

# AgriQuant A strong combination of FT-NIR spectroscopy and sampling

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Quant



#### Spectroscopy that makes a difference!

- Q-Interline A/S develops, produces and markets spectroscopy-based analysis equipment for quality- and process optimization in food, feed, dairy, agricultural and biofuels.
- Our solutions are based on best available technology and we use innovative and correct sampling techniques.
- Our solutions generate value for our customers
- Our solutions improve the customers' production
- We are flexible and innovative
- We build and maintain long-term relations
- Our company is driven by customer inputs



## **Company History**





• Q-Interline A/S is a family-owned Danish company founded by our CEO Anders Larsen in 1996. From 1996 to 2003 the company was primarily an exclusive reseller organization for ABB Analytical (Bomem) and Delta Instruments, and this is still a vital part of the business for the home markets.

In 2003 Q-Interline undertook a new role as a producer of analytical apparatus for the food/feed/Agri industry segment in its own name.

The companies products are today sold world-wide by a growing network of distributors.

Headquarters 45 km west of Copenhagen



Estimated 30 million analysis results generated annually on Q-Interline instruments



#### The AgriQuant system



The Quant system



# Spectroscopic performance highlights

- Spectral range 3,700 to 14,885 cm<sup>-1</sup> (2700-671 nm)
- Signal to noise (60 s, 16 cm-1, at peak response) > 500 000: 1
- Frequency repeatability (@ 7300 cm-1) < 0.006 cm<sup>-1</sup>
- Frequency accuracy (@ 7300 cm-1) < 0.01 cm<sup>-1</sup>
- Absorbance reproducibility sys/sys (toluene) < 0.002 AU

typical, at 25 °Celsius with InAs detector



# Optimised sampling solutions

- The optimised sampling solutions will provide representative sampling
- Protect the sample from the point where they are extracted via NIR scanning all the way to the reference analysis
- The use of optimised sampling solutions will ensure excellent spectral quality and more precise and representative results



#### For heterogeneous products





#### For homogeneous product





For heterogeneous products





#### For pasty products





#### For liquid products





#### Penprobe for multiple analysis with probe





#### For connection of many types of probes





#### European Market introduction of new Spiral sampler (patent pending)

- First introduction in Europe
- New powerful accessory for energy crops, grain, fresh forage and other hetorogene products
- Covers 375 cm<sup>2</sup>
- Easy to fill and empty
- Optimal for rutine agri labs with up to 1.000 samples a day !
- Automation options

#### **Design Hypothesis:**

For a representative scanning method, the variance between subsamples will approach the variance between repetitive measurements



#### New patent pending Spiral sampler



# 3 scanning methods

#### **Bottle Sampler**

#### Petri Spinner



## Spiral Sampler



15 cm<sup>2</sup> per turn
28 cm<sup>2</sup> per analysis
50 grams per sample

18.1 cm<sup>2</sup> per turn
18 cm<sup>2</sup> per analysis
35 grams per sample

374 cm<sup>2</sup> per turn
110 cm<sup>2</sup> per analysis
600 grams per sample



# Contact information

# Find contact information and learn more about our products at

www.q-interline.com

Please visit the Anaspec.nl and Q-Interline demo during the lunch break and see the fantastic new spiral sampler !

# Thank your for your attention 😳

