

# FOCUS ON RESINS: A FAST-CHANGING MARKET



*Few areas of the industry are changing as rapidly as the resins and additives that hold veneers and wood particles together. Technology has to keep up with legislation. Emission requirements are becoming ever more stringent. In this special Focus on Resins, we examine new technology and well-established companies in the sector. First we look at NTL Chemical Consulting, which has more than 30 years experience in developing resins for the industry*

**N**ikos Pargianas, founder and technical director of NTL Chemical Consulting says it is a demanding and fast-changing market. "If there is no continuous upgrading and improvement of resin technologies at customers' plants, the existing technologies will become obsolete after some time, the clients will not be able to fulfill market demands, and this is going to result in significant costs and losses to customers," he says. "That is why panel makers need not just a resin supplier, but a consultant and partner in resin technology and advice. If a company wishes to have successful results and maximum financial benefits, a close collaboration with an experienced consulting company, like NTL, is a strong asset."

So NTL provides formaldehyde-based resin technologies and technical support for the wood based panel industry. Licensing resin technology, customer training and on-site technical application support offer tailor-made solutions that meet the most stringent European, American and Japanese Standards, says the company; the performance of any combination of the two class groups of boards: V20, V313, V100; Formaldehyde Class: E2, E1, ½ E1, CARB-II, E-0 (F\*\*\*\*) and Super E-0 (F\*\*\*\*\*) can be met in the most cost-efficient way. NTL says it also provides, through its international partner network, complete engineering services, including tailor-made design and procurement, for the construction and operation of turnkey resin plants of different sizes.

"We have developed innovative and cost-effective formaldehyde based resin technology systems which increase board production output, reduce glue dosage and – most vitally – take formaldehyde emissions from wood panels down to the level of natural, untreated, timber," says Mr Pargianas. Couple these with quick, flexible, responsive and comprehensive technical services and support and perhaps it is no wonder that the NTL can claim that its wood



*Gel permeation chromatography*

panel clients achieve significant overall benefits and cost savings.

Ever-changing technology, as we have said, is everything. One of NTL's latest developments is a three-part resin system; it is this which it says can reduce formaldehyde emission levels to those of natural wood. "The system consists of a low-emission resin, a scavenger and a cross-linker and works hand-in-hand with the base resin," says Mr Pargianas. "It is suitable to apply to any particleboard and MDF line and it can be used with existing plant equipment without adversely affecting board properties. Due to its highly efficient scavenger, which is substituted for part of the base resin, the technology is typically less expensive than one-part resins or scavenger solutions and can achieve those greatly-reduced emission levels at less cost," he says.

The customer today is king and customers are becoming ever more demanding. The inescapable trend is towards panels tailor-made in short runs to customers' exact specifications, not just in size and weight but in finish as well. Here, too, NTL says it is at the head of the game.

"Another recent achievement of NTL is its contribution to the production of coloured MDF boards. With our South Korean customer Foresco MDF we have jointly developed moisture resistant and coloured E0 MDF boards in different textures and thicknesses." For those readers who might

## SUMMARY

- NTL has been in the forefront of resin developments for more than 30 years
- A message that NTL gives its customers is that upgrading resin technology must be relentless in order to survive
- NTL's three-part resin system can reduce formaldehyde emissions to those of natural wood
- The company has developed a system for coloured and moisture resistant MDF boards

wish to see the product at first hand, Foresco MDF will be an exhibitor (Hall 10.2, Stand H-030) at Interzum in Cologne Germany, (16 -19 May, 2017) where it will present several coloured boards and application ideas.

Given the emphasis on changing and forefront technology NTL has of course a modern and fully equipped R&D laboratory. Located at Incubator Thessaloniki Technology Park in Greece, the company says its scientists work continuously on upgrading and developing new resin formulations and providing 'troubleshooting and practical' solutions to meet customers' specific needs. NTL has been actively engaged in technological alliances and research collaboration projects with universities and technical wood engineering Institutes, the better to understand the behaviour and performance of different wood species and to develop the best suited resin technology systems.

"By our definition, an appreciative customer is the mark of a successful company," says NTL. Relying on its resin technology, its knowledge and experience, NTL feels confident it can guarantee clients the performance they require.

NTL Chemical Consulting will be exhibiting at Ligna, in Hannover, Germany, 22-26 May 2017. Visit them at stand F49, Hall 26. ●