

Maintenance Services Overview

Predictive Maintenance and Condition Monitoring increase staff productivity, inventory savings, and production capacity

As ICM has evolved to serve the rapidly advancing ethanol industry, our role as a support provider has expanded as well, and we offer a number of solutions to make running ethanol plants simpler and more profitable.

Peak performance through scheduled maintenance

A sound maintenance system is critical in achieving one of the most important factors in a plant's long-term success—reliable and predictable performance. Because of this, ICM offers a set of tools to help ethanol facilities protect their assets

Ethanol-specific CMMS offers savings upwards of \$200k

The CMMS is a full-featured computerized maintenance management system that incorporates the MAPCON® software package that's been optimized for ethanol facilities. Priced at thousands of dollars less than many ethanol plants pay for a self-installed system, the CMMS offered by ICM is a superior solution. Pre-loaded with much of the data needed to operate a plant, including more than 10,000 spare parts records, 5,100 equipment records, and many other customizations, the CMMS also includes professional installation options. And in most cases, we can get your CMMS up and running in 12 weeks or less. The system is available with varying levels of installation options:

The Financial Advantage of MAPCON® CMMS	
Inventory Savings Estimated annual savings	\$75,000
Increased Maintenance Productivity Estimated annual labor savings	\$37,500
Reduced Material and Contractor Costs Estimated annual savings	\$37,500
Increased Production Capacity Estimated annual profit increase for 50 MGY plant	\$144,000
Total Estimated Annual Savings and Cost Avoidance	\$226,500

Installation includes a full year of support by ICM's professional Plant Asset Preservation Team. And after your first year, you have the option of retaining that same level of expert assistance by enrolling in our ongoing support program.

Enhancements to MAPCON® system

Make your most useful maintenance tool even more powerful with:

- MAPCON® accounting interface
- PDA and bar coding software, hardware, and supplies
- Basic and Advanced user training
- Annual support contract

MAPCON



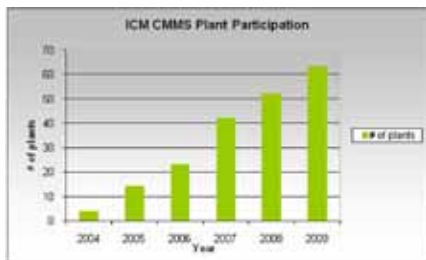


Contact us for pricing!

Our professional customer service representatives are available to demonstrate how our Plant Asset Preservation services can positively impact your facility.

Learn more about CMMS, MAPCON®, or the 30-plus other products and services ICM offers to meet your plant's needs! Call our Customer Service department today.

877.456.8588



Nearly two-thirds of the ethanol plants across North America trust the MAPCON® CMMS offered by ICM to help manage their maintenance requirements.



Predictive Maintenance avoids problems before they happen

ICM offers predictive maintenance/condition monitoring solutions that utilizes the latest technology, including:

- Vibration analysis and fan balancing
- Infrared heat-detection imaging inspections, including mechanical IR, structural IR, and electrical IR
- Mechanical integrity inspections (Should be performed every 5 years to meet the requirements of OSHA Standards 29 CFR 1910.119(j) for Process Safety Management)
- Leak Detection and Repair (LDAR) kit

More solutions designed to simplify plant maintenance

In addition to CMMS and Predictive Maintenance solutions, ICM offers other services designed to help your plant's maintenance staff manage their obligations in a time-efficient and cost-effective manner. Ask us about:

- Comprehensive Energy Audit
- Medium- and high-voltage electrical maintenance, including switch gear inspections and circuit breaker testing
- DCS service and support contract
- Arc flash safety compliance
- Process Safety Management, including MOC compliance such as updating redlines, P&IDs and SOPs; Process Hazard Analysis (PHA)
- Pre-startup Safety Reviews
- Lockout/Tagout Profile Book
- Site Security Plan
- Ethanol Environmental Compliance Software

Maintenance support from ICM

It's extremely important to ICM to collaborate with our customers as we explore options to enhance productivity and profitability. Through the partnerships we've developed, we have discovered some opportunities to help enhance plant operations even further, including:

- Maintenance organization audit
- Equipment and pipe labeling package
- Recommended spare parts package
- Extensive spare and replacement parts inventory
- Deeply discounted inventory shelving
- Emergency and scheduled shutdown support