SpectraAlyzer
OLIVE

Great taste comes with
great recipe and extra virgin quality

ZEUTEC

made
in
Germany

What it does for you

> The **SpectraAlyzer OLIVE** and **OLIVE Top Window** are the most advanced olive oil analysis instrument solutions available for testing the most common parameters required within the olive oil extraction processes.

In the modern olive processing industry reliable and accurate olive analysis solutions are necessary to provide customers with products of highest and – what is most important – consistent quality. In order to be most competitive in the world market, consistent high yields, top olive quality control and low production costs are the objectives that need to be achieved.

Designed as a modular system, the SpectraAlyzer OLIVE solution presents the analytical results of these major quality parameters within 45 seconds:

• **Whole olives:** oil (yield), moisture, acidity, peroxides and others

• **Olive paste:** moisture, oil, acidity content and others

• **Olive oil:** moisture, acidity content, peroxide no and some other side parameters

• **Olive press cake:** moisture and oil content

There is no need to manually condition the sample and extra reagents do not have to be used so this olive and olive oil analysis provides **highly accurate quality control parameters** at no extra cost.

As a stand alone system the SpectraAlyzer OLIVE can be operated very easily and intuitively – even close to the production line. The rugged construction and unique optical sample/reference setup ensures reliable operation in environments with fluctuating temperatures, vibrations and dust.

Key features

Versatile sample presentation

with closed, open, viscous and slide cups
for powders, pastes, slurries and liquids
or with glass cups on the top window.
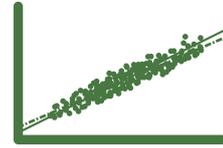
Many mathematical models

for all kind of products included for quick
calibration models installation and start-up.

NIR sample/reference technology

like all SpectraAlyzer instruments for high
sensitive and long term stable measurements.

Touch user interface

and intrinsically mounted glass touch for straight
forward hygienic instrument operation.

Compact design

optimised for bench top or at-line application.

User friendly
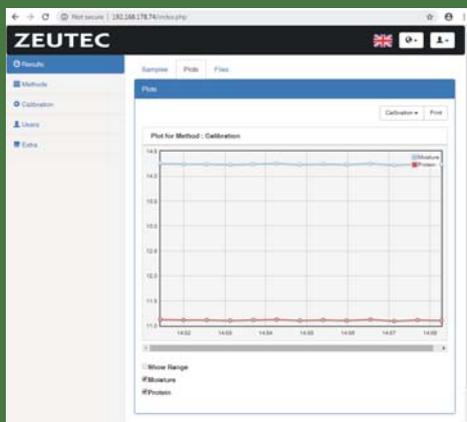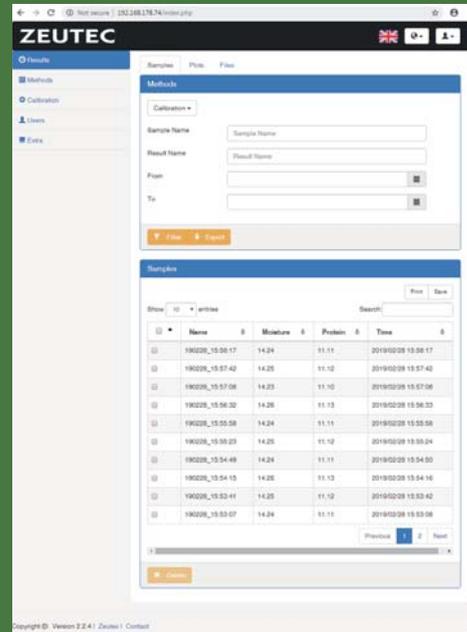
sample presentation and easy to operate.

Web server connectivity

for direct instrument access via LAN
and internet from anywhere, any time.

Online Electronic
Lab Logbook

- Full sample and analytical results history
- Filter results by time or sample name
- Search for samples
- Export to Application Worx
- Copy, print or save (PDF / Excel) samples

- Plot multiple properties as graph
- Select / deselect different properties

- Calibration management
- Import feature for new / updated calibrations
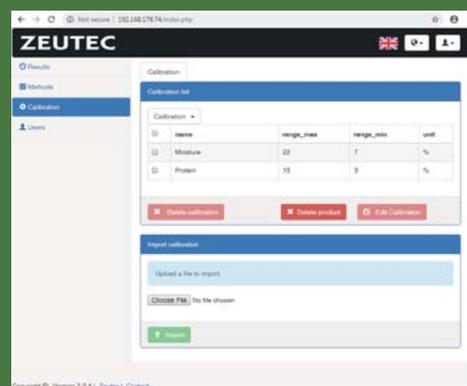
Production process flow diagram

Olive quality check 1

Moisture, oil and acidity content in delivered olives are analysed. Oil and acidity concentration is used as the basis of the payment to the farmer.

Quality check before crushing 2

During or after crushing moisture and oil concentration are checked for mill extraction optimisation.

