

FOSS

MycoFoss™

Protect your business with smarter mycotoxin management



ANALYTICS BEYOND MEASURE



MYCOTOXIN TESTING TODAY: IN AN UNCERTAIN WORLD, INNOVATION LIGHTS THE WAY

Mycotoxins have always been a threat to the safety of food and feed. As extreme weather events become increasingly common, mycotoxins have more opportunity to thrive and contaminate our supply chains.

For food and feed producers alike, mycotoxins constitute a growing concern for the health and welfare of both humans and animals. Variability in the supply of raw materials and constantly

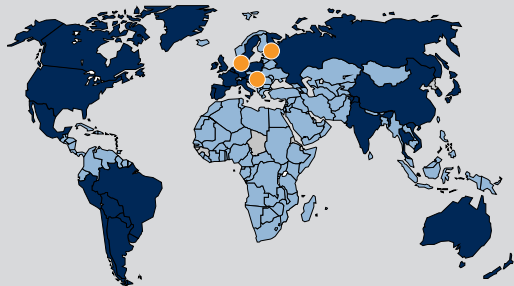
evolving regulations only serve to make quality control increasingly complex and time consuming.

Despite the critical importance of testing for mycotoxins, the methods available to the grain and feed industry are seriously limited. Reference methods are time-consuming and costly. Alternatives for rapid testing are characterised by many manual steps such as pipetting, timing, weighing, mixing and shaking. All these

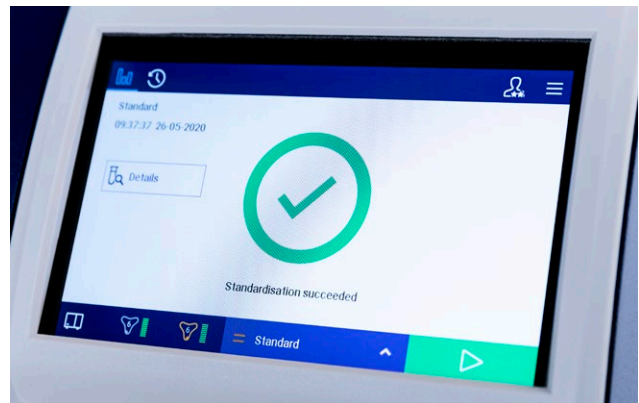


manual steps include the risk of human error or irregularities that create doubt about accuracy and the repeatability of results.

It's time for a new approach with the world's first fully automated rapid test for mycotoxins.



Founded in 1956, FOSS has a rich history of delivering innovative analytical solutions for process control across food, agri and beverage industries. Today, FOSS is a global organisation with local FOSS offices and partners on all continents and across all main food, agri and beverage industries.



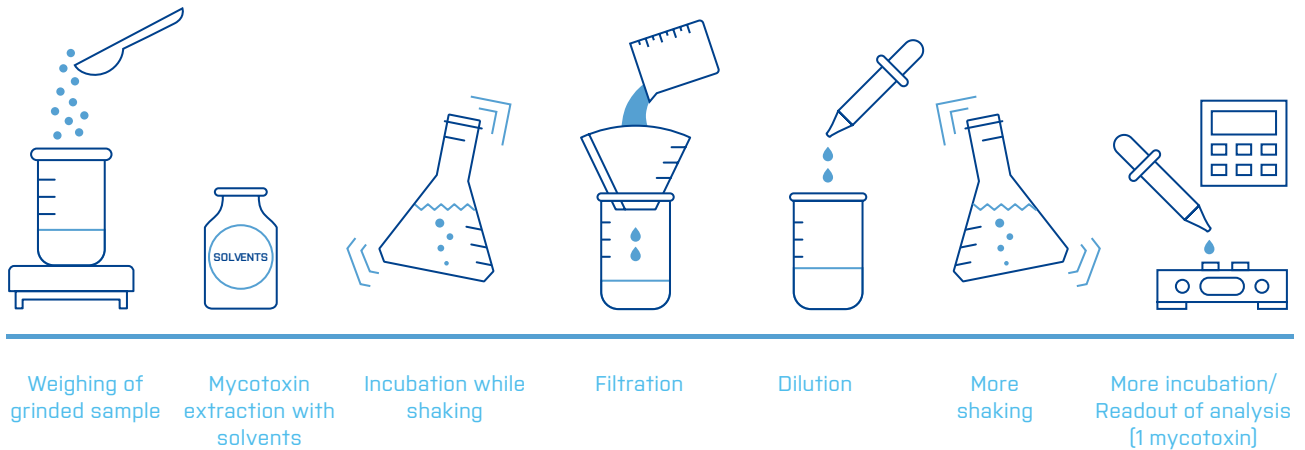
A NEW WAY TO MANAGE MYCOTOXINS FROM FOSS

