

PCMS provides quality solutions to industry

CONAM



PCMS

CONAM Inspection

The goal at CONAM Inspection is to be the first choice when selecting a testing company to satisfy your quality needs, and due to its wide range of services, technological advances and expertise, CONAM is accomplishing that goal.

For more than 30 years, CONAM has provided comprehensive quality control services to a broad range of industries from the petrochemical and refining industries to inspection of the Liberty Bell. CONAM's extensive capabilities allow a myriad of industries to use its services as a sole source for quality control needs, which eliminates the expense of multiple vendors. CONAM integrates innovative new technologies with conventional testing methods to assure the integrity of industrial materials and components as cost-effectively as possible. This innovative attitude is what CONAM calls "the quality solution."

Among its many offerings to industry — including its materials analysis group (MAG), which provides state-of-the-art metallurgical and chemical analysis, and its affiliate CTC Analytical Services, which is the recognized industry leader in lubricant and fluids analysis — CONAM's nondestructive testing (NDT) and inspection group provides a complete range of inspection, training and quality assurance (QA)/quality control (QC) services, including the creation and implementation of the plant condition management system (PCMS).

PCMS is the most comprehensive software program developed specifically for the industrial process industry. PCMS:

- Provides compliance with recognized codes and engineering practices. PCMS organizes and manages vital data for compliance with process-safety-management regulations internationally.
- Improves plant reliability

and cuts costs. PCMS is an intelligent information-processing system with patented technology that helps identify what to inspect and when, thereby reducing turnaround work scopes and increasing run time.

- Offers Windows® client-server-based software you can network. The program manages all facets of mechanical-integrity data and reporting, and facilitates easy exchange of data with other programs.

- Users group drives evolution. Asset integrity is totally serviced because the large user group provides the direction for all software development.

- Facilitates scheduling. The master scheduler provides a centralized platform to evaluate and set all inspection schedules.

Jim Redmon, division manager of PCMS, joined the CONAM team in 1995 to lead development of PCMS to its current state. Redmon helped to expand CONAM's services to include implementation of PCMS.

"Not only do we provide this technologically advanced software," Redmon said, "but we also provide implementation — qualified personnel on site, which provides expertise that will save any company money. PCMS ensures the mechanical integrity of equipment so that companies can operate equipment longer. This program is a valuable tool for turnarounds because the collected data pinpoints exact equipment repair and replacement needs. It's a complete package."

Case study: Valero Refinery, Texas City, Texas

As part of Valero Energy Corp.'s commitment to continuous improvement, Valero has initiated a vigorous restructure of its Thickness Management Systems (TMS) data. This restructure is designed to improve the corrosion rate calculations to more precise locations. Critical service piping is determined by a service-contained classification process. The more corrosive/erosive the service, the more monitoring locations and fewer months between intervals. This allows the engineering and inspection department to focus on more critical systems with a higher potential for failure. The restructure also allows Valero to link its Thickness Management Software (PCMS) to its Systems Applications and Products in Data Processing (SAP), and other engineering and drafting software systems. PCMS provides inspection-due reports, exception reports to flag anomalies and inspection-scheduling reports.

"Although Valero has taken the viewpoint

of SAP being our primary repository for information, we recognize the need for specialized programs," Mark D. Haag, lead systems specialist for Valero, said. "These programs provide information to the user that cannot be found or generated within SAP. In these cases, the secondary program tends to utilize data that is duplicated within SAP, and Valero's biggest concern is that this data matches. The interface between PCMS and SAP enables PCMS equipment details to be synchronized with SAP equipment details. The other half of the interface provides the freedom of creating work requests in PCMS and transporting the data into SAP to create a notification. This allows the inspector to maintain his data in a program with which he is familiar."

With the PAL link (PCMS autocad link), plant inspectors and engineers can instantly display data directly on to their existing inspection drawing. This information window can contain any information field within the PCMS system by the user simply selecting the field he wishes displayed from next inspection date to expected retirement date or even what method of accessibility is required to get to that inspection location.

Other advantages of PCMS include future projections of required replacements, budgeting reports and historical archiving of equipment repairs and replacements. This effort, headed by CONAM Inspection's PCMS group with project management and 12 full-time dedicated inspectors, resources the implementation and compiling of all necessary data both from the office and field sources.

"Equipment has nominal thickness when new," August Riemer, site project manager at the Valero Refinery in Texas City, Texas, explained. "We monitor equipment to prevent catastrophic releases of hazardous chemicals, flammable chemicals and petroleum. We also monitor failures to determine revenue losses and monitor erosion and corrosion to isolate problem areas before they fail. PCMS, because of its stored data, lets us know when and what to inspect. It flags anomalies, which saves inspection time and reduces costs."

The Valero Refinery recently won an award for Outstanding Safety Performance and Initiative from the OSHA Voluntary Protection Program (VPP), making the refinery an "OSHA Star site."

"On the inspection side, the OSHA representative said that Valero was putting together a premier system that facilities nationwide will model after, due to Valero's vision and PCMS' implementation," Riemer said.

"PCMS has been a valuable tool for us and was instrumental in helping us win the VPP award," Hollis Wood, chief inspector for Valero at Texas City, said. "Through PCMS,



CONAM's PCMS group pinpoints erosion and corrosion with the help of the program.

we have been able to get a handle on our corrosion rates, and we've been able to better plan our turnarounds. PCMS allows us to better forecast our corrosion and inspection needs, to better classify our pipes and has enabled us to track valve repairs and recommended inspection frequencies. We can now spend more time on our high-priority hydrocarbons. I am very happy with the PCMS crew here!"

Case study: Sunoco Refinery, Marcus Hook, Pa.

The Sunoco Refinery also utilizes PCMS and the CONAM support group. Joe

DiCarlantonio is the piping program inspector for Sunoco and has used PCMS not only at Sunoco but also at the TOSCO Refinery in Trainer, Penn.

"This program is a one-stop inspection tool," DiCarlantonio said. "It takes care of the thickness data for piping and vessels, safety valve servicing and visual inspection of vessels. I've done the implementation myself running the program with the help of CONAM's strong program support. They are willing to go out of their way to help with technical support and implementation when I need to convert data. Because of this program, we are now in one program which does everything. It's all in one place. The program, from a user standpoint, will get you most of the way, and the great support from CONAM's PCMS group takes you the rest of the way."

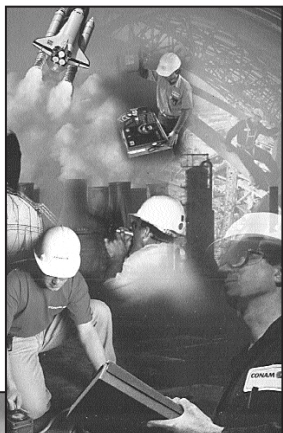
Continuing to evolve

PCMS consists of a user-driven design which continues to advance and evolve to serve the needs of industry. An annual user-group conference allows users to gather to discuss ideas and the ways in which this technology can be further utilized. Users define enhancements, and the PCMS group modifies and tailors improvements to fit the needs of a particular facility or industry in general. The program is constantly updating and improving on its own technology. PCMS is just one more reason why CONAM is industry's first choice in nondestructive testing and inspection.

For more information on PCMS or any of CONAM's other industrial services, please contact Mary Feher at (630) 681-0008 or visit www.conaminsp.com.

CONAM's proactive inspection and reliability system

- PCMS
- Thickness Management Module
- Inspect2 Module
- Safety Relief Valve Inspection Module
- Complete Mechanical Integrity Analysis and Record System



CONAM professionals implement the PCMS program.

