

## **OPTIMAS™:** **Operational Training and Information Management Applications Software**

**OPTIMAS™** defines training standards for jobs across a department, site, or corporation. It houses information needed to satisfy training and operating requirements and aids managers in keeping that info up-to-date. Set up courses of study for job positions for individuals or groups. **OPTIMAS™** platform encompasses several functional areas.

**Choose OPTIMAS™ if you need to better manage and track training of your mill's personnel.**

### **Reference Resource**

- Uploads reference materials via an easy document loading/editing interface
- Allows organizing material by department with up to four (4) sublevel topic areas
- Convenient bookmark function makes revisiting pages and lessons easier

### **Training Resource**

- Access training materials in a self-study environment from any networked location
- Launch computer-based lessons, checklists, external lessons/tasks—anything required for training activities
- Insert quizzes in strategic lesson locations to gauge trainees' grasp of material

### **Course Training**

- Enables individuals to identify training assignments and launch materials needed for training completion
- Administers personnel set-up and course requirements
- Provides up-to-the-minute records on training progress; use to plan training activities and foster timely assignment completion
- Tracks quizzes and results so managers can monitor lesson effectiveness

### **Qualification System**

- Enables personnel to complete required job certification assignments from any networked computer
- Displays results and performance tracking

### **Document Manager**

- Locates any procedure stored in **OPTIMAS™** for trainee review
- Manages the Change, Revision, and Publication processes
- Stores the most recent approved revision of any procedure

### **User and Administrative Guides**

- Available online for user reference regarding **OPTIMAS™** functions

## **MIDAS™:** **Material Integrity Data Acquisition Software**

Archive your industrial data in **MIDAS™**, an integrated document and data management system that provides one-stop access to critical information regarding equipment, equipment maintenance, operating conditions, and manufacturer specifications. Retrieve such data from any intra-networked computer. Ease your company's compliance with legal requirements, inspection planning, and records maintenance.

**Choose MIDAS™ if you wish to make better maintenance decisions using an intuitive, user-friendly platform.**

### **Information Acquisition and Storage**

- Set up archives on a department or mill-wide basis
- Store design and operating specifications, test data, and inspection reports for tanks, pressure vessels, safety valves, heat exchangers, deaerators, fans, and boilers
- Archive photos, drawings, manufacturer's forms, video clips, and reports

### **Information Retrieval and Distribution**

- Use any of several filtering options for fast access to desired information
- Review documents on-line or print as needed

### **Test Data and Inspection Reports**

- Import data and documents into **MIDAS™** for analysis and comparison to previous results
- Enter new data and reports with ease
- Generate custom summaries using statistics selected to provide a desired results overview

### **Data Analysis and Equipment Integrity Calculations**

- Analyze test data using data sheets, statistics, line graphs, wall maps, and data distribution tools
- Trend future indications via regression analysis
- View and print standard, difference, and regression wall maps
- Calculate ASME, API and temperature/pressure values with built-in tools

### **Equipment History Tracking**

- Review equipment and maintenance histories
- Use regression analysis of historical data to optimize outage planning and NDE inspection protocol
- Readily access equipment records for company and government inspections

### **Upcoming Inspection Notification**

- Track required inspections and issue reminders for upcoming and overdue inspections



**Power  
Specialists  
Assoc., Inc.**

531 Main Street  
Somers, CT 06071-2009

Phone: (860) 763-3241  
Fax (860) 763-3608

## **POWER SYSTEMS CONSULTING SERVICES**

for

- Power and Recovery Boiler Operations
- Utility Boiler Systems
- Cogeneration Facilities
- CFB/BFB Boiler Systems
- Waste Heat Recovery Systems

Check out our new website  
**[www.psaengineering.com](http://www.psaengineering.com)**  
**[info@psaengineering.com](mailto:info@psaengineering.com)**

## **OUTAGE AND PROJECT MANAGEMENT**

PSA's Outage & Project Management group integrates power engineering technology with practical operating experience to offer a unique approach to addressing specific power plant needs. We offer

