ReceivingOPT BA-T 2.0

Analysis of water content, ash content and calorific value.

APOS' ReceivingOPT BA-T is available in a new design. Just like the predecessor model, the entire APOS technology is combined in one stand system. The system is best suited for sample analysis during of the biomass/wood reception in material and thermal use of wood. A big and representative sample of approximately 8 litres can be analysed instantaneously. The system excels in intuitive operation and its rugged design for heavy use.

ReceivingOPT BA-T 2.0 is the ideal solution, when there is no dumping site/bunker available for a fixed installation; practically every time, when material is unloaded at different locations on the storage yard. The BA-T 2.0 relies on the proven measurement technology that is used in all APOS systems, however it is designed as a standing device. This allows the system to be used directly in the office of the employee responsible for material reception. The user software is very similar to the one used in BA systems.

Apart from the new, modern design the new ReceivingOPT BA-T 2.0 offers many more advantages:

- Analysis of water and ash content and calorific value.
- The sample container is made of steel and therefore extremely resilient.
- Opening and closing the container is simplified and sped up with gas springs.
- The system is equipped with a new, more resilient motor with a vastly improved lifetime.
- A larger measurement window of the sensor allows for a better look at the material.
- The software has been revised, so that more values with better quality can be measured in the same time.
- Self-checking system: quality indicator with each measurement.
- Consistent documentation of the entire material acceptance with daily and annual journal.
- Easy Integration of the Microsoft SQL database of the system to third-party systems.

The procedure for a BA-T System:

- The operator takes a sample of approximately 8l from the pile (maximum grain size according to EN 14961/ P63 with a maximum edge length of 100mm).
- The sample is put into the analysis container and the system is started with the push of a button. The sample number (e.g. delivery number) can be recorded with a keyboard entry or using the barcode scanner.
- Measured values as well as the moving average will be displayed graphically to the operator during the analysis, which takes roughly 3 minutes.
- The system provides an information of the measurement quality with each analysis.
- The values are automatically transferred to the materials reception journal, after the analysis has been completed. Material type and supplier can be filled in by the operator as well.
- The material can be evaluated according to the determined ingredients, for example water content/ moisture, ash content or calorific value.

The Receiving OPT BA-T includes:

- Analysis and documentation software
- Analysis container (Filling approx. 8l)
- Keyboard water- and dustproof
- APOS central unit, sensor and control electronics
- customized calibrations
- Setup location only requires 230V and Ethernet.

The System comes with calibrations customized for each customer for water content, ash content and calorific value. The standard calibrations are for the use with non-frozen materials. Calibrations for frozen materials available.
Additionally, data can be exported as an Excel file or to a third party system using the data interface. It is also possible to integrate to an existing weighing software of e.g. a truck scale, in order to import the values into the BA-T system to complete the entry in the goods receipt book. Additionally, the system can automatically send the daily journal to an e-mail distribution list.

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APOS BA-T System	
Dimensions	approx. 175cm x 66cm x 80cm (H x W x D)
Sample Volume	approx. 6 - 8 litres
Grain Size	EN 14961/P63; max. 100mm
Ambient Temperature	+ 5°C to + 35°C
Relative Humidity	max. 80% non-condensing
Interface	Ethernet
Weight	approx. 100 kg
Power Supply	230V AC;5 A
Light Source and Measurement Sensor	2 x max. 5 W
Recommended Lifetime Illuminant	approx. 5.000 operating hours per illuminant; replacement of both illuminants recommended after a year of operation (Ensued as part of the maintenance contract)

Specifications Measurement System (Hardware)	
Wavelength Range	950nm – 1690nm
Measurement Rate	> 60 raw values/minute
Number of Measurement Points	1
Repeat Accuracy	< 0,5%- points standard error
Single Values per Sample	100-150
The systems have been developed by APOS for quality control and goods inward inspection. Further applications are at the discretion of the customer.	