

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

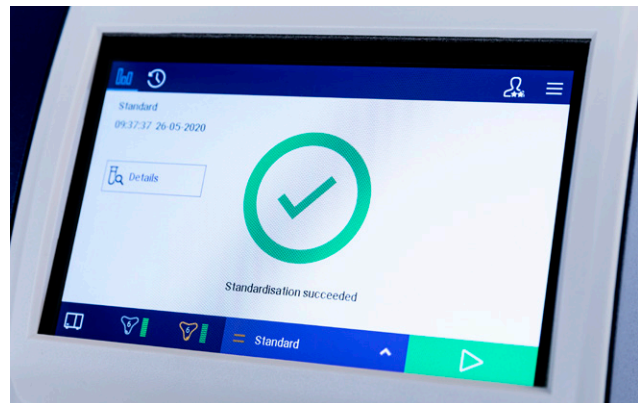
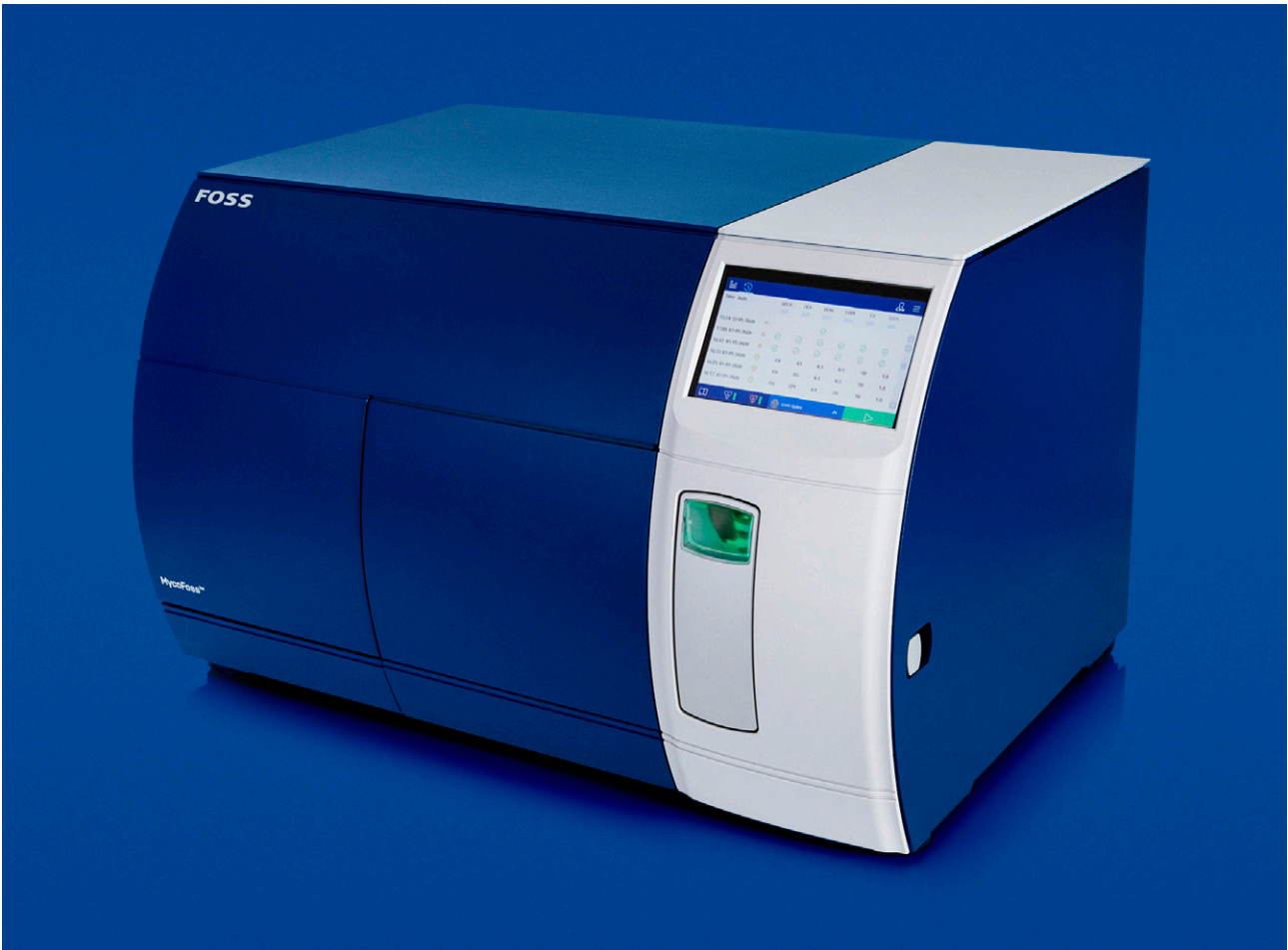


