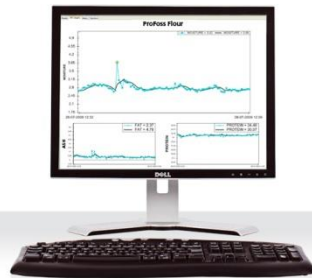


# FOSS NIR based in-line solutions for the food industry

# FOSS



## NIR Platform CRA-W



March  
27<sup>th</sup>  
2013



**Stef D'Espallier**  
Regional Sales Manager  
FOSS Benelux

# "The world's best Dedicated Analytical Solutions"

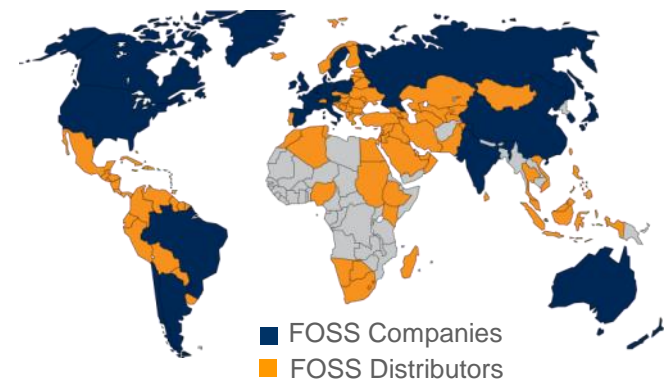
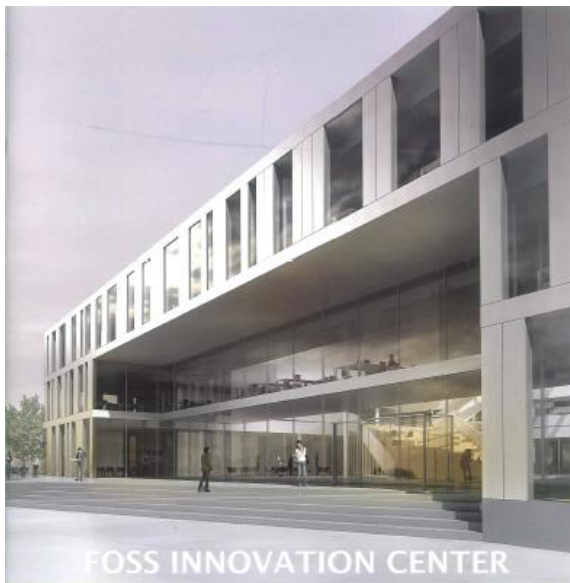
# FOSS

The FOSS vision:

*"To provide the world's best dedicated analytical solutions - which add value to our customers business by improving quality and optimising production".*



