## Maintenance plan pays off in six months

# Louis Dreyfus biodiesel plant reduces maintenance costs

### Louis Dreyfus Commodities

Louis Dreyfus Agricultural Industries in Claypool, Indiana USA produces 1 million tons of soybean meal for animal feed and 80 million gallons of biodiesel annually. The Claypool facility, one of the largest biodiesel processing plants in the world, includes a soybean processing plant with an integrated biodiesel plant.

Due to increased efficiencies, Louis Dreyfus Commodities has been able to reduce and better plan their third party maintenance. Just in this area alone, the cost reductions have enabled them to capture a return in their investment in just six months.



Since startup, maintenance had been more reactive than proactive or preventive.

Instrumentation and maintenance analysis leads to reduced maintenance costs and a fast return on investment.

#### The results

- Annual maintenance expenses significantly reduced
- Improved plant efficiency by changing reactive maintenance activities to proactive
- Developed Predictive/Preventive maintenance plan
- Established inventory of spare parts for critical instruments

**The challenge** The plant manager wanted insight of maintenance activities for budgeting reasons:

- Resources were not available nor time to set up effective controls maintenance program
- Process efficiency suffered from instrument's reactive maintenance

Our solution Endress+Hauser performed an Installed Base Analysis which surveyed the plant, analyzed the situation and made recommendations.

Endress+Hauser then developed a maintenance plan, set up a web-based asset information system, trained the customer's personnel and provided all the resources needed to carry out the plan.





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#### Continuous improvement and financial benefits

Annual maintenance expenses have been reduced significantly since the program's implementation. The plant manager wanted to have insight into maintenance needs for budgeting reasons, but the plant did not have the resources or the time to set up an effective maintenance plan. Endress+Hauser had the expertise to do so. The plant's maintenance did not have a complete view of all instrumentation information, but the analysis identified 507 instruments with important related information.

#### Process efficiency, minimized downtime

Previously, when an instrument had to be taken out of service for reactive maintenance, uptime was reduced. The resulting maintenance plan helped the customer to anticipate on maintenance and better monitor instruments of critical importance. The plan resulted in scheduled maintenance with improved budget costs.

#### The essential steps of the project

#### 1. Collecting data in the plant

Endress+Hauser performed an on-site inventory assessment with visual inspection of all installed instrumentation(all manufacturers). Using AssetXpert, an industrial handheld tool, Endress+Hauser analysed 507 unique instruments and collected additional relevant maintenance information.

### 2.Compiling information and defining critical instruments

All of the collected device information, along with the relevant maintenance information was added into our online asset information system. Endress+Hauser worked with the site manager to assign a level of importance for each instrument in the process.

#### 3. Creating maintenance plan

Endress+Hauser created an effective maintenance plan, explained the results of the analysis and maintenance plan, and handed over the online asset information system, pre-populated with the installed base asset information.

#### 4. Providing training

Endress+Hauser trained the customer on the online asset information system to ensure the upkeep and effective usage of the installed base information.

Since criticality levels were established, the customer knew which parts needed to be inventoried to decrease plant downtime.

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