The MycoFoss™ fills a gap in current rapid testing strategies by offering speed and convenience of rapid methods without the need for complex manual steps associated with other methods.

For maize and wheat, results for up to six mycotoxins (DON, FUM, AFLA, ZEA, OTA and T-2) are provided in one go. Single mycotoxin (DON) tests can also be performed on barley. Results are delivered within eight minutes.

FROM MANUAL TESTING TO MYCOFOSS™

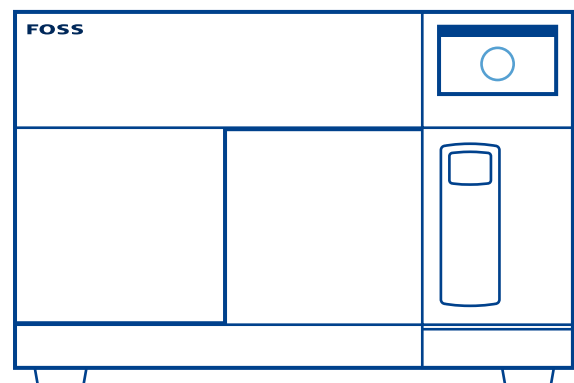
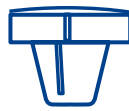
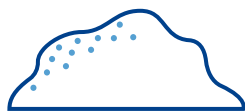
Through smart automation of test procedures, MycoFoss™ takes mycotoxin testing into a new era of automation, reliability and repeatability.



Typical steps involved in manual testing methods are time-consuming and include the risk of human error or irregularities that create doubt about the consistency of test results.

Testing with MycoFoss™:

- 1 Scoop into a cup
- 2 Insert in the instrument
- 3 Wait for result on the screen



Place grinded sample in the cup

Place the cup in the instrument and press start

The simplicity of MycoFoss™ allows anyone to perform valid tests while cutting operational costs, for instance, by reducing the need for training and reliance on specialist staff.



BETTER DECISION MAKING

MycoFoss™ ensures the consistency of data essential when making fast decisions about raw material intake and segregation in grain handling, malting and feed and flour milling. In feed milling, the data also helps to make important decisions about process adjustments and use of additive binders. In flour milling, the reliable results are essential for ensuring compliance with legal requirements.



Grain receipt

Segregate raw materials into food or feed quality and check for presence of mycotoxins.




Feed milling

Segregate raw materials for different feed products and enable better use of toxin-binders and toxin-inhibitors.



