Siempelkamp's initiative "Intelligent Production" will pay off: **Less raw material required, more profitable production using the Ecoresinator**

➜ By Carmen Lorch and Thomas Steeger

The Ecoresinator is Siempelkamp's innovative response to competitive pressure, discerning consumers and increasing material costs. Since its first launch at LIGNA 2011, many plant owners throughout the world have realized the most convincing advantages of this glue/fibre blending system: significant material savings, low operating costs, technological flexibility.

Ecoresinator – the all-rounder

- up to 15% less glue consumption
- precise metering of the glue mix by an intelligent control
- homogeneous application to the fibres
- optimal modulation of the glue droplet size in regard to the product requirements
- reduced production costs
- test and assembly prior to delivery, therefore enabling the customer to resume production in no time
- wear resistant, as it works in the low-pressure range
- no downtime, since a cleaning automatism is integrated
- low investment costs, as the upstream and downstream equipment do not require modification

Ecoresinator – State-of-the-art glue/fibre blender

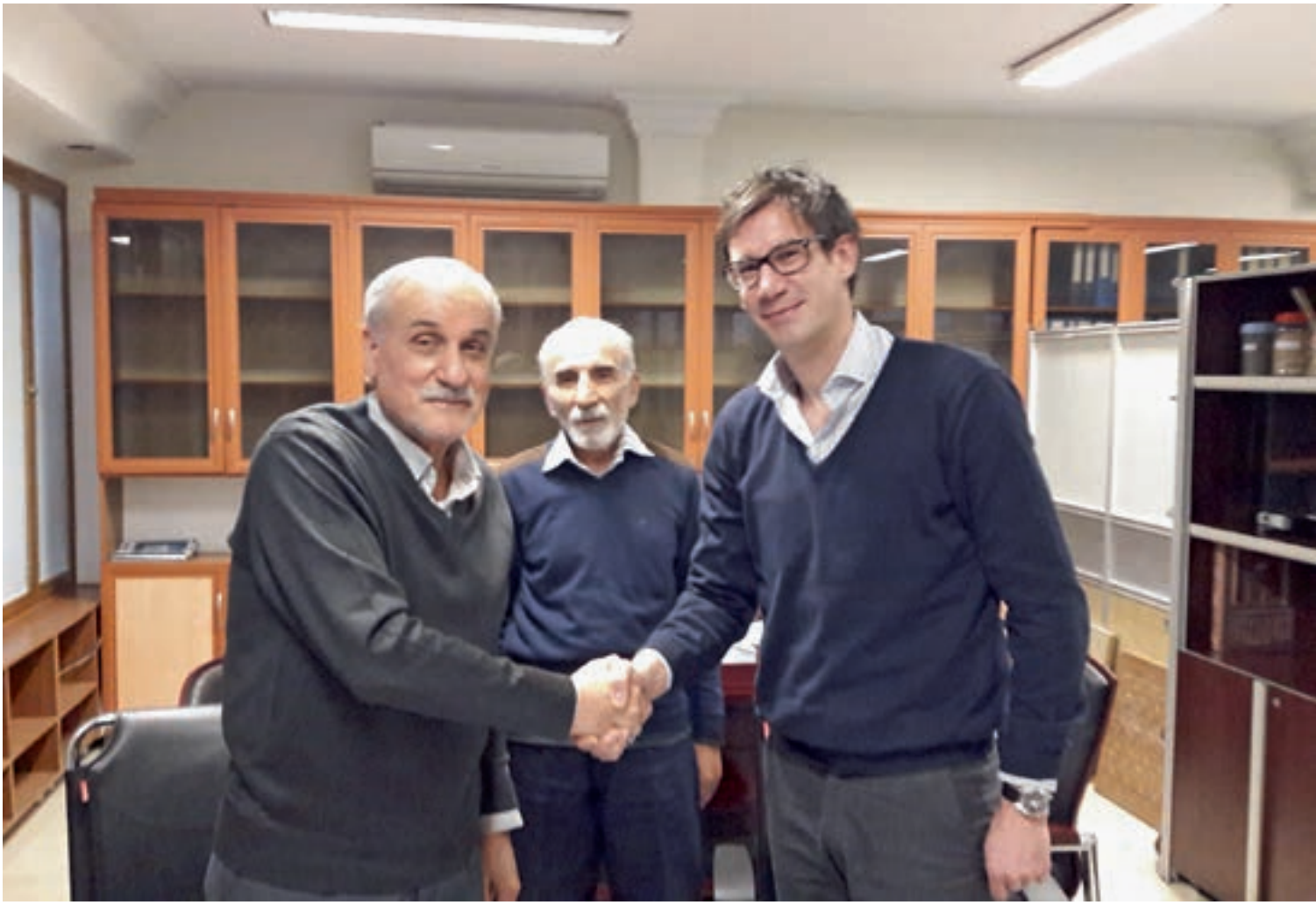
Compared to traditional blowline resination concepts the Ecoresinator requires up to 15% less glue while at the same time improving the board quality. The 2-component nozzles developed by Siempelkamp and Schlick in close collaboration use steam to atomise the glue, which can therefore be optimally applied to the fibres. Specific product requirements are accommodated by varying the steam volume accordingly. This, in turn, leads to considerable glue savings.

