



Cleantech Timber Drying

New Timber Drying halves Power Bills

Alent Drying AB deliver control systems, sensors and equipment for timber drying. The Alent system is easily adapted to all kind of drying kilns and the return of money is extremely short because of energy savings, shorter drying time and enhanced quality. It all depends on the new drying technique introduced by Alent: The patented interval drying called Alentpumpen®.

We have more than thirty years experience in timber drying and have built thousands of computer systems for process control. We have several patents in the timber drying field and have introduced important praxis for timber drying, e.g. Pressurized hot water spraying, condensation panels and automatic overhead restraint system with shrinkage measurement. The new invention, The Alent Pump, is the most important technological leap we have ever seen in the timber drying area.

The Alent Pump works by stopping the fan motors in intervals during the drying process. The water movement processes inside the wood are in the short time independent of the climate outside the wood. In fact, the water movement is raised during the stop depending on higher moisture gradient in the wood and because the water diffusion caused by temperature, change direction during the stop and push water towards the surface of the wood. The wood surface is moisturized during the fan stop because of this water flow and the stationary air above the surface. This will also improve the drying and prevent cracks.

The fans are stopped half the drying time and the drying time is shorter. This is proved by more than 7000 drying batches at 14 sawmills in Northern Sweden. Alent Drying has joined the Ligna exhibition to find partners and distribution channels for this new drying technique.

New invention by Alent will be released at Ligna:

Online Softsensor for Wood Moisture Content

Timber drying is one of the most difficult processes to control, depending on thousands of individuals in a batch with a wide range of input data like input moisture content, density and structure of the wood. Researchers and technicians are searching for a method of measuring the moisture content in the whole batch, good enough for controlling the drying and stopping at the required final moisture content.

The Alent Pump opens new opportunities to control the drying process and to measure the wood moisture content.

After several years of research and development, Alent is now ready to present a new solution, the Alent Softsensor for Wood Moisture Content.

The Alent Softsensor presents the estimated mean value of wood moisture content for the whole batch during drying. The confidence region, or the accuracy, seems good enough to end the drying without the need of manual measurements.

Eric Björkman, +46 920 40 70 56