Nils FOSS

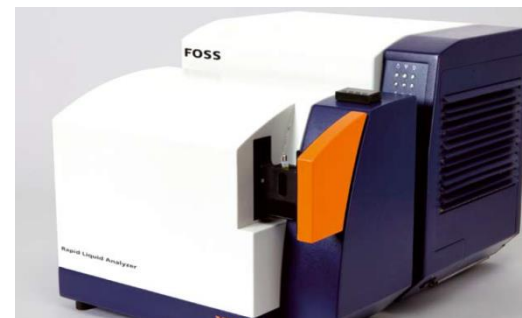


Dedicated Analytical Solutions



# FOSS NIR-based at-line solutions for the food industry

# FOSS



Dedicated Analytical Solutions

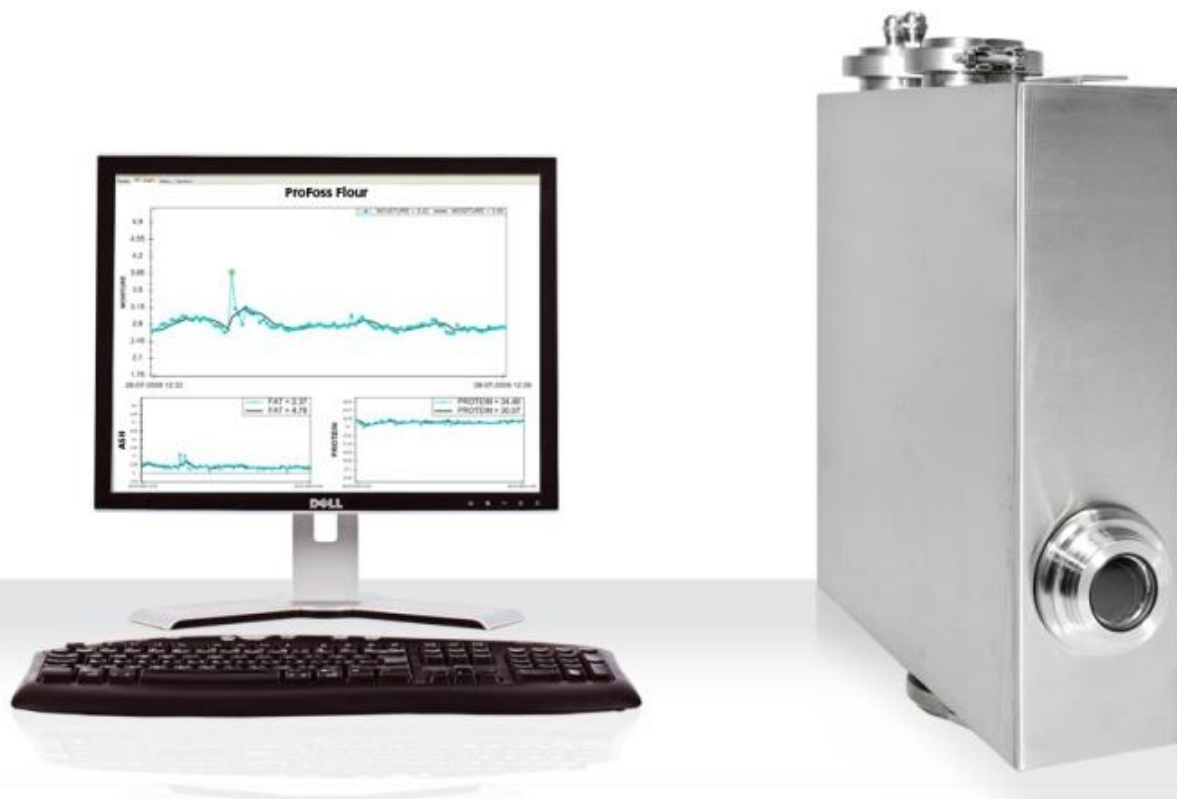
XDS Process Analytics

Monochromator based

400 – 1100 nm

850 – 2100 nm





### The easy way to get started with process analysis



- High Resolution Diode Array (High Accuracy)
  - Reflection 1100 – 1650 nm
  - Transmittance 850 – 1050 nm
- Internal reference (No drift)
- True in-line analysis (No bypass needed)
- Seamless transferrable calibrations (One calibration for multiple production lines)
- Intelligent calibration tool – ISlcal™ (Allow non-experts to develop expert calibrations)
- Dual Lamp technology (No loss of uptime)
- Dedicated sample interfaces (Flexibility in choosing for the most optimal way to 'look' at a sample)

### ProFoss is delivered with

- ProFoss High Resolution Diode Array analyzer
- Dedicated sampling interfaces
- Starter calibrations
- Installation fittings and guidelines

