

Quality control solutions for the Oilseed Industry

Having worked with major companies within the industry for many years, Perten Instruments has gained great experience in how to help oilseed millers work more efficiently. Among our customers we count some of the very largest companies in the industry, as well as specialized local companies.

Complete solutions

When you buy an analysis system from us, we deliver a complete solution including instrument, installation and training, calibrations, software and after sales services. A Perten Instruments representative will install and train your staff locally. We offer calibration packages that range from basic needs to cutting edge applications. Our SimPLUS software allows you to control, monitor, and maintain the DA 7250 as you see fit – locally or control a network of multiple instruments from a central location.

Save Money and Improve Quality

Our analytical instruments help you save money. They are all rapid, accurate, robust and easy to use – in other words they were designed for industrial use and will work equally well on the factory floor as in the lab. As they help you improve efficiency and save money, they typically pay back their cost in less than 6 months. These are some of the ways they can bring you benefits:

- Determine moisture, oil, fatty acid profile and more in oilseeds
- Optimize pressing, extraction and drying of oilseed meal
- Monitor degumming and free fatty acid neutralization
- Verify feed nutritional properties of the oilseed meal

Some of our products are mentioned in the points below, and a full list of suitable products can be found on the back page. The DA 7250 NIR placed at-line or in the lab is typically used for all these purposes. Many companies are now bringing NIR analysis on-line for real-time monitoring and control, using the DA 7300 NIR On-Line. The two models use the same technology and calibrations are fully transferable between them.

Raw material intake

Perten Instruments offer moisture meters and NIR instruments for quality control of incoming oilseeds. Rapid and accurate determination of moisture, oil, fatty acid profile, protein and more will enable you to pay the right price for the oilseed you purchase.

Tempering and dehulling

For tempering you need rapid and accurate moisture testing. The DA 7250 At-Line NIR as well as the Aquamatic Grain Moisture Meter provide highly accurate results in less than 10 seconds.

Pressing and extraction

The DA 7250 NIR Analyzer will determine the oil content and more in presscake and expeller in only 6 seconds. You don't need to grind the sample before it is analyzed, and there are no cups to pack and clean. The instrument can be placed at-line and process operators will confidently use it. We have examples of customers who were able to tighten their specification of oil content in the presscake by one percentage point after they started working with the DA 7250.

Degumming

With the DA 7250 you will be able to get phosphorous results in a few seconds. The analysis is easy and doesn't require any chemicals or an equipped lab.

FFA removal

6-second determination of oil FFA content using the DA 7250 will give you the information you need to determine the optimal conditions for the neutralization.

Oilseed meal drying

The DA 7250 At-Line and DA 7300 On-Line will give you accurate moisture results in seconds, which makes it possible to truly optimize drying. Increase profit by minimizing moisture safety margins, while avoiding product quality issues.

Meal blending

The DA 7250 and DA 7300 will enable you to improve margins as you can monitor and control the blending in of hulls and reach exactly the intended protein content.

Verification of oilseed meal nutritional content

The price of oilseed meal depends on its composition. Using the DA 7250 you will be able to determine moisture, protein and other nutritional parameters without any wet chemistry analyses.

What you can analyze

The following are the most commonly measured parameters. They can be determined on-line, at-line or in the lab.

- Moisture
- Protein
- Oil
- Fatty acid profile
- Ash
- Amino acids
- Free fatty acids

NIR calibrations for these and other parameters are available for all common oilseeds, meals and oils. Spectral data collected on other NIR models can be transferred to the DA 7250 and DA 7300, to provide a seamless upgrade from your old equipment.



Recommended products

Preferred choice

DA 7250 NIR At-Line

Employing the latest NIR technology it determines moisture, protein, oil and more in oilseeds, intermediates and meals – in only 6 seconds. No grinding, drying or other sample preparation is required.

DA 7300 NIR On-Line

Real-time process monitoring on-line. Calibrations are fully transferable from the DA 7200 At-line NIR. The DA 7300 uses open communications interfaces and can be fully integrated in existing plant control systems.

Low-cost alternative

Inframatic 8600

Using proven and robust NIR technology, the Inframatic 8600 can determine several of the parameters that the DA 7200 determines. The Inframatic 8600 requires a lab mill for sample preparation.

Additional products

Inframatic 9500 Grain Analyzer

The Inframatic determines moisture, oil and more in whole oilseeds in only 40 seconds.

Aquamatic 5200 Moisture Meter

Determine moisture in all kinds of oilseeds. The Aquamatic is based on recent development work performed by the USDA and is the most accurate moisture meter available.

Laboratory Mills

Approved hammer and disc mills for preparation of whole grain and pellets. They are extremely durable and highly suitable when you need to grind samples for wet chemistry or NIR analysis.