

# AE Staley Plant Rebuilds Vibration Monitoring Program and Begins Data Collection in One Week

## RESULTS

- 300 percent productivity gain for machinery inspections and diagnostics
- Database setup reduced from nine man-months to one man-month
- Inspections for 187 critical machines resumed in first week of program
- Weekly data collection time greatly reduced



## APPLICATION

Grain milling and processing machinery

## CUSTOMER

The AE Staley Plant of Tate & Lyle in Lafayette, IN processes more than 200,000 bushels of corn daily to produce sweeteners, starches, ethanol and animal feeds.

## CHALLENGE

Over the past decade, the mill increased corn processing from 140,000 bushels to more than 200,000 bushels per day, while reducing employee headcount by 30%.

When a key maintenance employee gave two weeks notice and left the company, thousands of hours of experience walked out the door. To make matters worse, this was the only staff member with an understanding of the old software needed to access their maintenance records. The maintenance group was resigned to recreating the program with the existing software system.

An inquiry of the original vendor revealed manual entry was required for over a million parameters, points and machines—a three month job for three people.

*“If you want to increase your efficiency, there it is!”*

David Nichols, Predictive Maintenance Technologist

### SOLUTION

Nichols discussed the problem with Emerson and learned how simple and fast database creation and management is with AMS™ Suite: Machinery Health™ Manager software. "To build the route for that much equipment, tune it....I didn't believe it could be that easy."

AMS Machinery Manager was used to configure half the factory's machines in the first week. Routes were being run within 5 days. The capabilities of the CSI 2130 Machinery Health Analyzer allowed all data to be collected by one part-time analyst.

"A great sense of accomplishment" came along with the quick database set up, according to Nichols. "I can get out, run 2 routes, and be back in my office in one hour and 45 minutes....If you want to increase your efficiency, there it is!"

Nichols says that Emerson's equipment and software is "so much easier" to use, and the readings are "lead pipe dead-on." Now he sends a "nice report to the boss, and they post them so everyone can see." Reports can include color photos and integrate multiple technologies, such as oil analysis data, for a more complete picture of machine health.

Tate & Lyle's AE Staley plant is continuing to increase worker productivity, and is now adding even more capacity.

*"I didn't believe it could be that easy."*

**David Nichols, Predictive Maintenance Technologist**

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