



FOOD LAB

Quality control systems for food and beverage



PalmOilTester

The new method for quality control of Palm Oil



PalmoilTester: analyser for crude and refined palm oil

PalmOilTester is a simple and accurate testing system that, within a few minutes, enables to determine Free Fatty Acid (FFA), Peroxide Value (PV), DOBI & Carotene in raw and refined palm oil.

The **Plus Version** can also test Iodine Value and Anisidine Value (AnV) in palm oil.

Thanks to its simplicity and reliability, PalmOilTester is used by palm oil producers in Malaysia, Thailand, Indonesian, Nigeria etc. during all production stages: in the oil mills where the fruit is crushed, in refineries, during acceptance, during storage and when the finished product is sold.

The innovative characteristics have made PalmOilTester very popular among **worldwide food industries** that use palm oil as ingredient.

System



The analytical system includes:

- A **Spectrophotometric Analyser** with solid state emitters (LEDs) and reading and incubation cells thermostated at 37° C.
- A **Kit** of pre-vialed, disposable reagents with a low toxicity developed by the research laboratories of CDR and a 12-month shelf-life.
- **Pipettes** to simplify the collection of the samples.
- **Print Manager**: software that enables the connection of the analyser to the PC in order to store and print the results of the tests.
- **Operator's manual** and **functional illustrated sheets**.

PalmoilTester is supplied with a 3 year warranty.

PalmOilTester is able to test raw palm oil and Kernel Palm Oil and provides the following information:

- **Free Fatty Acids** 1 minute
- **Peroxide Value** 4 minutes
- **DOBI & Carotene** 6 minutes
- **Iodine Value** 2 minutes
- **p-Anisidine Value** 2 minutes

This system significantly reduces testing time because it enables to test up to 14 samples simultaneously, which means that it is possible to perform **80 FFA tests, 70 Peroxide Value tests, 40 Iodine Value tests** and **40 p-Anisidine Value tests** in an hour.

Simple Methods

PalmOilTester analytical methods are simpler and faster as compared to traditional ones. Tests can be performed in a few simple steps:

1. Heat the palm oil, which is solid at room temperature.
2. Select the parameter to measure from the menu: the system automatically selects the correct wavelength.
3. Use the supplied pipette to add the correct volume of reagent and sample, then mix.
4. Follow the displayed instructions.
5. The result is automatically calculated in a few minutes, displayed and printed by means of the on-board printer.

No Technical Support and Maintenance Expenses

- Unlike NIR systems or other photometric systems, this system does not require regular calibrations: it is supplied pre-calibrated, although the calibration parameters can be changed quickly and simply.
- The system does not require costly spare parts: the analyser uses LED luminous sources and does not therefore require the maintenance that is usually needed for photometers with tungsten luminous filaments. The absence of moving parts eliminates the risk of damages.

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