

# Can you read between the lines?

## Buckman's RBA can.

Buckman's Recovery Boiler Advisor analyzes and compares data with its highly accurate mass balance based leak detection system giving boiler operators updated information four times a minute – that's every 15 seconds –

making it easier to read between the lines.

The Recovery Boiler Advisor is a **comprehensive leak detection system** that helps operators decide on the need to perform an emergency shutdown procedure because of a tube leak. The system's sensitivity ranges between 0.15% and 0.5% of the normal feedwater flow to the boiler, depending on the availability and consistency of boiler instrumentation.

With over a decade of development by a consortium of industry experts, the Recovery Boiler Advisor leak detection system provides a reliable and proven method of identifying potential leaks in a paper mill's recovery boiler. Buckman's acquisition of Alert Systems Inc. brings a new level of resources backing up the Recovery Boiler Advisor, and ensures that the system that has been widely accepted by the industry continues to evolve.

### Value to the Mill

- Dynamic mass balance based leak detection system
- Also looks for the classic signs of a lower furnace leak (I.D. fan speed, opacity, furnace draft, drum level, etc.)
- Determines relative location of leak in unit
- Typical detectable limit of 0.3% of feedwater flow to boiler
- Helps prevent unnecessary shutdowns
- Provides a safer working environment around the recovery boiler
- Continuous real time monitoring of boiler system components and processes

## System Advantages

- Accurately differentiates leak vs. non-leak situations
- Reduces incidence of false alarms
- Provides peace of mind
- Archives significant events
- No lapse in trends after short off-line periods



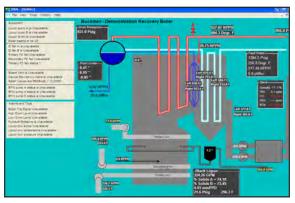
#### **System Features**

- Operator friendly
- Online and context sensitive Help
- Online operator training program
- Remotely accessible
- Independent display screens
- Easy-to-understand graphic interface
- Easy maintenance and remote updates
- Playback of events
- Alarm capability on DCS console
- Remembers system status before boiler trip switch is activated
- Convenient verification feature

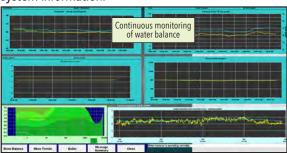
#### Configuration

- Uses BLRBAC recommended instrumentation
- Uses existing mill instrumentation
- No additional proprietary hardware or analyzers required
- Interfaces with mill DCS
- Easy installation; no downtime required

The basic boiler schematic with information.

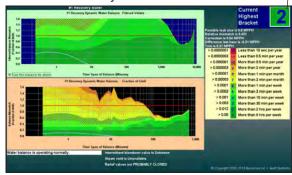


Main screen with the multiple graphical views of the system information.

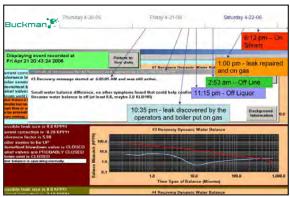


Real time indication of system anomalies

The numerical representation screen showing the likelihood that the system is in an unusual condition.



An actual leak detection, with the history of the leak noted on the screen.



Note: The leak detected was determined to be between 1.5 and 4 gpm for this fairly large boiler.

For more information or a demonstration in your mill, contact your local Buckman representative, or visit us online at **buckman.com**.

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