

MycoFoss™

Protect your business with smarter mycotoxin management



ANALYTICS BEYOND MEASURE

MycoFoss™ is the first ever mycotoxin testing solution to combine automation with speed. Just place the sample and press start. Results are delivered within eight minutes.

Let anyone test

The fully automated mycotoxin testing requires no special operator skills, just place the ground sample in the instrument and push start. With a minimum of delay, action can then be taken on raw material intake, segregation, process adjustments and the use of additive binders and facilitate compliance with legal requirements.

Make better decisions

Increase your knowledge of mycotoxin contamination levels and make better-informed decisions. For corn and wheat, results for six mycotoxins are delivered in a single analysis, while for barley and corn DDGS, results for four mycotoxins are provided at once. Competitive cost of ownership and a low cost per sample enable you to test as often as you need.

Be safe on every level

Accurate and consistent data based on an automated test, combined with FOSS IQX™ digital solutions, provides a safe foundation for your mycotoxin risk management program. Efficient data management and qualified documentation ensure adherence to standard operating procedures.

Sample types

Corn, wheat, barley and corn DDGS (Distillers Dried Grains with Solubles)

Assay solution

Singleplex corn:

AFLA (AFB1, AFB2, AFG1 and AFG2), DON

Singleplex wheat and barley:

DON

Multiplex corn and wheat:

DON, ZEA, AFLA (AFB1, AFB2, AFG1 and AFG2), OTA, T2+HT2, FUM (FB1, FB2 and FB3)

Multiplex barley:

DON, ZEA, OTA*, T2+HT2*

Multiplex corn DDGS:

AFLA, DON, ZEA, FUM*

Technology

Bead-based flow cytometric immunoassay

*) In experimental mode.

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**	-

***) Experimental mode; accuracy of +/-30% stdev across whole measurement range not verified.

Technical specification:

Consumables	Ready-to-use sample cups, extraction liquid, assays, standards and flow cytometer cleaning liquid for 100 analyses.
Sample volume	4-6 g
Sample preparation	The milled sample must have a particle size in which 95 % of the material passes through a sieve of 0.845 mm, 20-mesh or 850 microns. The milled sample should have a flour like texture for proper extraction of mycotoxins.
Analysis time	7:55 minutes from inserting sample cup to result.
Ambient temperature	7-33 °C

Dimensions and installation requirements:

Dimensions (W x D x H)	700 x 485 x 435 mm. Keep minimum 20 cm between instrument and walls.
Weight	37 kg
Power supply	100-240 VAC ±10 %, 50/60 Hz
Operation environment	Indoor facilities. Place the instrument on a stable bench. Avoid accumulation of dust.
Drain	Waste container***

***) Dispose and label of waste from the instrument according to local legislation.

Optimize your instrument performance

Digital services	Streamline your operations and improve your profitability with our FOSS IQX™ digital solutions.
Service agreement	With a FOSS service agreement you will secure operational uptime, regulatory compliance, and analytical accuracy.