# Sawmills Lower Energy Costs, Enhance Productivity, Increase Operator Safety

## **Smart Controls Yield Significant Benefits**

by John N. McMurray, Sales Engineer

Carotron's Sawmill Productivity System offers needed cost savings and operator protection by addressing four key areas:

#### 1. Reducing high peak saw-motor starting torque

Adding a Solid State Starter lowers the initial starting current, bringing down power company demand meter charges and sharply reducing impact loading on belts and gearboxes. Optional Bypass Contactors further increase system efficiency during periods of continuous motor runtime.

### 2. Fast speed reduction of rotating equipment

A DC Injection Brake unit added to your existing AC induction motor quickly slows the saw blade and minimizes the opportunity for injury. Codes in some areas require each machine over a certain horsepower to be equipped with such a device.

### 3. Precision conveyor speed control

Converting a fixed-speed conveyor to a variable speed feed allows an operator to adjust the cutting rate according to variables, such as wood grade, hardness, moisture content, and thickness. With the optional load-sensing Feeder Drive Control, conveyor speed is automatically adjusted to keep the saw motor loaded to a preset limit. This maximizes electrical power factor (and motor efficiency) and machine productivity.

### 4. Guide Fence Position Control

Guide fences are typically set mechanically with lock-bolts or hydraulically with parallel cylinders running up against mechanical stops. Either method is labor-intensive and time consuming. If small changes are required to compensate for blade wear, production downtime is costly.



Scan the QR

code with your

phone or visit

Carotron.com

Carotron, Inc. 3204 Rocky River Rd Heath Springs, SC 29058

Phone: (888) 286-8614 (803) 286-8614 Fax: (800) 286-6063 Email: saleserv@carotron.com Website: http://www.carotron.com Carotron's Precision Guide Fence Position System replaces manual, mechanical, and hydraulic components with high-accuracy servo-controlled linear actuators. An operator enters the desired board width on an easy-to-use touch screen to set the initial cut. On-screen pushbuttons then allow fine tuning the width after the first cut. As the blade wears, compensation can be made in increments and stored in control memory. Actuator-mounted encoders ensure the precision and repeatability of the fence position.

We would welcome the opportunity to look at your application and give you a no-charge Site Survey & Evaluation. **Call Carotron today at:** 1-888-286-8614