Another outstanding feature: any existing plant can be retrofitted with an Ecoresinator within short, since it is supplied as a preassembled glue-injection system including switch cabinet and automation software.

In 2016 alone Siempelkamp successfully marketed six Ecoresinator systems totalling the systems sold since 2011 to 35! What exactly is greeted with enthusiasm by our customers? On the one hand, the glue savings potential and the great technological versatility enabling optimal modulation of the glue droplet size to the product requirements. On the other hand, it is extremely advantageous that all Ecoresinator systems are tried and tested at our workshop

15 %

… glue savings can be achieved using the Ecoresinator, while at the same time improving the board quality.



Bagasse premiere; contract negotiations with Lohe Sabz Jonnob Company (from left to right): Thomas Steeger (Sales Ecoresinator, Siempelkamp Logistics & Service GmbH), Y.A. Mirzakhani (Commerical Director Lohe Sabz Jonoob Company), A. Ebrahimian (Member of Board of Director Lohe Sabz Jonoob Company)

All Ecoresinator systems are tried and tested at our workshop prior to dispatch, thus ensuring that installation and restart of production be made within one production shift only.

prior to dispatch, thus ensuring that installation and restart of production be made within one production shift only. "Minimum downtimes and the resulting fast ROI have been especially convincing to our customers," says Thomas Steeger, Modernisation Sales and Mechanical Retrofits at Siempelkamp Logistics & Service GmbH, at Krefeld.

2017: One premiere, one start-up

The story of success of the intelligent glue-injection system continues in 2017: earlier this year Siempelkamp was awarded a contract for the supply of an Ecoresinator to be used in a production plant employing mainly bagasse as raw material. A long-standing customer from Iran went for this concept. "Using bagasse is a premiere for us, proving once again the technological versatility of our Ecoresinator: it can handle all the raw materials that are suitable for MDF production," says Thomas Steeger.

We are pleased to state that the Ecoresinator has achieved another milestone in March 2017: At Jaguaraiva, Brazil, a facility site operated by the Chilean wood-product manufacturer Arauco, an Ecoresinator was successfully commissioned. This was our second supply to Arauco! The customer was delighted, amongst others, by

Start-up at Arauco, the team: front line from left to right Alex Ferreira Alves (Arauco, plant manager), Rudolf Ohlendorf (Siempelkamp technologist Ecoresinator), Jorge Santos Silva Filho (Arauco, Production Coordinator MDF1, Product-coordinator MDF 1), Riva da Silva Lima (Arauco, MDF-production manager). Rear line from left to right Wellington Vieira (Arauco, production operator), Jaime Piekas (Arauco , Engineering-coordinator), Edemilson do Nascimento (Arauco, process- and quality manager), Roldenir Francisco da Trindade (Arauco, process analyst)

the short installation time / startup within 12 hours resulting in an excellent overall uptime. Max. uptime is guaranteed by intelligent flushing sequences and cleaning intervals. Thanks to their positive experience Arauco will instal another – this will be the third – Ecoresinator in mid-2017.

Bagasse – a useful by-product

Bagasse are the fibrous residues from sugar cane pressing for sugar production . It is a so-called by-product or joint product. Bagasse is to be found in all sugar-producing countries e.g. Brazil, China, Thailand. The material is taking on an important role, since re-cycling and resource efficiency have come into the focus of many industries: bagasse has been turning from waste used as fuel for production facilities into a sustainable raw material.