Malting and milling

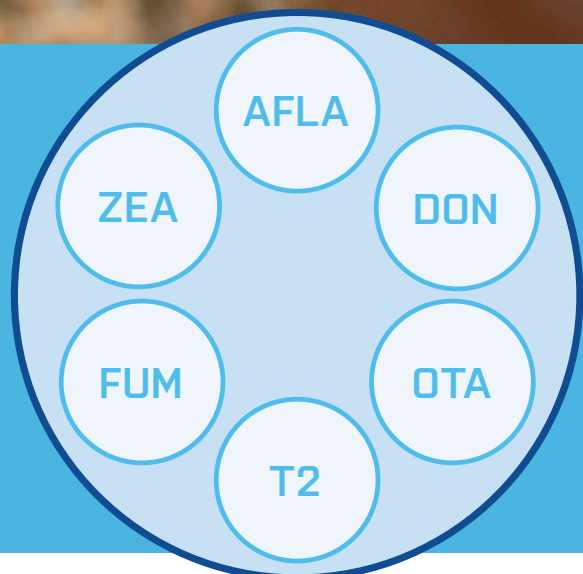
Avoid getting contaminated products into your production.



Consistency, usability and flexibility makes MycoFoss™ a future-proof platform for your mycotoxin testing

SIX IN ONE

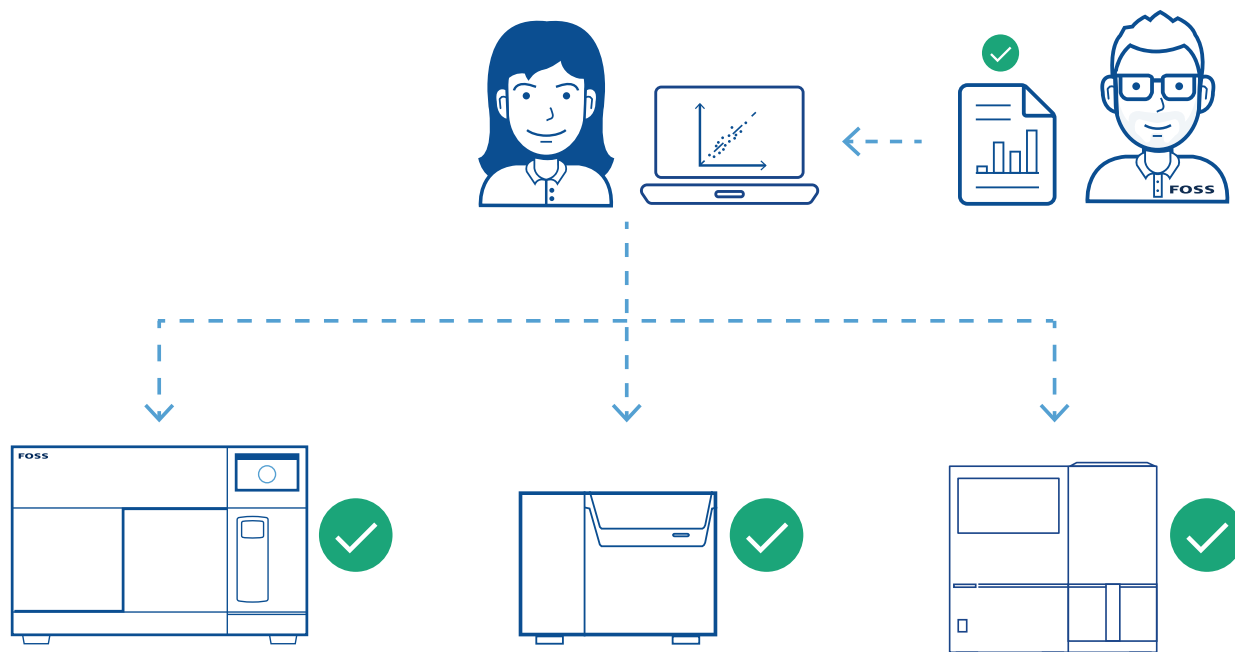
Increase your knowledge about mycotoxin contamination levels and make more informed decisions with accurate data on up to six mycotoxins in maize and wheat in one analysis. Barley can be tested for DON. The competitive cost of ownership and a low cost per sample, enables you to test as often as you need and reduce risk.





