

SpectraAlyzer®

olive

Fastest Quality Evaluation of Olives during Processing, Harvesting and Growing



The SpectraAlyzer® as a part of an olive analyzer package provides accurate measurements of moisture and oil content in fruit, oil, pomace and extracted press cake within seconds.

In modern olive growing operations the olive yield and quality is directly influenced by the olive variety, climate and the irrigation level and control. In order to be most competitive in the world market, consistent high yields, top quality and low production costs are the objectives that need to be achieved.

To meet these objectives planting, growing, harvesting and processing of the olives needs to be planned and organized to the best standards known.

In the olive grove high investments and operating expenses for planting, irrigation, harvesting and processing equipment are spent without obtaining the most significant information at all-the information about the olive quality and yield that is the base for the monetary return and success of the individual farmer!

The remedy to this shortcoming in obtaining accurate information about the fruit is the SpectraAlyzer® olive package. The SpectraAlyzer® is a highly sensitive Near Infrared (NIR) spectrometer. It can determine the oil and moisture content in fruit, oil and pomace as well as in extracted press cake and other byproducts with unmatched accuracy.

The farmer can easily plot moisture take up of the fruit, monitor the oil accumulation and precisely predict the optimum point in time for harvesting.

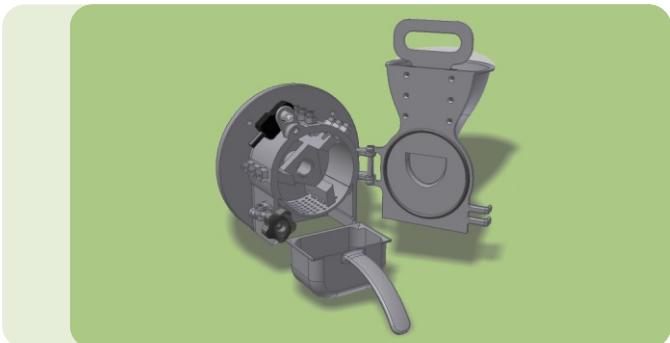
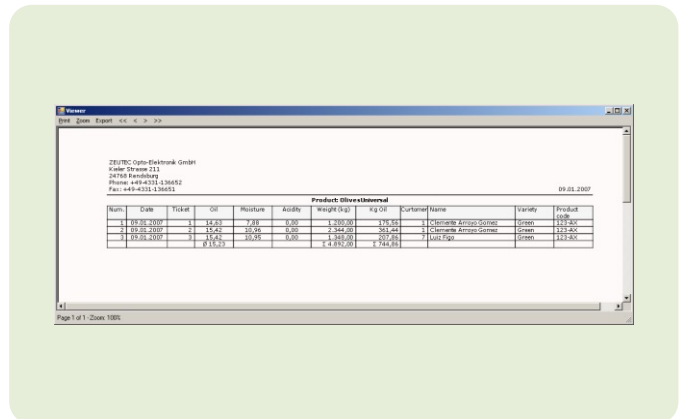
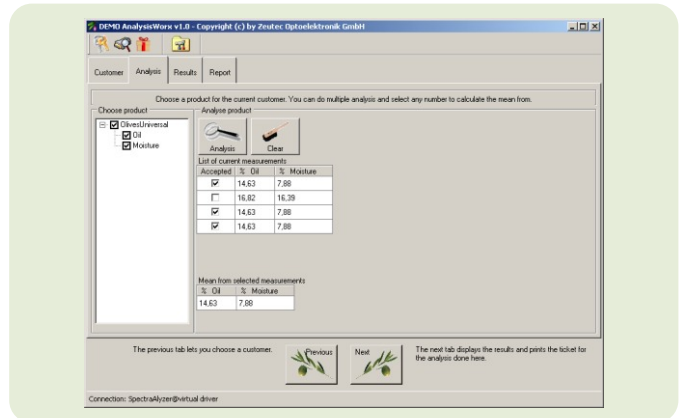
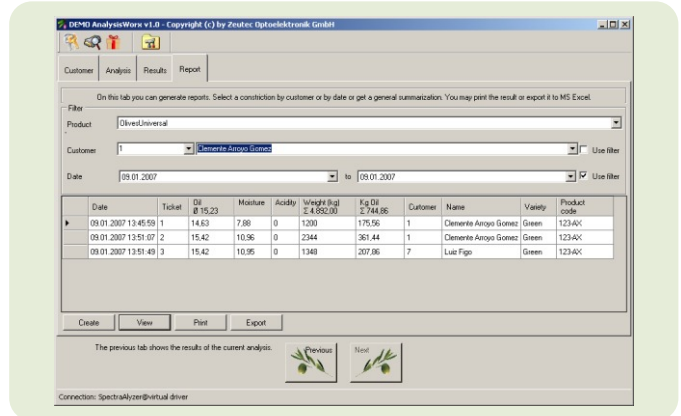


