the comparison of values obtained using the InfraLab with values for the same samples when analysed in the primary reference method, which may result in the need for an offset or "Trim" adjustment or a combination of offset and slope ("Span"). In either case, InfraLabXL provides a statistically valid value and this is quickly uploaded to and stored in the InfraLab. There is no need for any subsequent routine recalibration thanks to the InfraLab e-Series inherent longterm stability, proven using the available Reference Standard.

Measurements and Algorithms

Algorithm Set	Alg. No.	Product	Measurement	Range
IL2010-01	1	Fat in homogenised meat	Fat	2 to 60 %
IL2010-01	2	Moisture in homogenised meat	Moisture	30 to 75 %
IL2010-01	3	Protein in homogenised meat	Protein	9 to 23 %

For further information on the NDC InfraLab e-series Meat Analyser or to arrange a demo visit, please contact Noel Heary on 087 2479026 or by email on noel@irishpowerandprocess.com