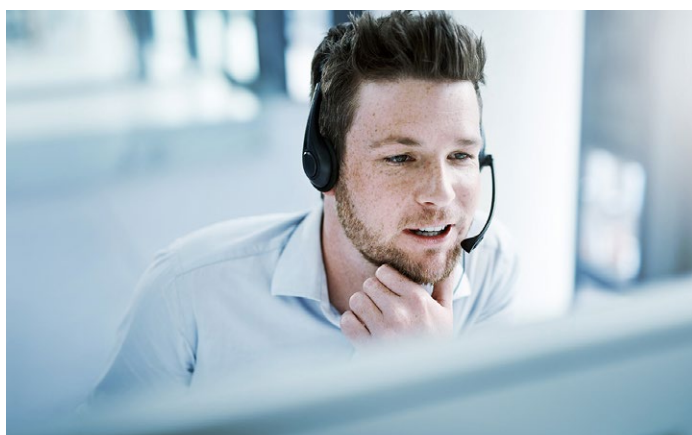
A RELIABLE PLATFORM FOR MYCOTOXIN RISK MANAGEMENT

Accurate and consistent data based on an automated method combined with digital services provides a safe foundation for your mycotoxin risk management programme. Efficient data management and qualified documentation ensures adherence to standard operating procedures.



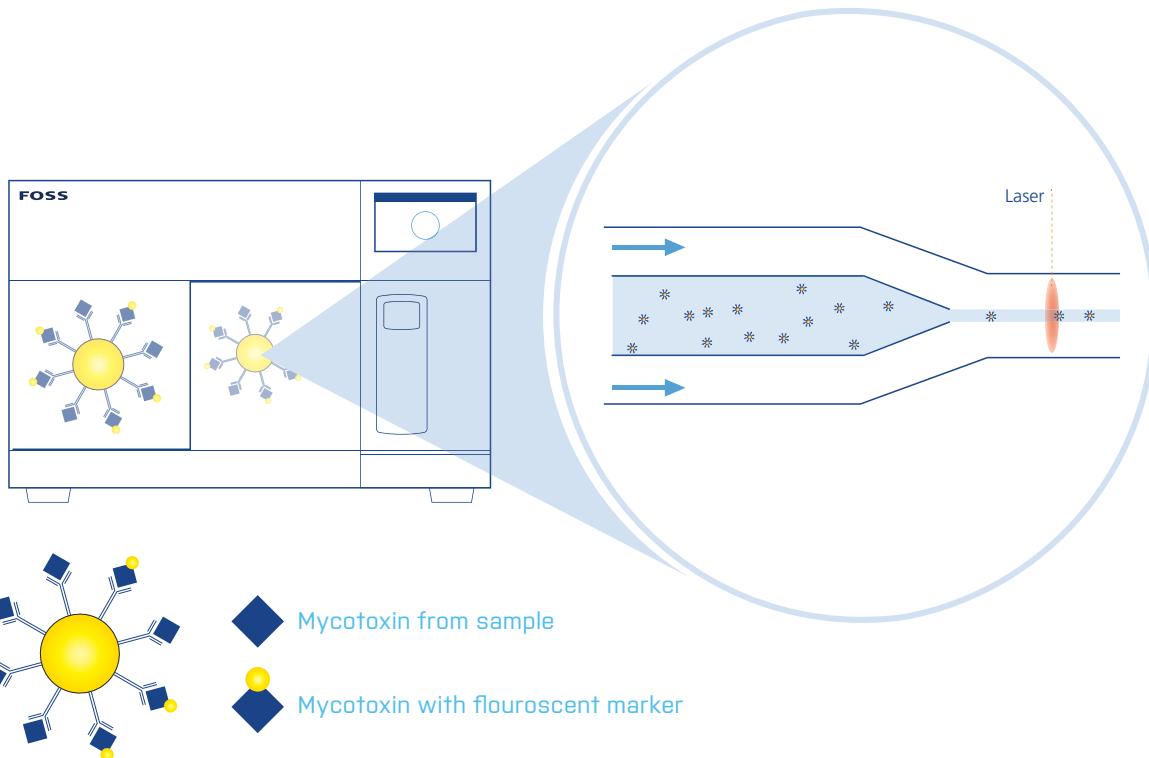
CONNECTIVITY FOR EFFECTIVE AND EASY DATA MANAGEMENT