The SpectraAnalyzer olive

The immediate availability of analytical values of the SpectraAnalyzer® olive allows the oil processor to adjust the plants operation parameters to achieve the maximum extraction rate and oil recovery combined with the best olive oil quality. In order to organize the raw material flow into the oil mill, Analysis worx, a software package, is available as an accounting database system.

Combined information about oil content and olive quantity delivered to the mill are processed, stored, receipt tickets are printed and finally used as a base for the payments to the individual farmers.

For those advanced users requiring comprehensive access to the analytical instrument a powerful software package, called Application worx, for analyzer operation is included.



What it does

- direct analysis of oil and moisture content (%) in olive fruit. The sample is milled with the "Olive Mill" to produce a paste for the analysis
- direct analysis of oil and moisture content (%) in olive oil (with the "slide cup") and pomace and other olive products (sample containers and filling spatula)
- direct analysis of acidity optional
- analysis time 60 s for fruit (incl. sample preparation) and 15 s for oil, pomace and other products
- no chemicals or reagents needed
- stand-alone analyzer solution - no external computer needed

Where the benefit is

Farming

- monitoring of oil and moisture and oil concentration during fruit maturation
- facilitates setup of oil accumulation curve
- precisely indicates via oil and moisture content analysis optimum irrigation levels over time
- determining the optimal time for harvesting

Oil milling

- manages and controls raw material intake from individual farmers to oil mill
- optional database software "Analysis work" simplifies accounting and payment to farmers
- supplies information for optimized oil recovery process at different process stations in milling
- gives control over pomace paste moisture and oil content
- monitors moisture and oil content during pomace oil extraction process

How it works

- uses NIR (NearInfraRed) spectroscopy
- composition of organic compounds is determined
- compounds structure is determined based on transmitted/reflected NIR light at sample
- calibration is used to calculate quantity of organic compounds in sample





What the package consists of

- SpectraAlyzer® olive
 - Grinder (olive mill)
 - Sample presentation containers for olives
 - Sample presentation cup for oils "Slide cup" with a gold reflector
 - "Application worx" software package
 - Precalibrations for a wide range and variety of olives, olive oils and olive products
- optional**
- "Analysis worx" software package (database system for raw material intake management for olive milling plants)



Technical Data

Near InfraRed analyzer

Spectral Range: 1445 - 2348 nm

Sample/Reference measurement for each optical filter

High Signal to Noise Ratio > 10000:1

LC display 240x128 pixel, COB Central Operation Button

Auto-diagnostic functions

Power requirements min. 90 V AC (20-60 Hz) max. 260 V AC (50-60 Hz), 160 VA

Operating temperature 5 - 40 °C non condensing

Height: 490 mm, Width: 330 mm, Depth: 480 mm, Weight: 20 kg

Olive Mill

Type: Hammer Mill

Housing and rotor materials: Stainless Steel SS 304

Motor: 230 V 50 Hz, 1.1 kW, 3000 U/min

Height: 350 mm, Width: 300 mm, Depth: 585 mm, Weight: 20 kg

Your local representative