

BRINGING THE LUMBER



L&S Electric in Schofield, WI is the Midwest's largest service center for rotating apparatus repair and a leading supplier of integrated systems for the power-generating industry. They are known for their dedicated people, quality products, and above all, their service capability. As a Yaskawa premier industrial distributor and authorized service provider, they were easily able to recognize a need for the Yaskawa U1000 Industrial Matrix Drive for a local machine builder.

CHALLENGE

A proud leader in cutting edge sawmill equipment, Cleereman Industries based in Newald, WI has been in business since 1954. They started out owning and operating a sawmill business and now are a manufacturer of a wide range of sawmill equipment that includes Carriages, Track Frames, and Trim & Grading Lines.

Cleereman recently decided to redesign a rotary log kicker in order to increase its size range, as well as transition its hydraulic system to a fully clean electric system. The challenge was the overall size of the log kicker. The resulting machine inertia makes the 15 cycle per minute rate difficult to achieve. The machine's inertia and cycle per hour requirement would have required a large braking package to dissipate the energy.

SOLUTION

Cleereman turned to L&S Electric for a solution to their challenge.

Initial thoughts of a standard VFD and brake resistor were considered, but L&S representatives recommended a more energy efficient solution. Due to its power regeneration capabilities, a Yaskawa U1000 Industrial Matrix Drive was selected to control the 30HP electric drive system.

This solution not only allowed Cleereman to get away from the maintenance time and costs that are associated with hydraulic systems, but also provided them a cleaner, more energy efficient solution in a smaller package.

RESULTS

Cleereman is now able to smoothly control the very high inertia log kicker. Whether motoring or regenerating, the U1000 Industrial Matrix Drive provides Cleereman with a clean power solution by maintaining ultra low input current harmonics.

In addition, the U1000's inherent regenerative capabilities eliminated the braking resistors that dissipated heat from the deceleration of the load.

Cleereman can now provide a solution that reduces their customers' utility costs. The energy that would have been wasted using resistors is now diverted back onto the grid. Removal of the resistor package also increases machine lifetime and reduces machine maintenance requirements by eliminating another point of potential failure. Lastly, using the U1000 Industrial Matrix Drive eliminates fire safety concerns that come with using resistors in lumber mills to burn off regenerative energy.



Enhance your green initiative with Yaskawa's U1000 Industrial Matrix Drive, the product that goes beyond conventional drives by providing outstanding harmonic performance and full, four-quadrant operation, all in a compact stand-alone drive solution.