

Maintenance 302

Work order generation and planning

- Overview
- Interacting with CMMS
- Analyzing the problem
- Accessing documentation

Overview

My team spends as much time on paperwork and planning as they do in the field. How can PlantWeb help?

In a traditional maintenance environment, work planning is a labor-intensive, time-consuming process. Even in plants with a computerized maintenance management system (CMMS), information is often recorded on paper and then manually entered in the CMMS. Work orders based on incomplete information about a problem, as well as difficulty accessing paper-based maintenance documentation, can result in repeated trips to resolve the same problem.

PlantWeb architecture with AMS Suite: Intelligent Device Manager and AMS Suite: Machinery Health Manager software can automate and simplify work order generation and planning, providing information maintenance technicians need to do the job right the first time.

This course explains how.

Hint: As you go through the topics in this course, watch for answers to these questions:

- *How does PlantWeb simplify work order handling?*
- *What kinds of problem-solving applications are supported?*
- *How is work preparation streamlined?*

Interacting with CMMS

One way to reduce time and errors in generating work orders is to eliminate the need to manually enter information into a Computerized Maintenance Management System (CMMS).

For field devices, AMS Device Manager can initiate a transaction with a CMMS such as SAP or MAXIMO. AMS Machinery Manager can do the same for mechanical equipment.

Sending diagnostic results, including the type of condition detected, timestamp, plant tag, device configuration, and other information directly to the CMMS eliminates most of the routine data entry that can take up to 50% of typical maintenance time.

Information flows both directions. For example, the CMMS can also notify AMS Device Manager that a maintenance work order has been generated, putting work order, diagnostic, and troubleshooting information at the fingertips of maintenance personnel. And because AMS Device Manager now "knows" that a work order has been issued for the equipment, it won't generate additional work orders for the same problem if more alerts occur.

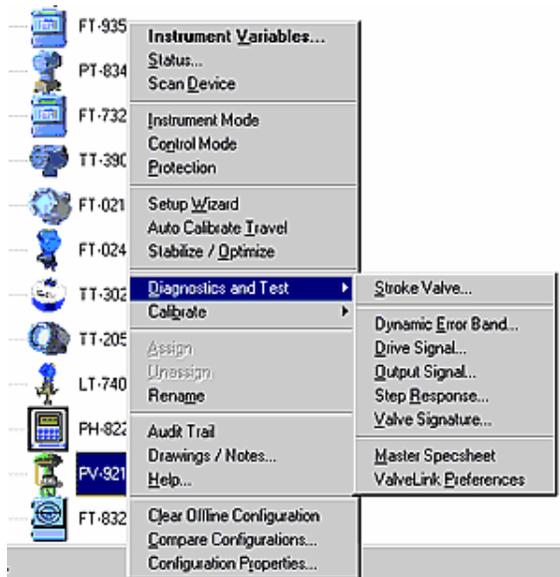
Analyzing the problem

Without a complete understanding of the problem, technicians don't know how to solve it before going into the field. They may take the wrong tools or documentation, or even have to remove the equipment from the process and take it to the maintenance shop to identify the problem.

The result: repeated trips to the field, increasing the time and cost to get the equipment back on line.

PlantWeb's advanced diagnostics and AMS Device Manager SNAP-ON™ applications can often help pinpoint the problem so your team can fix it right the first time. SNAP-ON applications are available for valve diagnostics, calibration tools, root-cause diagnostics for both equipment and process loops, and plugged line detection.

For example, the SNAP-ON application for valve diagnostics, called ValveLink, lets you run advanced diagnostics such as valve signature, dynamic error band, drive signal, output signal, or step response. ValveLink analyzes the data collected from the tests and displays the results so you can plan repair work more efficiently.



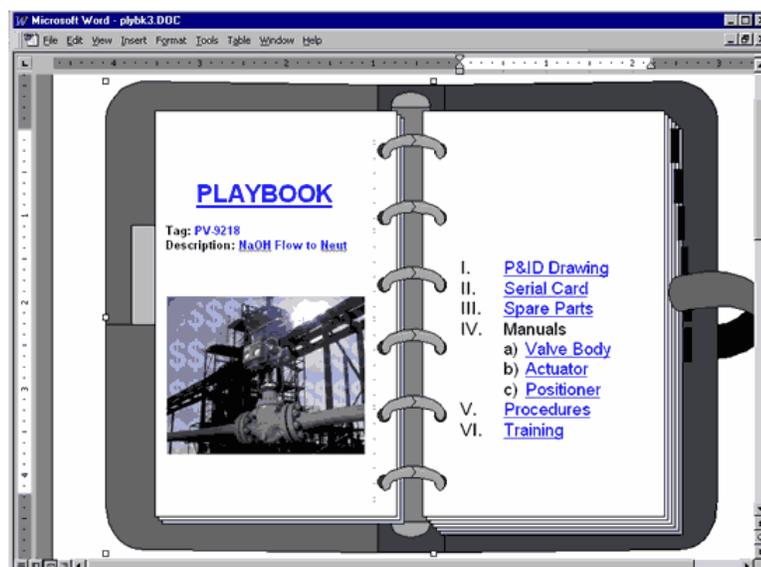
PlantWeb diagnostics and AMS Machinery Manager software provide similar benefits for mechanical equipment. A collection of spectrum analysis capabilities, self-diagnostics, and monitoring graphics can lead even a novice user to a reliable diagnosis.

Accessing documentation

Solving the problem frequently requires access to additional information about the equipment and appropriate maintenance or repair procedures.

In a traditional, paper-based maintenance environment, that means digging through drawers and cabinets for drawings and documentation that may not have been filed properly the last time they were used.

The AMS Device Manager drawings and notes capability makes it easy to find needed information. Drawings and notes, plant drawings, BOM's, maintenance procedures, and other user-defined information can all be stored and accessed online.



Combined with good problem analysis, this easy information access helps maintenance personnel plan their work more efficiently — and resolve more problems on the first trip to the field.