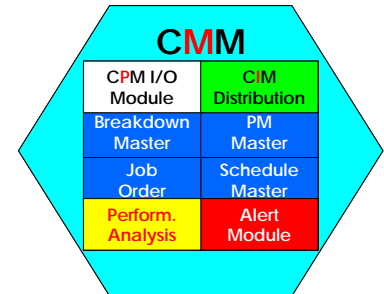




Our Solutions

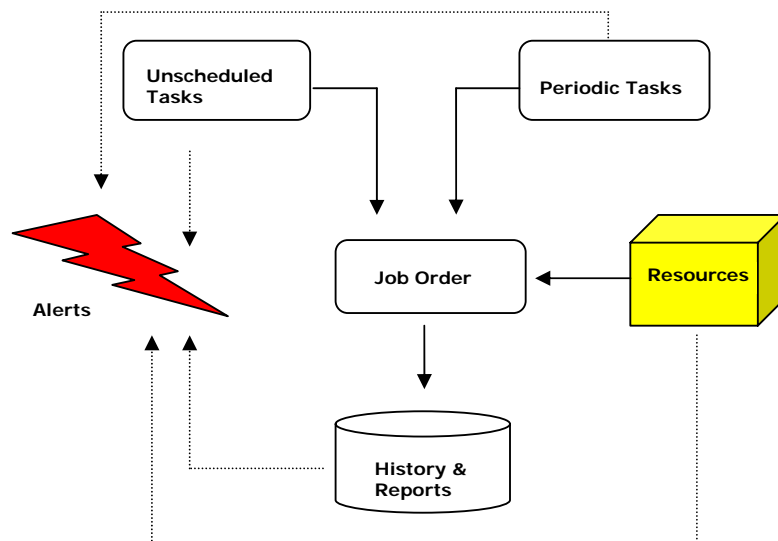
The ever competitive business landscape has driven the growth and use of more advanced machinery and processes in manufacturing environments. With increasingly complex and costly machinery implementations, firms now face the challenge of balancing machinery performance and reliability versus cost. We have developed the **Chronos Maintenance Manager (CMM)** that addresses this challenge and is coupled with ease-of-use and rapid deployment.



The **CMM** is designed to function as a full-featured standalone system but also plugs in seamlessly into the integrated manufacturing system of **Chronos e-Manufacturing Suites**. With **CIM Distribution Modules** plugged in, users able to control and track all spare parts usage and inventory status effectively. The **CPM I/O Module** captures raw I/O signals from machines in real time basis for process control purposes. In addition, **CMM** fulfils all routine and unscheduled maintenance management needs and features a highly effective alert function for mission-critical machinery and equipment in real time basis.

Process Flow

CMM is composed of five integrated modules to perform specific maintenance operations.



The core functionalities of **CMM** are depicted in the diagram above.

1. Equipment information is combined with periodic or unscheduled tasks that automatically trigger job orders. Job orders can be triggered from dates, meter readings, process or equipment variables.
2. Job orders are generated complete with work plans and resource requirements. Once generated, the job order details the work to be completed for a particular task.

3. When the work is completed, the electronic job order is edited to reflect the actual work that was done and the resources used.
4. The job order is then closed and the information becomes part of the equipment's permanent service history.
5. With an accumulation of data in the history, report database, and captured from machine directly, an alert system (via messaging, SMS or email) can be configured to closely monitor mission-critical equipment & machine. The data will also serve to provide a basis for executing iterative improvements to the entire maintenance process.

The Benefits

A successful implementation of a **CMM** will yield the following benefits:

- ✓ Optimal balance of equipment & machinery maintenance (not too much, not too little)
- ✓ Reduced unscheduled equipment & machine downtime
- ✓ Increased equipment & machine reliability and longevity
- ✓ Balanced investment in parts inventory
- ✓ More consistent compliance with regulatory or quality standards
- ✓ Improved reporting and management support
- ✓ Improved asset management
- ✓ Improved safety
- ✓ Improved quality
- ✓ Reduced overall maintenance costs



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