

Determining the resin content on the fiber or chip, adjusting the addition of resin during the process and improving production.

APOS ResinReducer continuously determines the resin amount (quantification of the nitrogen content) on fibres or chips. With this, it is possible to adapt the addition of resin during the process and improve the production.

The continuous monitoring prevents under- or overdosing of resin, saves costs and optimises the mechanical and chemical properties of the finished board.

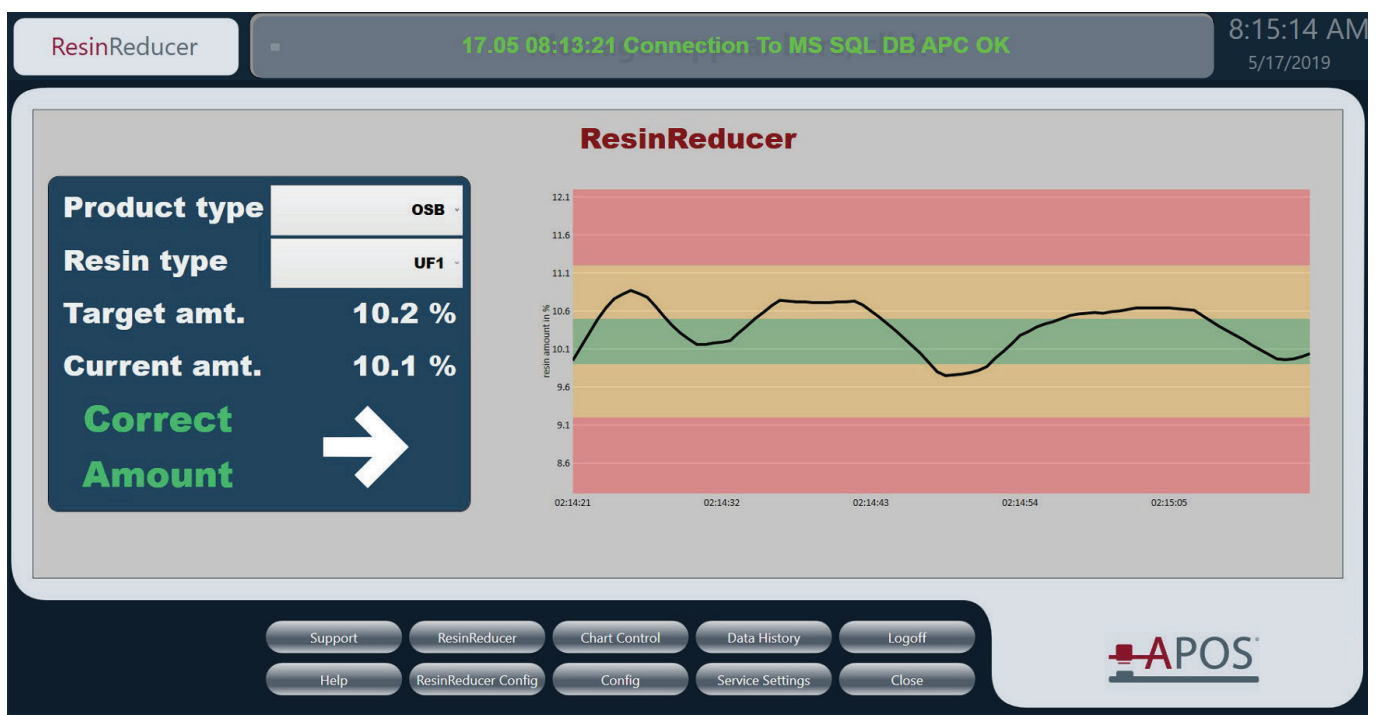


Figure: Screenshot visualization measuring resin content (ResinReducer)

Besides monitoring the current resin amount on the glued fibres or chips, also nitrogen amounts before gluing (e.g. due to urea addition or usage of recycling wood) can be taken into account by a second sensor placed ahead of the gluing station. Product specific material formulas and used resin types can be entered and the desired resin amount can be adjusted on this base.

The user enters the desired product, and the systems shows the guideline values and the current resin amount. The values can be processed to serve an automated or manual adaption.

All APOS systems are multiparameter capable.

## 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 // 0.67 in 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  and .