Centrifugation / Decanter 3

Residual oil (dry and fat based) and moisture concentration are analysed to optimise the decantation process and adjust the malaxation. The extraction yield is calculated.
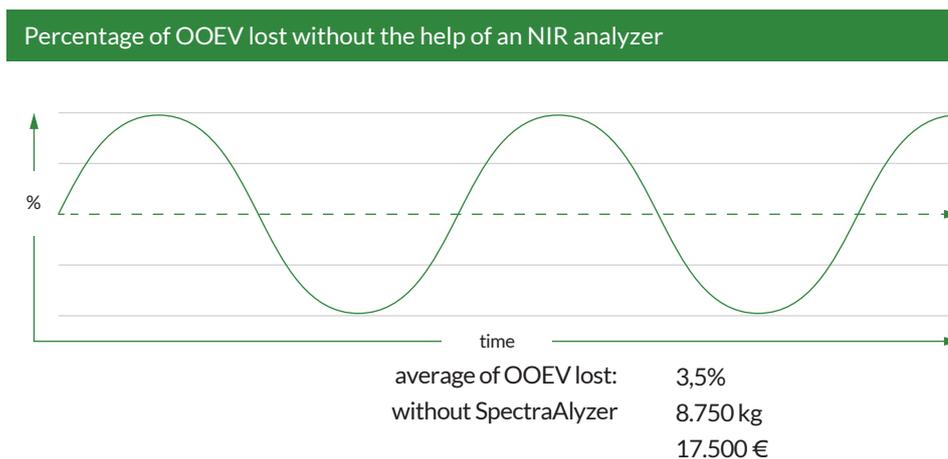
Oil 4

The final oil quality is controlled by determining the moisture, acidity, peroxide no, sterols and other side parameters.
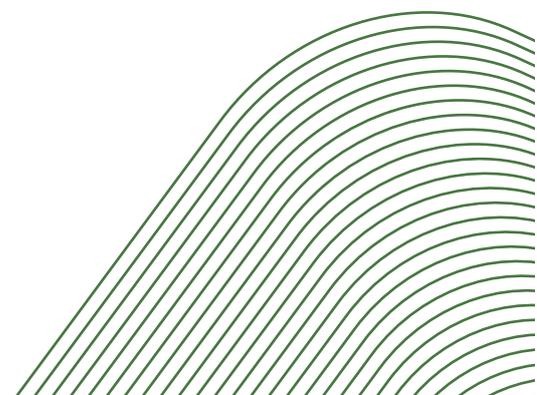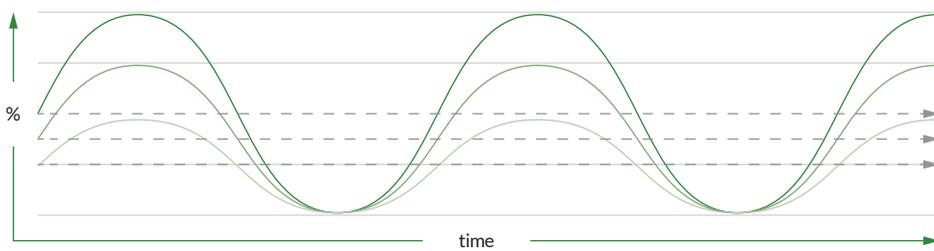
Economical benefits and amortization

Case study to illustrate increased profitability using the **SpectraAlyzer OLIVE**
with the improvement of oil extraction from the olive pomace.

Basic data			
	1.000.000		kg ground olives per year
	2.0		Euro/kg OOEV (Olive Oil Extra Virgin)
	25%		Average yield in olives
2,0%	to	5,0%	OOEV lost in pomace during the extraction

10.000 €
lost
(5.000kg)

25.000 €
lost
(12.500kg)

Percentage of OOEV lost without the help of an NIR analyzer

%

time

MAX: 5,0%

MED: 3,5%

MIN: 2,0%

average of OOEV lost: 3,5%
without SpectraAlyzer   8.750 kg
                          17.500 €

Percentage of OOEV lost with the help of a SpectraAlyzer

MAX: 5,0%

MED 3,5%
- 3,0% - 0,5% better extraction
- 2,5% - 1,0% better extraction

MIN: 2,0%

average of OOEV lost:	3,5%
without SpectraAlyzer	8.750 kg
	17.500 €

average of OOEV lost:	3,0%
with SpectraAlyzer 0,5 % better extraction	7.500 kg
	15.000 €

Amortization period for the SpectraAlyzer (PVP: 18.000 Euros)

Save per harvesting season with SpectraAlyzer	2.500 Euros	7,2 Seasons

average of OOEV lost:	2,5%
with SpectraAlyzer 0,5 % better extraction	6.250 kg
	12.500 €

Save per harvesting season with SpectraAlyzer	5.000 Euros	3,6 Seasons

Technical data

Design

Spectral range 1400 - 2400 nm

Dual beam system, Sample / reference measurement

High signal to noise ratio > 150 000 : 1

Large expandable internal memory for calibrations, methods and history results

Auto-diagnostics

Graphical user interface, projected capacitive glass touch panel

Optional Accessories

Keyboard, Barcode Reader, Printer, Application worx (AWX), Transflection stamp

Analytical Performance

Please refer to commodity specific performance data sheet

Specifications

Screen	TFT 800 x 480 pixel
Power requirements	min. 90 V AC (50 - 60 Hz), max. 260 V AC (50 - 60 Hz), 220 VA
Operating temperature	5 °C - 35 °C non-condensing
Interfaces	1 x front USB 2.0, 3 x USB 2.0, 2 x RS232, Ethernet
Dimensions	Height: 310 mm / Width: 300 mm / Depth: 480 mm
Weight	17 kg

Order information

SpectraAlyzer OLIVE	110-A100-4
SpectraAlyzer OLIVE TW	110-A100-8

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