manual steps include the risk of human error or irregularities that create doubt about accuracy and the repeatability of results.

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.



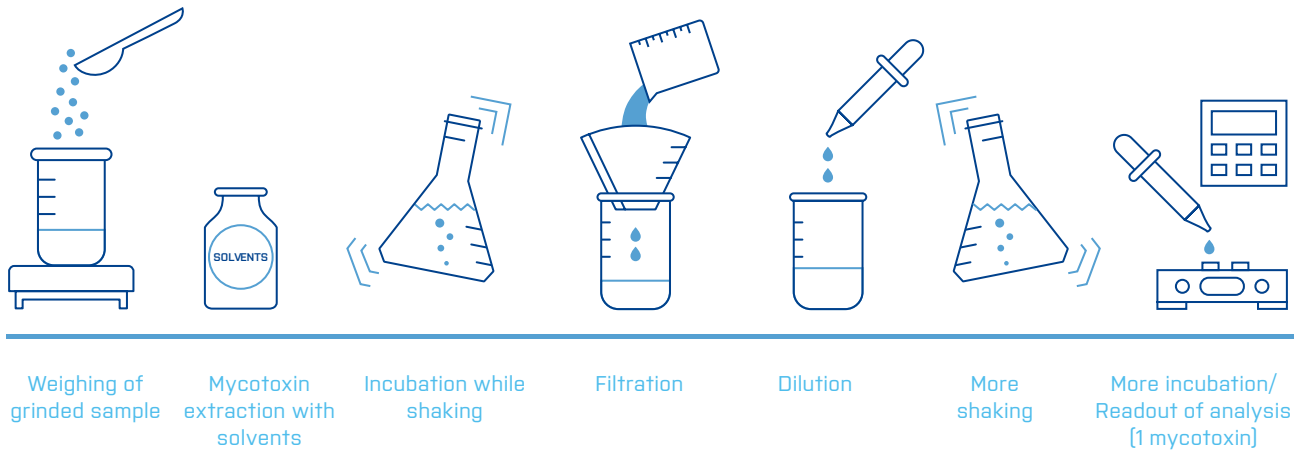
A NEW WAY TO MANAGE MYCOTOXINS FROM FOSS

MycoFoss™ provides a better option for on-site mycotoxin testing with the speed and convenience of an automated rapid method, which circumvents the complex and error-prone manual steps associated with the alternative methods that are otherwise used by the industry today.

For wheat and corn, results on the contamination levels for the six most important mycotoxins (AFLA, DON, FUM, OTA, T-2/HT-2 and ZEA) are provided in a single automated test in 8 minutes. For barley and corn DDGS results for four of these mycotoxins are currently provided (DON, OTA, T-2/HT-2 and ZEA, and AFLA, DON, FUM and ZEA, respectively).

