

# Making a cut that counts

VHT provides innovative peak shaving solution to american sawmills

Sawmills are integral to construction and other industries around the world. And they tend to consume a lot of power. When Canadian sawmill equipment suppliers AMS wanted to cut power peaks in newly upgraded sawmills, they contacted long-time partner Van Halteren Technologies. By pooling know-how and experience from across the organization, VHT developed a unique power management solution with real energy-saving potential for sawmills across the world.

AMS Solutions are Automation Engineering Specialists, providing sawmill equipment throughout Northern America. As with many industries, the high-power performance of cutting-edge sawmill technology can overwhelm already strained power grids, putting local communities at risk of power outages. As tools and

equipment are upgraded in the mills, the need for managing power peaks increases.

## Securing the power grid

AMS Solutions were about to install their advanced Edger Optimizer saw technology in sawmills in southern USA. The AMS Edger Optimizer uses intelligent scanning technology to cut lumber according to exact specifications with minimal spillage. The system requires a lot of energy, and AMS soon realized that the increased power draw could disrupt local power grids. They needed to mitigate power peaks, in a sustainable and cost-efficient way. In search of a solution, AMS contacted VHT Canada. VHT has been partnering with AMS for over ten years. While very familiar with sawmills, AMS hadn't addressed power management issues before. They relayed the question to the Greentech division at VHT in the Netherlands. While the team were



experienced in developing complex power management systems for a wide range of applications, this would be the first project aimed at sawmills. The team brainstormed and investigated possible solutions with the help of earlier projects in the organization. Soon, a promising idea took shape. Using ultracapacitors, VHT tailored a complete power management system, providing efficient peak shaving. The system would enable the mills to maximize the efficiency of their regular power usage, without having to produce their own power. This would stabilize the pressure put on local power grids by the sawmills, securing power supply both for the mills and the surrounding communities.

### A unique solution in demand

Ultracapacitors store electricity in a way that enables rapid supply of power when a peak threatens to overload the grid. When the sawmill's power consumption is below average, the ultracapacitors are charged. By integrating ultracapacitors into a comprehensive

power management system, the sawmills would get access to extra power when needed, in a smart and environmentally sustainable way. The advantages of VHT's ultracapacitor-based solution convinced AMS and their customers, who chose it over the competition. After embracing the innovative power management system from VHT, AMS Solutions has asked for further quotations for similar solutions. Efficient peak shaving comes with serious benefits for sawmills worldwide. It allows them to keep the mill running without the risk of outages. It also reduces the financial costs resulting from high power draws. But equally important, it helps sawmills in limiting their environmental impact. This in turn is crucial for the industry going forward. For example, mills that deliver products to the EU need a verified commitment to sustainable practices. Efficient power management is one way to show this commitment. There is a great opportunity here for sawmills to reduce their carbon footprint, securing their own future.