---

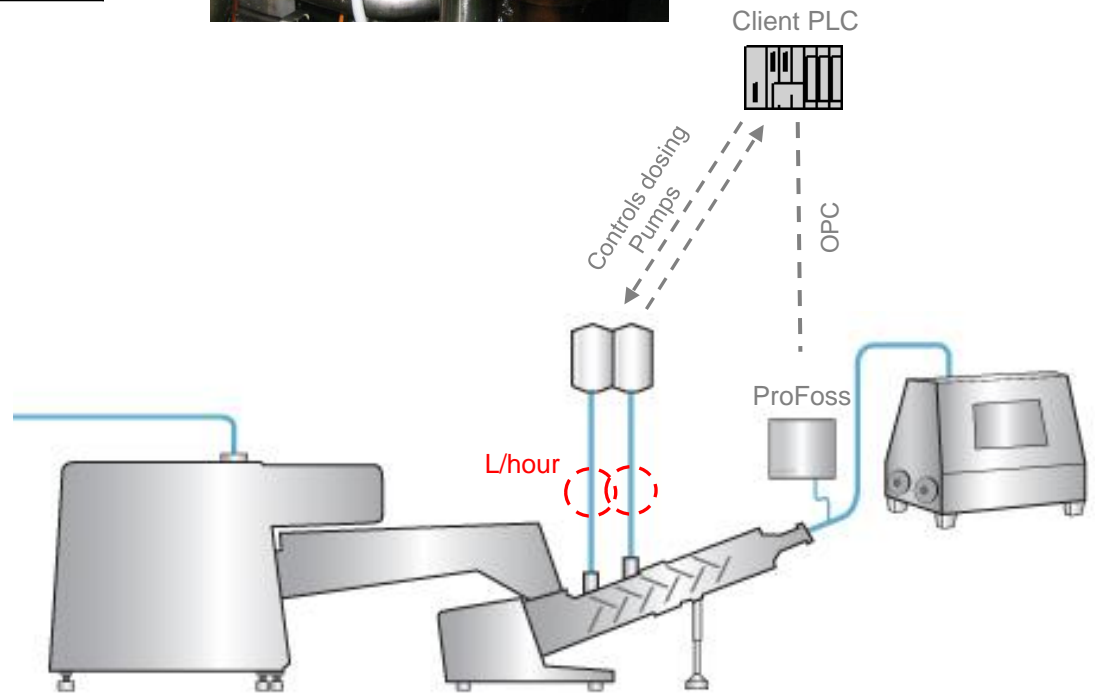
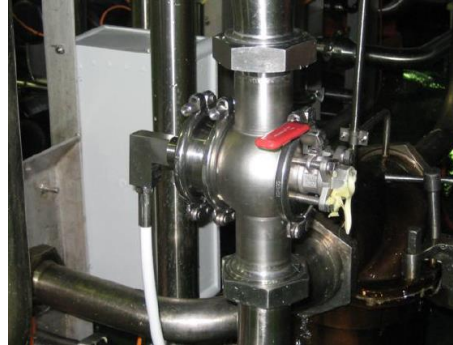
- OPC data integration toolbox
- FossCare™ total service partnership
- RINA™ remote instrument monitoring

---

- Guarantee on accuracy and process variation detection limit
- Clear description of installation/calibration/validation procedures
- Clear agreement on validation timeframe (4 to 5 weeks)

# Butter

	Accuracy %	PVDL %
<b>Moisture</b>	0,046	0,015
<b>Fat</b>	0,044	0,015
<b>Solids non fat</b>	0,014	0,005
<b>Salt</b>		

