



SPECIFICATIONS:

Hardware & Software Requirements

- Client Computers: Pentium 200+ MHz with 128 Mb of RAM, XGA resolution (1024 X 768 minimum); sound card required for video and simulations
- Operating System: Windows NT, ME, 2000 or XP

Licenses Available

- Department, Site and Enterprise licenses are available.
- The software can be deployed initially in one department, or business unit, and easily expanded to others over time.

Warranty Support

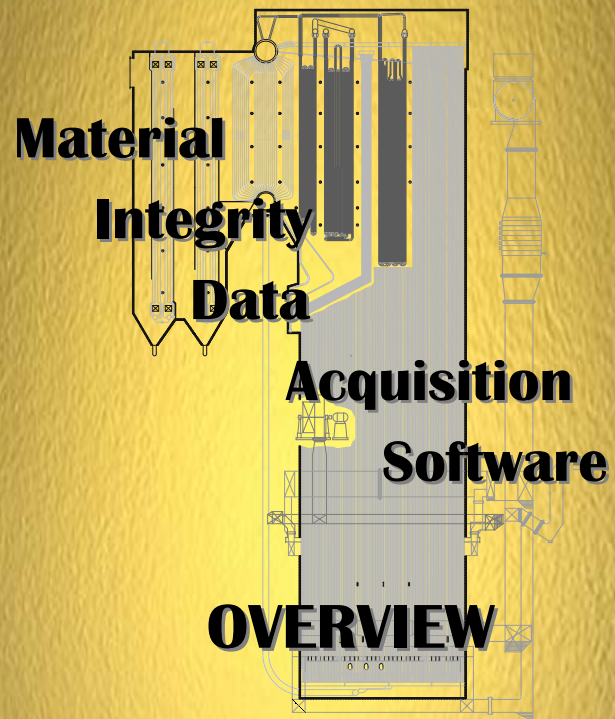
- Warranted to work as specified for one year. Warranty does not cover problems caused by user.
- Upgrades and phone support free for one year.
- Ongoing support and upgrades following year #1 are available for a nominal annual fee.

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MIDAS



MIDAS® Overview

Computerized document and data management system providing one-source access to critical information on industrial equipment, design specifications, operating condition and maintenance history.

MIDAS® makes it easy to comply with legal requirements, inspection planning and records maintenance.

MIDAS® stores all your design, manufacturer's data, and pertinent maintenance records in one accessible place, allowing users to retrieve and print needed information at any time from any networked computer.

You can use MIDAS® to store data for equipment such as tanks, pressure vessels, safety valves, heat exchangers, deaerators, fans and boilers. MIDAS® can also be used to document records relating to equipment maintenance; including test data and inspection reports.

MIDAS® is more than just a repository for information. MIDAS® also enables you to analyze the data it manages, perform ASME and API calculations and examine trends that can help you make better maintenance decisions. Immediate justifications for MIDAS® can help you meet Tank Cluster regulations, save you money by assisting you in optimizing NDE test area protocols, reduce audit preparation time and improve overall outage planning efforts.

MIDAS® Organization

MIDAS® organizes information first by department then by type of equipment. Up to nine (9) departments are available. Current equipment types include boilers, fans, pressure vessels, safety valves, tanks and heat exchangers.



MIDAS® Benefit Analysis #2

BACKGROUND: Companies continually attempt to review and optimize annual recovery boiler NDE requirements focused on cost reduction and shortening outage duration,

Therefore, the use of condition-based inspection and data analysis tools becomes critical.

SITUATION: If cost reductions can be achieved by proper condition-based inspection analysis with no measurable or predictable increase in risk, sound engineering judgment and experience can be utilized to optimize testing in areas with minimal wastage where no significant material loss has occurred. This is conditional however requiring confirmation the operational factors affecting wastage have and are expected to remain consistent.

MIDAS® Meets Your Analysis Needs!

MIDAS® Benefit Analysis #3

BACKGROUND: Cluster Regulations regarding required tank testing and record keeping is a burdensome task without a system to easily store, monitor, analyze and retrieve both the information and data.

When regulations require tracking of key information, test data and inspections, management of that information is critical.

SITUATION: Ask yourself what resources are required to try to stay on top of keeping information accurate and timely. Now, add the burden of managing inspection dates to meet regulations and deadlines with the appropriate flags to notify you of upcoming priorities so that you can schedule accordingly.

It certainly can be done manually, or in a spreadsheet, but:

- Is that cost effective?
- Is that efficient?
- Does that minimize risk?

MIDAS® Meets Your Informational Needs!

MIDAS® Benefit Analysis #1

BACKGROUND: When properly staffed, mill departments have the eyes of many looking and planning with a predictive maintenance mindset. As these departments downsize, or regulations require additional monitoring and record keeping, mill personnel must manage critical component information regarding aging assets in a disciplined fashion:

- Knowing where key technical data and inspection information are located, and
- What pieces of that information are essential to future operations

It is absolutely critical.