FROM MANUAL TESTING TO MYCOFOSS™

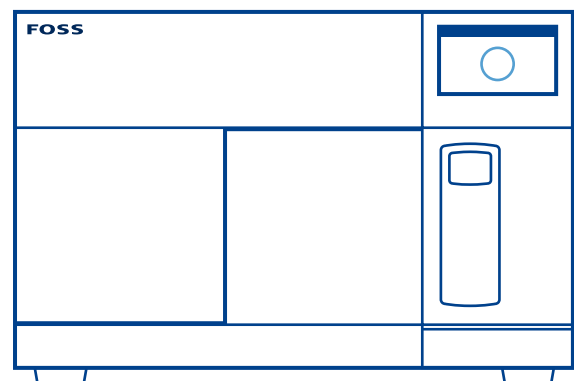
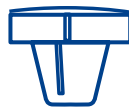
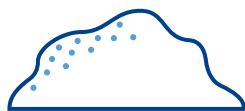
Through smart automation of test procedures, MycoFoss™ takes mycotoxin testing into a new era of automation, reliability and repeatability.



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

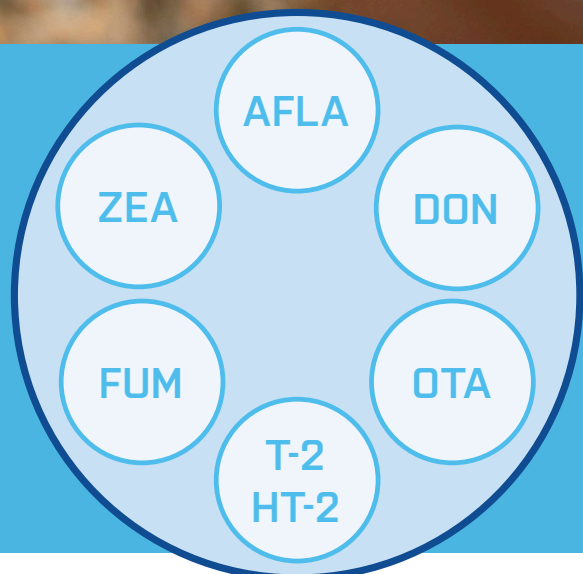
Avoid getting contaminated products into your production.



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

SIX IN ONE

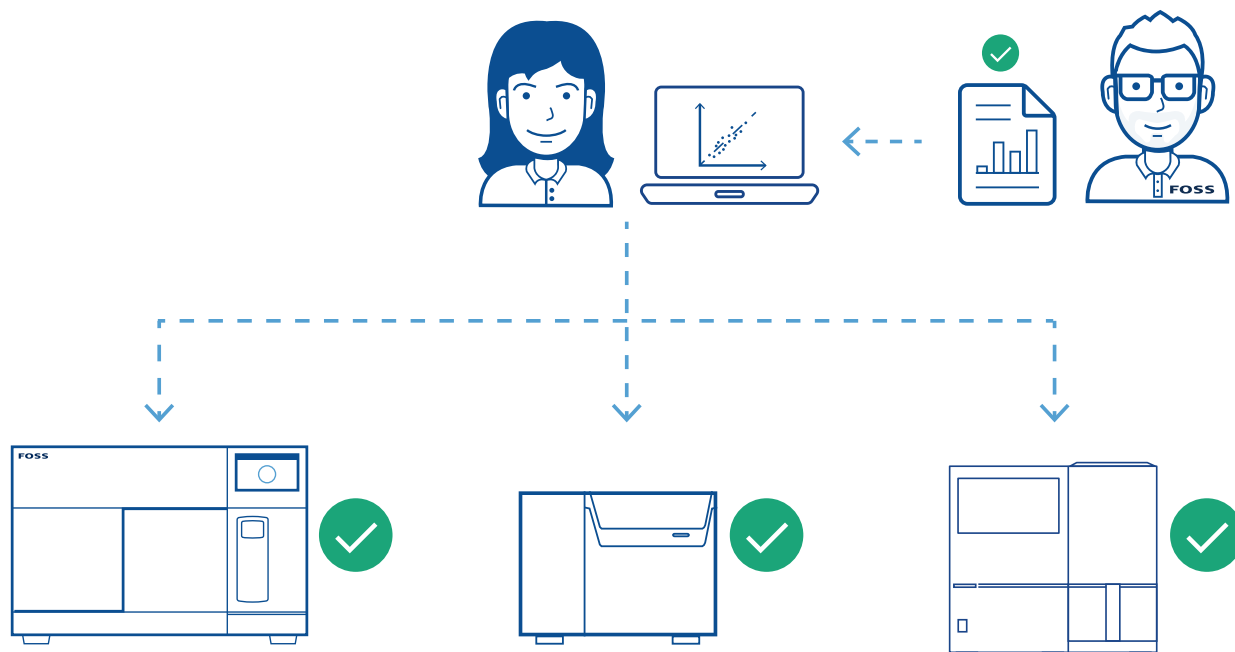
Increase your knowledge about mycotoxin contamination levels and make more informed decisions with accurate data on up to six mycotoxins in corn and wheat in one analysis. The competitive cost of ownership and a low cost per sample, enables you to test as often as you need and reduce risk.