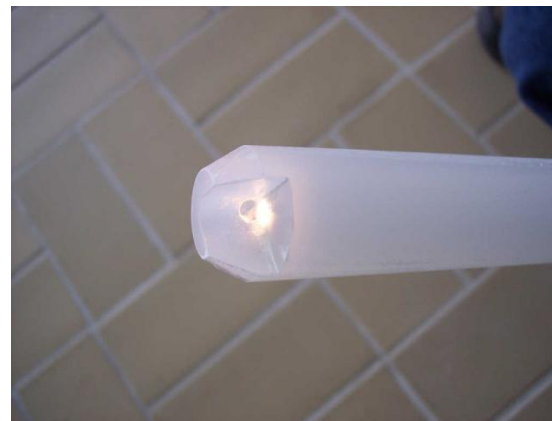


Lateral transmittance flow cell



# Milk powder

	Accuracy %	PVDL %
<b>Moisture</b>	0,1	0,03
<b>Protein</b>	0,27	0,08



Powder probe

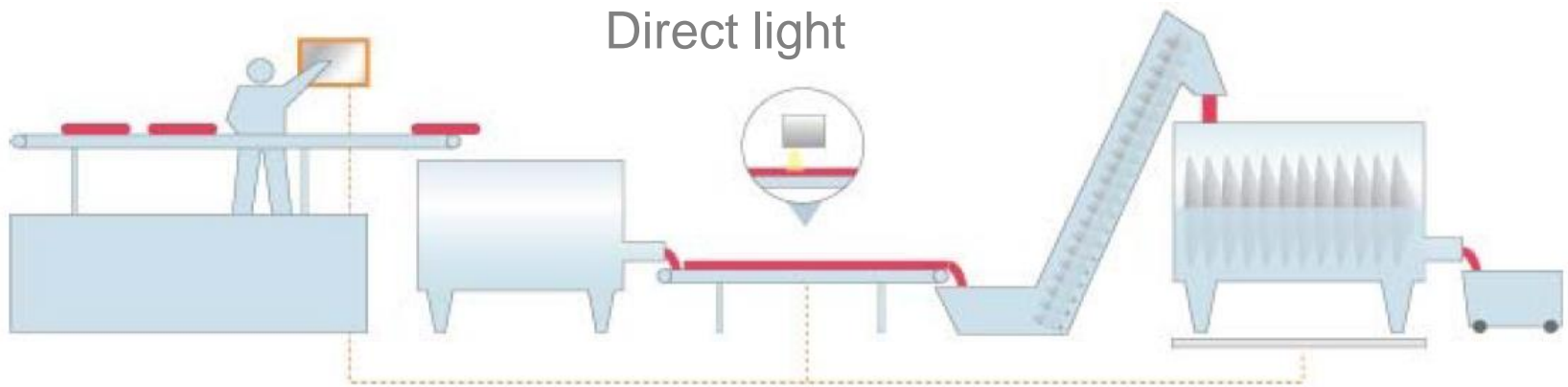
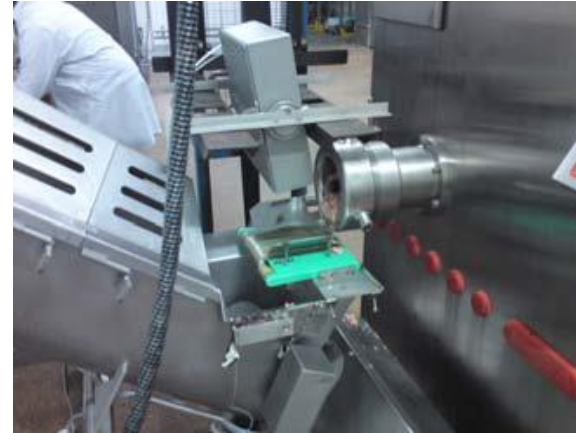
	Accuracy %	PVDL %
<b>Ash</b>	0,04	0,0015
<b>Protein</b>	0,22	0,03
<b>Moisture</b>	0,13	0,01



Window reflection

# Ground meat

	Accuracy %	Batch accuracy %
<b>Fat</b>	1,3	0,5



- Wheat whole grain (moisture, protein)
- Greek yoghurt (total solids, fat, protein)
- Animal meal (moisture, fat, protein)
- Mechanically deboned meat (MDM)
- Feed (moisture, fat, protein, ...)
- Mozzarella (total Solids, protein, fat)
- Soymeal (moisture, fat, protein)
- Whey protein concentrate (WPC) (total Solids, protein, fat)
- Milk protein concentrate (MPC) (total Solids, protein, fat)
- Fresh cheese (total solids, fat, protein)



# YES

**BUT ALSO TAILOR MADE:**  
PROFOSS IS VERY EASY TO INSTALL  
CALIBRATIONS ARE EASY TO DEVELOP  
AND FOSS SPECIALISTS ARE READY  
TO INVESTIGATE ANY APPLICATION  
THAT COULD HELP STANDARDIZING  
YOUR PRODUCT QUALITY

- Cocoa butter
- Chocolate
- Gluten
- Ground corn
- Fish meal
- Meat mix for pet food
- Nougat
- ...

# FT-IR ProcesScan

Examples:

- Cheese milk
- Powder milk
- Condensed milk
- Market milk
- Whey



THANK YOU FOR YOUR ATTENTION

**FOSS**

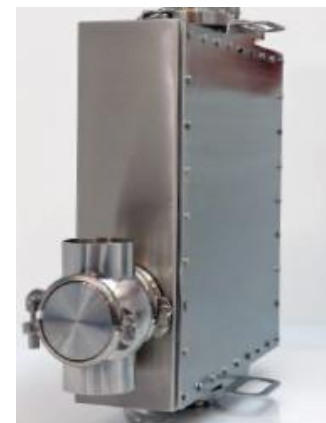


Check out our website



[www.foss.dk](http://www.foss.dk)

Or contact us at [fossben@foss.nl](mailto:fossben@foss.nl)



Dedicated Analytical Solutions