## **N**-alyzer



Measurement of nitrogen content of raw chips before or after dryer. Determination of recycling wood share (glued fraction) during process. Improvement of production.

APOS N-alyzer continuously determines and quantifies the share of glued material in the material flow APOS' online spectroscopy technology. With this it is possible to adapt the material mix during the production process. With a continuous monitoring, the gluing can be optimised as well, an over- or underdosing can be prevented, costs can be saved and products optimised.

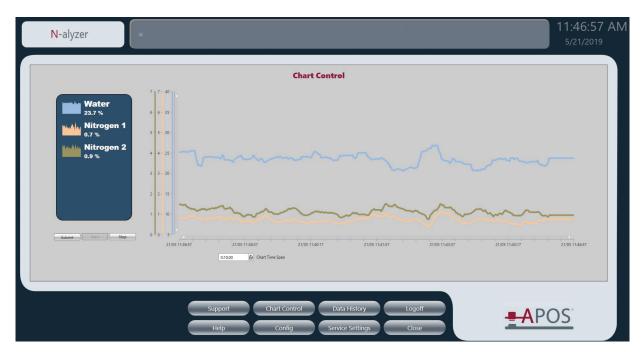


Figure: Screenshot visualization measuring nitrogen (N-alyzer)

Urea and resin both contain nitrogen and the N-alyzer can show this valuable information. Based on the current nitrogen amount of the unglued material, the share of recycling material (material which already contains resin) is captured. The material can be analysed both before and after the dryer, which allows an optimisation of material feeds and recycling shares. The share of glued material influences the emissions from the dryer, so e.g. the addition of urea can be adapted.

Also, recycling material has different material properties compared to fresh wood material, which have an influence on the amount of glue needed. Aged material has an inactive surface (hydrophobic), which must be considered for a wetting with resin. The determination of nitrogen gives information about the share of recycling wood and hence allows for an improved process management.

APOS' product focus are systems for quality management / bone-dry billing of wood and process applications for the wood industry, both, material and thermal use. All systems are multi parameter capable, i.e. besides determining the Nitrogen amount APOS can determine the water content or other parameters of the material simultaneously.

## **N**-alyzer



Specification Measurement System		
Wavelength used	950nm – 1690nm	
Measurement interval	> 60 raw values/minute	
Number of probes	1 – 2	
Repeat accuracy	< 0.5%-standard deviation points	

Central Spectrometer Unit (CSU)		
Form Factor	400mm x 500mm x 250mm (WxHxD)	
Weight	25kg // 55.1lb	
Electrical protection class	IP 54	
Ambient temperature	Heated, cooled -20°C to 50°C // -4°F to 122 °F	
Relative air humidity	Max. 80%, non condensing	
Interfaces	Ethernet, OPC, 4 -20mA	
Power Supply	230V AC	

Contact Probe	
Form Factor	Diameter 165mm // 6.5in, Length 178mm // 7in
Weight	4.5kg // 9.9lb
Measurement window	sapphire glass, 17.25mm // 0.67in diameter
Penetration depth	ca. 17mm
Electrical protection class	IP 65
Ambient temperature	-20 °C to 60°C // -4°F to 140°F
Flange Type	DN50 PN10-16s
Data transfer	RS 485 and fiber optic cable
Light sources	2 x max. 5 W
Expected life time	Approx. 5,000h per bulb, two bulbs installed
Power Supply	24V DC; 400mA

Distance Probe	
Form Factor	164mm x 163mm x 110mm
Weight	3.5 kg
Protection Class	IP 64
Ambient temperature	+ 5°C to + 40°C
Relative air humidity	max 80% not condensing
Light source	20W
Power supply	12 VDC
Distance from material	150 - 400mm
Data transfer	Optical

The EMC compatibility of our systems has been successfully tested according to the relevant criteria and sub-standards of DIN EN 55011 and DIN EN 61326. The detailed requirements can be found in the product documentation or requested from us.

This product is available with **CE** and **EHI**.