- Obtain central access to analytical data for all your connected analytical instruments
- Set-up user specific rights across operations
- Automatic back-up of data
- Enables additional data integration options



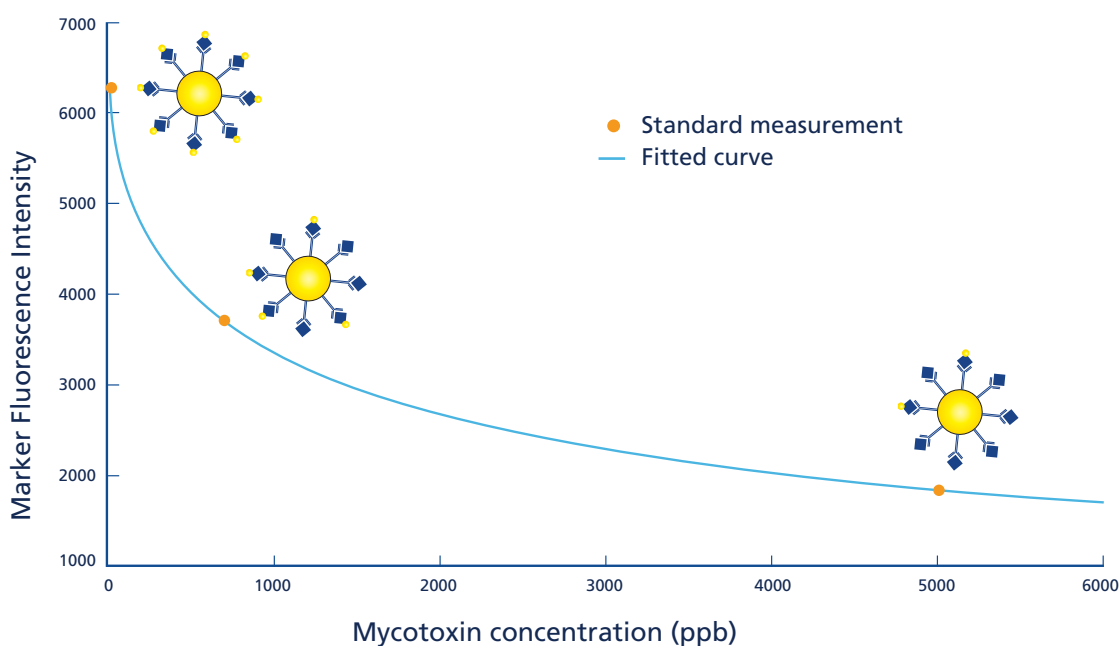
Lasting performance

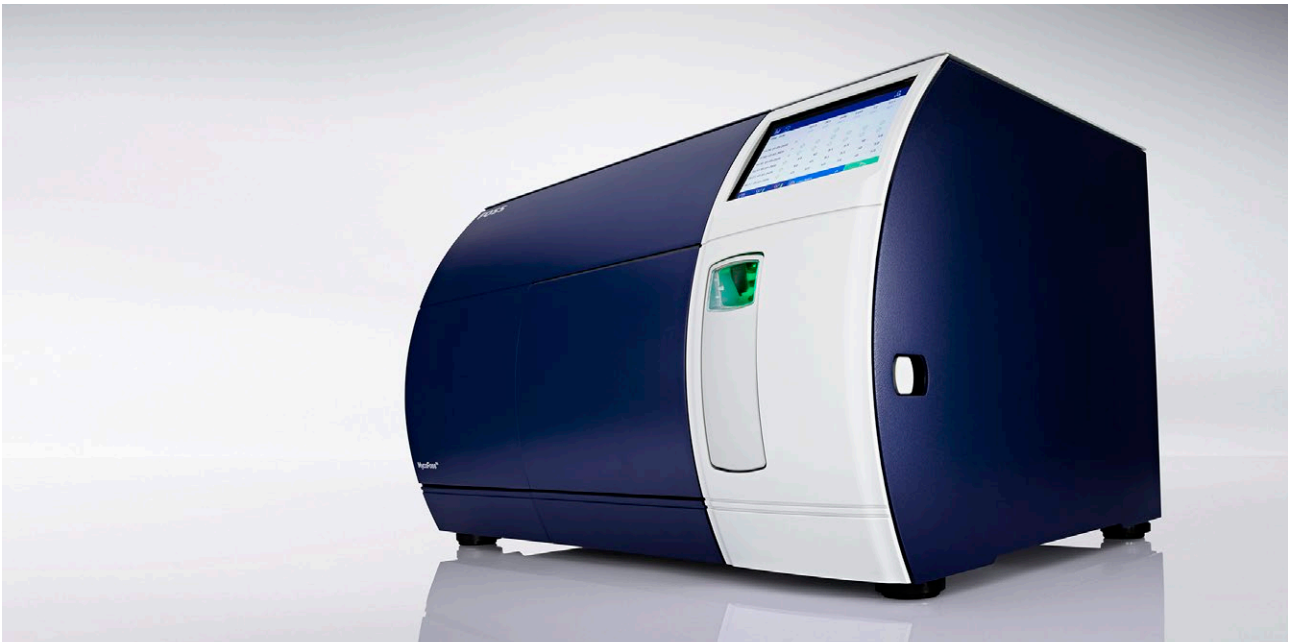
SmartCare™ is a service solution that ensures indisputable results from your FOSS analytical solution. Uptime is safe-guarded and trouble-shooting alleviated, setting you free to do your job in pursuit of improved business performance.



INNOVATIVE SOLUTION BASED ON PROVEN TECHNOLOGY

MycoFoss combines well known technologies in an innovative format. The solution is based on a competitive immunoassay in which antibodies bound to fluorescent microbeads are analyzed with flow cytometry. The assay reagent includes mycotoxins marked with a fluorescent molecule. These 'markers' are attracted to the antibodies. Likewise, mycotoxins in the sample are also attracted. Flow cytometry then reveals the concentration of mycotoxins relative to the quantification provided by the markers - the stronger the fluorescent signal, the lower the presence of mycotoxins in the sample.