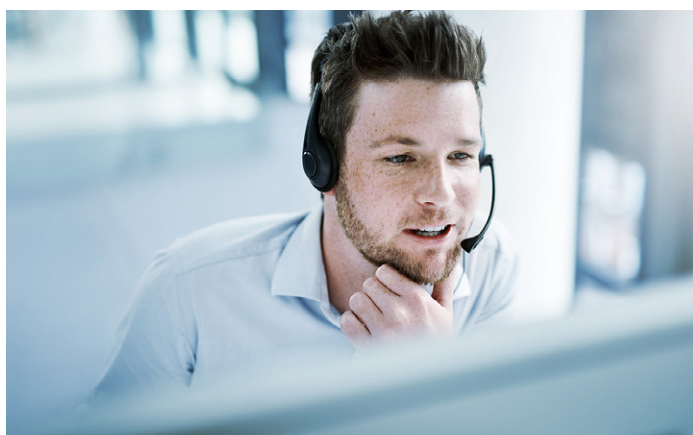
A RELIABLE PLATFORM FOR MYCOTOXIN RISK MANAGEMENT

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.



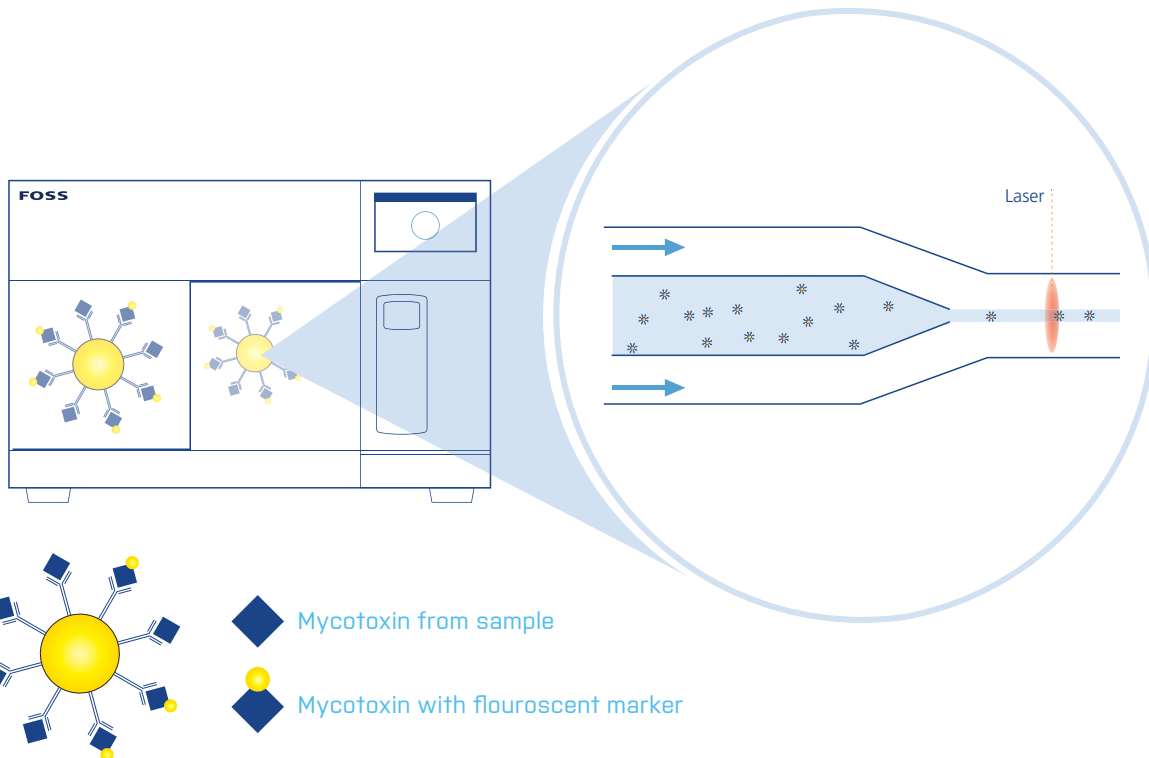
CONNECTIVITY FOR EFFECTIVE AND EASY DATA MANAGEMENT

