

# Ekho for Pulp & Paper

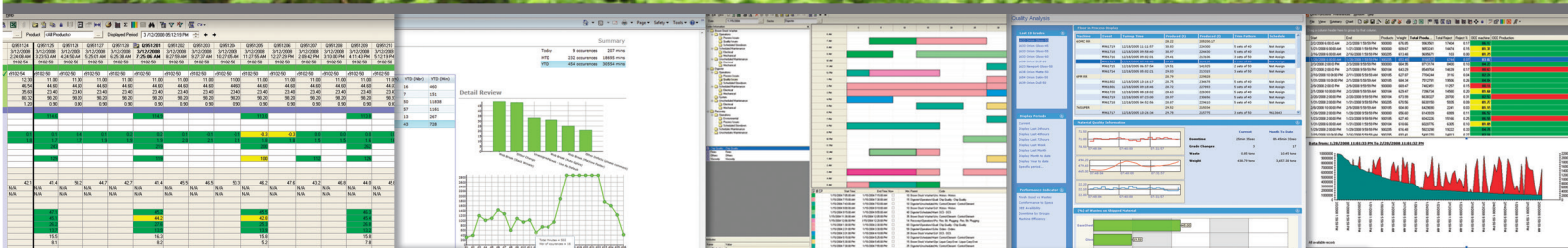
The Performance Management Solution for the Forest Products Industries

▷ Collects data from all assets and related systems  
Historian, SCADA, MES, LIMS, CMMS, ERP, Internet

▷ Provides software functionality to analyze all relevant data and generate operational intelligence for Performance Management initiatives.

▷ Provides user configurable displays, reports and queries to optimize production and maintenance activities, and drive ROI from operations.

- Performance metrics
- OEE, KPI's
- Downtime, RCA
- Alarms & Notifications
- Comparative Analysis
- Microsoft Centric
- Web enabled



## About Ekhosoft

Ekhosoft is the leading provider of Performance Management Solutions for major enterprise customers across North America and Europe. The Ekhosoft solution is called Ekho, and has been successfully installed in a broad range of industries, including Pulp & Paper, Mining & Metals, Oil & Gas, Food & Beverage, Chemicals, Consumer Products and Renewable Energy (Wind, Solar, Hydro and Biofuels).

With over 200 man-years of industry experience working exclusively with Performance Management Solutions, and with offices in Canada, Europe and across the United States, Ekhosoft is uniquely positioned to service your needs.



## Forest Industry customers use Ekho for Pulp & Paper to address:

### Improving Production Efficiency

- Monitor production performance in real time
- Identify sub-optimal operations
- Analyze lost production
- Group, sub group, and sector performance analysis
- Monitor energy usage and costs
- Support alternative energy use strategies

### Improving Asset Availability and Performance

- Monitor asset performance in real time
- Decrease downtime
- Increase mean time between failure
- Decrease time to repair
- Identify abnormal operation before failure
- Triggering alarms and notifications

### Improving Asset and Component Reliability

- Regular Diagnostics
- Root Cause Analysis
- Graphical representation of cause and effect

### Improving Product Quality

- Managing product and test specifications
- Interfacing to lab systems and data historian
- Provide real time measures of quality performance
- Generate quality certificates

### Manage Regulatory Compliance

- Define work processes
- Increase efficiency and effectiveness of resources
- Improved reporting, analysis, communication & knowledge transfer
- Support all OSHA Environment, Health and Safety initiatives

### Dynamic Query and Reporting Capability

- KPI's, OEE
- Focus lists - Statistics by group, sub group or turbine
- Export to Excel or PDF
- Select and plot data from historian
- Replay history and correlate events

## All Ekho Solutions Feature:

▷ Ekho is configurable out-of-the-box, and does not require any customization. Each customer can design and configure a specific solution for their needs.

▷ Ekho's scalability allows each customer to focus resources on current priorities, getting immediate returns, and then extending the solution across multiple assets and performance management targets. Ekho provides each customer with the optimum cost effective solution both now and into the future.

▷ All Ekho solution components are totally integrated.

They provide a single solution that seamlessly ties together all your requirements from the control systems to your planning systems.

## Benefits to the Pulp & Paper Industry Customers include

- Improving operational efficiency
- Maximizing production
- Improving product quality
- Improving customer service levels
- Reducing inventory levels
- Improving asset availability and performance
- Prolonging the life of existing assets
- Monitoring raw material quality
- Reducing energy consumption
- Monitoring environmental emissions
- Focusing on health and safety issues
- Lowering costs and improving profitability.

## Project Delivery Options

▷ Together with our partners, Ekhosoft is fully staffed to provide consulting and implementation services, including requirements analysis and confirmation, integration services (SCADA, HMI, Historian or Business Systems), software configuration, project management and implementation services.

▷ Ekhosoft will also work with you on a proof of concept basis (prior to full scale implementation), whereby we will install and configure Ekho to demonstrate how the software will meet your requirements and deliver business value.

## Technology

**The Ekhosoft solution for Performance Management is 100% Microsoft centric.**

### Software

- Microsoft Windows Server
- Microsoft SQL Server
- Internet Information Service (IIS)
- Internet Explorer (IE)

### Hardware

- Quad Core Processor
- 8 GB Ram
- 50 GB Disk (size depends on volume.)

### Operating Environment

Ekho will operate in standard virtual environments such as Microsoft or VMware.

### Mobile

Ekho is enabled for mobile use on Windows, Apple and