Sample types

Maize, wheat and barley

Assay solution

Singleplex maize and wheat:

Aflatoxins - AFLA (AFB1, AFB2, AFG1 and AFG2)

Deoxynivalenol - DON

Singleplex barley:

Deoxynivalenol - DON

Multiplex maize and wheat:

Deoxynivalenol - DON

Zearalenone - ZEA

Aflatoxins - AFLA (AFB1, AFB2, AFG1 and AFG2)

Ochratoxin A - OTA

Trichothecene 2 - T-2

Fumonisins - FUM (FB1, FB2 and FB3)

Measuring ranges:

Singleplex solutions

Mycotoxin	Measuring range, ppb
Aflatoxins - AFLA (AFB1, AFB2, AFG1 and AFG2)	2 - 300 (automatic dilution above 100)
Deoxynivalenol - DON	200 - 30,000 (automatic dilution above 5,000)

Multiplex solutions

Mycotoxin	Measuring range, ppb
Aflatoxins - AFLA (AFB1, AFB2, AFG1 and AFG2)	Maize: 2 - 100. Wheat: 4 - 100
Deoxynivalenol - DON	200 - 5,000
Zearalenone - ZEA	30 - 500
Fumonisins - FUM (FB1, FB2 and FB3)	500 - 5,000
Ochratoxin A - OTA	5 - 100
Trichothecene 2 - T-2	50 - 500

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