- Construction Management
- Quality Assurance Supervision
- Pre-Outage Planning Audit
- Outage Facilitation
- Start-up & Shutdown Support
- Component Conceptual Design for
  - Burner Air Systems
  - Flue Gas Support System
  - Water and Steam Circuits
  - Fuel Handling Systems
  - Ion Exchange Systems
  - Burner Retrofits
  - Heat Exchangers
- Zero Discharge Alternatives
- Bid Evaluation and Specification Development

## **WATER SYSTEM AUDITING**

Utilizing a unique water systems data acquisition methodology, PSA Engineers

- Evaluate thermal, chemical, mechanical, operational, safety, and environmental factors that impact upon system efficiency
- Assess the reliability and availability of key system components
- Prioritize areas of concern that may impact upon system performance, reliability, and productivity
- Recommend and assist with specification development for equipment/process upgrades

PSA also specializes in providing individual component diagnostics and total system impact assessment for the following steam and water systems:

Clarifiers and Filters    Condensate Polishers  
Heaters and Deaerators    Process Heat Exchanges  
Reverse Osmosis    Softeners & Demineralizers  
Steam Generators    Surface Condensers

## **COMPREHENSIVE BOILER INSPECTIONS**

PSA Field Engineers evaluate power, recovery, cogeneration and utility boilers and their auxiliary systems. We provide a thorough component integrity assessment to plant personnel, including

- A confirming report, compatible with our MIDAS™ database management software
- Maps and data distribution graphs of tested areas
- Photo documentation (correlated to text)
- Punch list generated on-site for critical items
- Inspection database
- A final report that includes pertinent findings and recommended short- and long-term solutions

## **BOILER SYSTEM PERFORMANCE OPTIMIZATION**

PSA Engineers provide the following boiler and boiler support system engineering services:

- Air System Optimization
- Air Foil Calibration
- Burner System Balancing
- Burner System Optimization
- Tuning for Efficiency and Emissions Reduction

## **NONDESTRUCTIVE TESTING**

We utilize several methods of nondestructive examination, including

- Liquid Penetrant (PT) Testing
- Magnetic Particle (MT) Testing
- Ultrasonic Thickness (UT) Testing
- Remote Field Eddy Current Testing
- Destructive Metallographic Testing Analysis
- Air Flow Measurement
- OmniScan™ / AccuScan™ and IRIS® Immersion Testing
- ASNT TC-1A Certified, In-House ASNT Level III

in aid of Tube Failure Analysis, Deposit Identification and Analysis, Boroscopic Examinations, and metallurgical integrity testing of

Boilers    Composite Tubes    Condensers  
Deaerators    Digesters    Evaporators    Fans  
Lime Kilns    Pressure Piping    Pressure Vessels  
Stage Heaters    Tanks    Welds

## **PRESSURE VESSEL / TANK CONDITION ASSESSMENT**

In compliance with API-653 and API-570 (American Petroleum Institute) and BMP regulations, we can monitor vessel/tank integrity on an ongoing basis. PSA provides

- Initial survey and scope recommendations
- Ultrasonic thickness (UT) profiles
- Magnetic particle (MT) and ultrasonic (UT) weld integrity surveys
- Visual inspection of critical components
- Documentation of findings
- Repair recommendations
- MIDAS™ database development
- Strategic planning for subsequent assessments

## **OPERATIONAL TRAINING**

PSA's Operational Training group integrates power plant operating experience and power engineering technology to address a spectrum of training requirements. We offer

- CBT (Computer-Based) Training via OPTIMAS™
- Instructional Seminars
- Content Development:
  - Generic Courseware
  - Fundamentals
  - Site-Specific Curricula
- Simulations Training
- Needs Analysis and Strategic Planning
- Program Facilitation Services
- Train-the-Trainer Programs
- NDE Certification Programs

## **INSTRUCTIONAL SEMINARS**

PSA offers seminars in the following disciplines:

- Power Plant Basic Technology
- Power & Recovery Boiler Operations
- Turbine/Generator Operations
- Water Systems Management
- Ion Exchange System Technology