



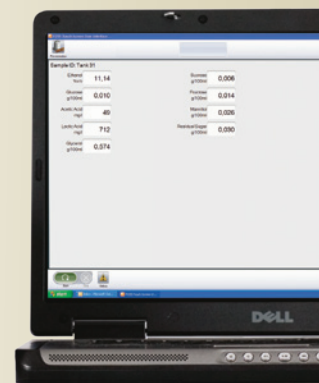
## BioFoss for rapid monitoring of ethanol fermentation



Dedicated Analytical Solutions



Ethanol  
Glucose  
Sucrose  
Fructose  
Acetic Acid  
Lactic Acid  
Glycerol  
Mannitol  
Residual Sugar



*'A real breakthrough  
BioFoss offers a  
HPLC for routine*

## Faster information, better results

The fermentation tank is your money-maker and keeping it running smoothly and efficiently is a major concern. Knowing what is going on inside is crucial for effective control, but to date, obtaining this knowledge has not been easy. Analysis with existing HPLC options is time consuming and to some extent operator dependant – if only fermentation control could be fast, accurate and easy.

Now, a breakthrough in FOSS fermentation monitoring technology gives you the information you need during fermentation of sugarcane derived ethanol.

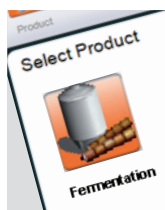
### BioFoss provides:

- ✓ **Fast analysis**  
– complete result report within two minutes
- ✓ **Accurate results**  
– including the important infection indicators
- ✓ **Ease of use**  
– place the sample, close the lid and push start

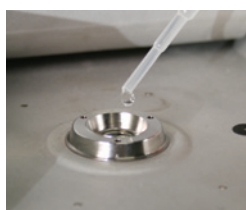


BioFoss offers a cheaper and faster alternative to HPLC for routine analysis with a fast payback in the form of saved costs and optimal output from the fermentation process.

### Just how easy is it



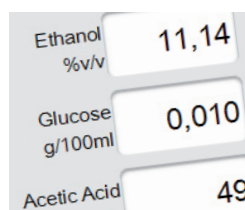
1. Select sample type



2. Load sample



3. Press start



4. Await result



5. Wipe clean

learn more on [www.foss.dk/ethanol](http://www.foss.dk/ethanol)





*ough in fermentation monitoring,  
cheaper and faster alternative to  
e analysis'*



## Quality without compromise

Unlike some instruments that are promoted as a single solution covering different analysis requirements, FOSS solutions are dedicated to the task in hand. Only in this way can you get the usability and accuracy you need to optimise output. Why compromise on quality and output when the ideal solution is available and ready to use?

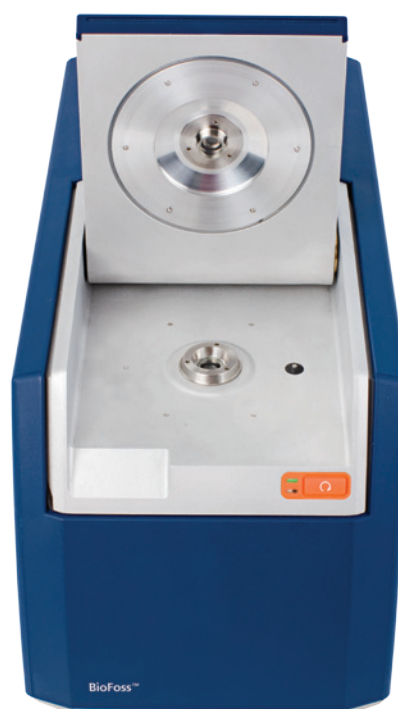
The new BioFoss is a case in point. It is built on analysis technology which is second-to-none for testing for the parameters required in fermentation monitoring.

BioFoss is delivered pre-calibrated and ready-to-use to use for fermentation monitoring. Installation is straightforward and you can start to enjoy the benefits of rapid control from day one.

### FTIR – the right tool for the job

Simplicity, ease-of-use and speed-of-results are central to all FOSS solutions. With these principles in mind, FOSS is first in introducing Fourier Transform Infrared Analysis (FTIR) technology to the biofuel industry. FTIR is ideal for testing liquid samples. It can also deliver measurements for a wide range of parameters in a single analysis operation, making it ideal for fermentation monitoring applications.

*“Why compromise on quality when  
the ideal solution is available  
and ready to use?”*



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# FOSS in the sugar industry

FOSS is the world's leading supplier of dedicated analytical solutions for optimal production of food, agricultural, pharmaceutical and chemical products.

In the sugar industry, FOSS dedicated analytical solutions help to increase yield, productivity and profitability. FOSS solutions help producers to source the best feed stock for their process and optimize the process with respect to efficiency and costs.

With FOSS you can take advantage of:

- ☑ Straightforward "plug-and-analyse" instruments
- ☑ Ready-to-use calibrations, calibration transferability and application support
- ☑ State-of-the-art calibration technology
- ☑ Simple-to-use and easy-to-maintain instruments
- ☑ Customer training at sites around the world
- ☑ A network of sales offices and exclusive dealers so that you can always talk to a local partner about ongoing support with your FOSS solution.

## Biofuel from sugar cane

The FOSS XDS™ rapid liquid analyser is an accepted solution for payment analysis of sugar cane and is widely used in the biofuel industry. Complementing this is the new BioFoss™ for fast and easy monitoring of the fermentation process as an alternative to more time-consuming HPLC analysis. The InfraXact™ NIR analyser provides a rapid method for analysis of shredded sugar cane and bagasse.

FOSS is involved in all aspects of biofuel production around the world. More than 60% of US and European ethanol producers today already use a FOSS dedicated analytical solution.



Visit [www.foss.dk/biofuel](http://www.foss.dk/biofuel) for more information about how FOSS dedicated analytical solutions can help you to produce quality biofuel effectively and with optimal profit.

# FOSS

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