- 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



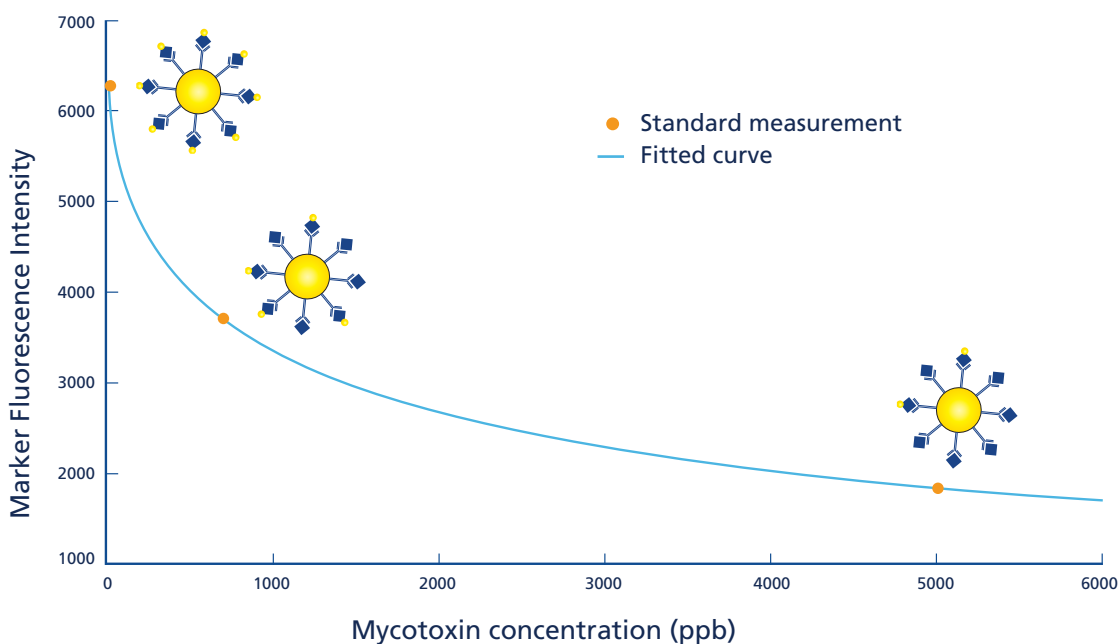
Lasting performance

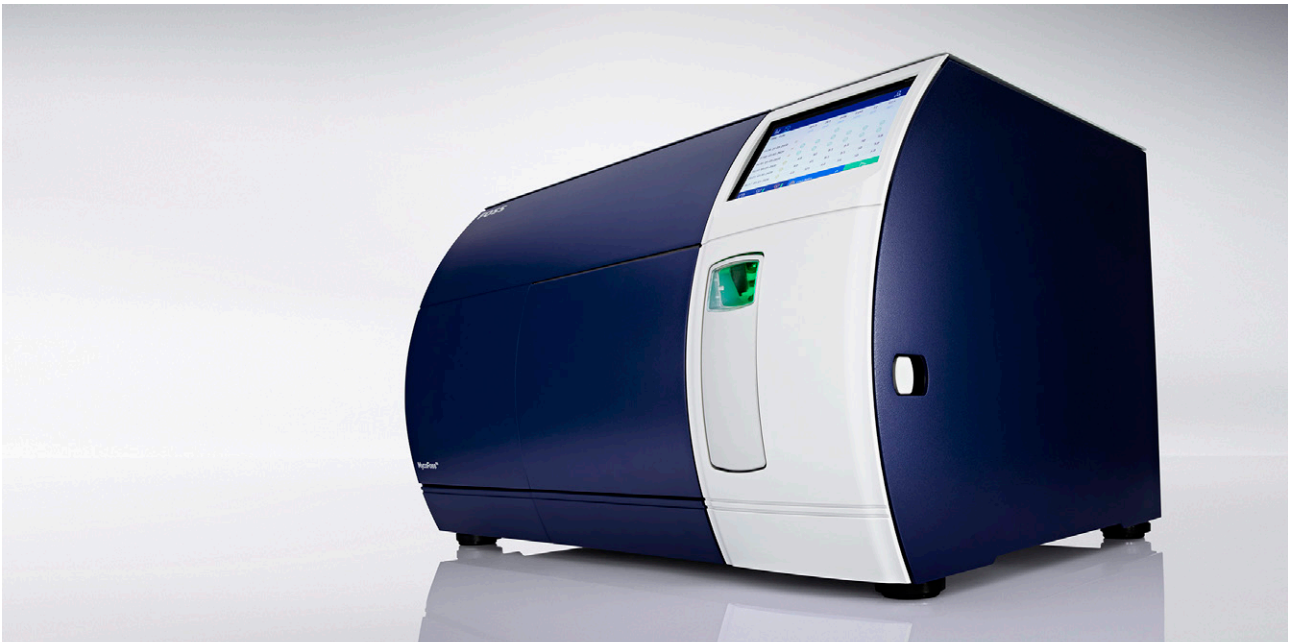
SmartCare™ is a service solution that ensures indisputable results from your FOSS analytical solution. Uptime is safe-guarded and trouble-shooting alleviated, setting you free to do your job in pursuit of improved business performance.



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

Corn
Wheat
Barley
Corn DDGS

Mycotoxin families

Aflatoxins - AFLA (AFB1, AFB2, AFG1, AFG2)
Deoxynivalenol - DON
Fumonisin - FUM (FB1, FB2 and FB3)
Ochratoxin A - OTA
Trichothecene - T-2 (T-2, HT,2)
Zearalenone - ZEA

Measuring ranges:

Singleplex solutions - ppb (µg/kg)				
Mycotoxin	Corn	Wheat	Barley	Corn DDGS
Aflatoxins - AFLA	2 - 300	-	-	-
Deoxynivalenol - DON	200 - 30,000	200 - 30,000	200 - 30,000	-
Multiplex solutions - ppb (µg/kg)				
Mycotoxin	Corn	Wheat	Barley	Corn DDGS
Aflatoxins - AFLA	2 - 100	4 - 100	-	20 - 100
Deoxynivalenol - DON	200 - 5,000	200 - 5,000	300 - 5,000	500 - 5,000
Zearalenone - ZEA	30 - 500	30 - 500	30 - 500	50 - 500
Fumonisin - FUM	500 - 5,000	500 - 5,000	-	500 - 5,000
Ochratoxin A - OTA	5 - 100	5 - 100	20 - 100*	-
Trichothecene - T2+HT2	50 - 500	50 - 500	50 - 500*	-

*) Calibration model still in experimental mode, i.e. accuracy validation ongoing.

FOSS

FOSS
Nils Foss Allé 1
DK-3400 Hilleroed
Denmark

Tel.: +45 7010 3370
Fax: +45 7010 3371

info@foss.dk
www.fossanalytics.com
November 2025. GB