Failure to have such information readily accessible and statistically accurate/current could result in maintenance planning oversights that could place an entire operation at risk from both a

safe practices perspective
and a
productivity perspective.

SITUATION: Insurers and inspection companies, like PSA, are routinely tasked with assessing the integrity of critical pressure and non-pressurized components:

- Documenting the conditions observed, and
- Identifying what should be done to insure a reasonable reliability and availability as mill hard assets age and deteriorate

Good document management regarding component history is an essential element to the risk management process. It also plays a major role in maximizing the benefits to be derived from recovery boiler audits - where the condition of the recovery boiler structure is closely scrutinized by mill audit team members.

Unscheduled outages or extended outage windows are often the product of missed pieces of historical information that, if uncovered earlier in the process, could have been addressed in a timely and orderly fashion.

Poor document filing and retrieval practices, particularly at mill locations where there has been a significant turnover and/or downsizing in the technical staff, can be a major contributor to operations and maintenance department planning oversights.

MIDAS® Meets Your Critical Needs!

MIDAS® Functionality

Operations, maintenance and planning personnel can all take advantage of this centralized data and information management platform. Key functional capabilities are highlighted below.

MIDAS® will store design and operating specifications, test data and inspection reports for a variety of equipment types; including pressure vessels, boilers, heat exchangers, safety valves, tanks and fans.

MIDAS® also allows you to store associated information such as:

- Photos
- Drawings
- Manufacturer's Forms (U-1, R-1, P-3 etc.)
- Video Clips
- Reports.

Data storage examples:

- NDE
- IRIS
- ACCUSCAN
- OMNISCAN

Data can be:

- Imported from a Panametrics database
- Imported from a Krautkramer database
- Imported from Excel
- Entered Manually

Equipment documentation archives can be set up on a department or mill-wide basis.

Users can retrieve any information in **MIDAS®** from anywhere on your site's computer network. Documents can be viewed on-line or printed out as needed.

Users can have quick access to specific information by filtering numerous criteria from the database while performing a search.

MIDAS® makes it easy to reference specific equipment descriptions, design, operating or manufacturing criteria.

Information

Acquisition

and

Storage

Information

Retrieval

and

Distribution

MIDAS® Functionality

Trainers and administrators can take advantage of the same functions as users, but additionally have permissions to perform a number of design and management tasks:

<p><i>Test Data</i></p> <p><i>and</i></p> <p><i>Inspection</i></p> <p><i>Reports</i></p>	<p>Data and reports can be entered directly into MIDAS® for analysis and comparison to previous results.</p> <p>Information pertaining to new equipment can be easily added or modified.</p> <p>New test data and reports can be imported directly into MIDAS®.</p> <p>Customized summary reports can be generated by MIDAS® with specific statistics to provide a quick overview of test results.</p>
<p><i>Equipment</i></p> <p><i>History</i></p> <p><i>Tracking</i></p>	<p>MIDAS® makes it easy to track history of past evaluations.</p> <p>New supervisors and maintenance personnel can use MIDAS® to quickly review equipment history.</p> <p>Equipment historical records are immediately available for company and/or governmental inspections.</p> <p>Ease of access to historical data and the ability of MIDAS® to perform regression analysis can assist you in optimizing outage planning and NDE testing protocol.</p>
<p><i>Upcoming</i></p> <p><i>Inspection</i></p> <p><i>Notification</i></p>	<p>MIDAS® can track required inspections and issue reminders when an inspection is approaching or overdue.</p> <p>You can easily determine when inspections are scheduled or required by law.</p>

<p><i>Data</i></p> <p><i>Analysis</i></p> <p><i>and</i></p> <p><i>Equipment</i></p> <p><i>Integrity</i></p> <p><i>Calculations</i></p>	<p>MIDAS® allows test data analysis using data sheets, statistics, line graphs, wall maps, data distribution, etc.</p> <p>ASME, API and Temperature/Pressure calculations are built into MIDAS® for performing Minimum Wall Thickness calculations for tanks, tubes, pressure vessels, drums and headers.</p> <p>Trending can be performed as a predictive tool using regression analysis; if three years of data is available for the specific areas monitored.</p> <p>Users can quickly ascertain the condition of large areas by viewing data in color-coded wall maps.</p> <p>Wall Maps:</p> <p>Several types of wall maps can be generated for boilers, pressure vessels and/or tanks with the ability to enlarge areas of the map to view actual data readings within the wall map format.</p> <ul style="list-style-type: none"> • Standard Wall Map • Difference Wall Map • Regression Wall Map <p>The “standard wall map” format shows the elevations and associated readings for a specific test date.</p> <p>The “difference wall map” format shows the variance of data from one test to another test; useful in comparing year-to-year testing.</p> <p>The “regression wall map” format allows you to better plan for the future. A slider bar shows future estimated readings based on linear regression of three or more years of data.</p>
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