

PLATTE VALLEY FAST FACTS

Company: Platte Valley Fuel Ethanol, LLC Location: Central City, NE Capacity: 47 million gallons/year **Post Expansion Capacity:** 96 million gallons/year **Owned by:** US BioEnergy **Designed by:** ICM Inc. Fagan Engineering, LLC & Fagan, Inc. **Average Downtime:** Less than 2 hrs./month **Total Shutdowns due to Equipment Failure:** Zero **Plant Manager:** Dwayne Braun Maintenance Manager: **Bob** Crockett **CMMS** Coordinator: Kenny Meyer **Production Start Date:** May 5, 2004



Ethanol, LLC.

Platte Valley Fuel Ethanol, LLC began operations on May 5, 2004. The Plant was designed and built by ICM, Inc., Fagan Engineering LLC, and Fagan Inc. Platte Valley employs 36 full-time associates and produces over 47 million gallons of ethanol per year. Currently Platte Valley is in the process of expanding their plant and hopes to be doubled in capacity by early 2007.

Client Focus

Platte Valley Fuel Ethanol, LLC

Reducing Downtime to Maximize Production



Platte Valley is able to keep their 47 million gallon plant producing around the clock by performing maintenance, work order tracking, scheduling and inventory management with very little downtime and zero shutdowns due to equipment failure. All equipment used to produce ethanol at Platte Valley is maintained by their six-person in-house maintenance crew, with the help of computerized maintenance management software (CMMS). Platte Valley chose MAPCON, designed and distributed by Mapcon Technologies, Inc., for their CMMS because of its economical price-point, system flexibility and the ability of MAPCON to interface with their accounting software.

Platte Valley is able to track preventative maintenance using their CMMS, instead of having to rely on the "memory" of their staff to make certain that tasks happen when they need to and in the same manner each and every time. They now have a system that will tell them when and how they need to complete scheduled maintenance tasks. They are also able to attach safety procedures to their PMs so their employees always know the safest way to accomplish their tasks. Because the Platte Valley maintenance and production teams are conscientious of their equipment and maintain it regularly, they have never had a total shutdown due to equipment failure.

Work Orders are another important part of the daily routine at Platte Valley. Their CMMS Coordinator is able to schedule and manage the time of his whole staff using one program. The staff knows when they walk in the door in the morning that their tasks will be laid out for them. They will know the tasks to be done, the parts and tools they will need to complete the tasks and any safety procedures they need to follow. Platte Valley also uses work orders to prepare for equipment availability. If for some reason a piece of equipment is not needed in production, they have a "bucket" of work orders that can be easily worked into the schedule. These work orders contain tasks that can only be done while the equipment is not in use.

"Always do PMs. Never put them off. We develop tomorrow's schedule today, and in doing so it allows us to react to issues that come up quickly without impacting what is already on the schedule." -Kenny Meyer (CMMS Coordinator, Platte Valley)



From Left to right: Bob Crockett (Maintenance Manager), Don Ribbens (Electrical/Instrumentation Tech) Rod Steinke (Maintenance Tech.), Jeff Liss (Electrical/Instrumentation Tech), David Enevoldsen (Maintenance Tech), Dave Lewis (Maintenance Tech) Kenneth Meyer (CMMS Coordinator), Glen Bogatz (Maintence Tech)

COST AND TIME SAVINGS REALIZED

- Less than 2 hrs of downtime per month
- Zero total plant shutdown due to equipment failure
- Plant maintained with 9 hour shifts five days a week with no weekend coverage
- Lack of spare parts in inventory has never caused or extended equipment downtime
- Maintenance department budget is less than 1% of total plant budget

PLATTE VALLEY'S KEYS TO CMMS SUCCESS

- A database with an equipment list that is specific and universally understood within the plant
- A talented and hard-working staff
- Effective system implementation and training for the maintenance team

The scheduling module that is now found standard in MAPCON was originally designed for Platte Valley by Mapcon Technologies, with ideas and suggestions provided by Platte Valley's CMMS Coordinator. Platte Valley is now able to schedule their entire maintenance team for different tasks from one screen, while also viewing the available hours for any given person. MAPCON provides them with the tools to maximize "wrench-time". The Platte Valley maintenance team has a 9 hour shift five days a week with no weekend coverage, so it is important they effectively utilize their available hours.

Closely tracking and maintaining appropriate inventory levels at Platte Valley is essential. A lack of spare parts in inventory has never caused or extended equipment downtime. They do not have a huge inventory but they have a smart one. Platte Valley believes that it is important for their facility to know exactly what they have in inventory and to be proactive in reordering supplies when they are needed. They use MAPCON's automatic reorder system to set up minimum and maximum quantities to ensure inventory is kept at optimum levels.

Platte Valley has a remarkable maintenance department that is dedicated to making Platte Valley the premiere plant in the ethanol industry. They are organized, proactive and committed to keeping the plant running smoothly and effectively. Providing 100% machine availability to produce ethanol is Platte Valley's ultimate goal.

> "Sheer economics of downtime...that's all the information you need. Do you want to replace a pump or do you want to have downtime?" – Bob Crockett (Maintenance Manager, Platte Valley)