

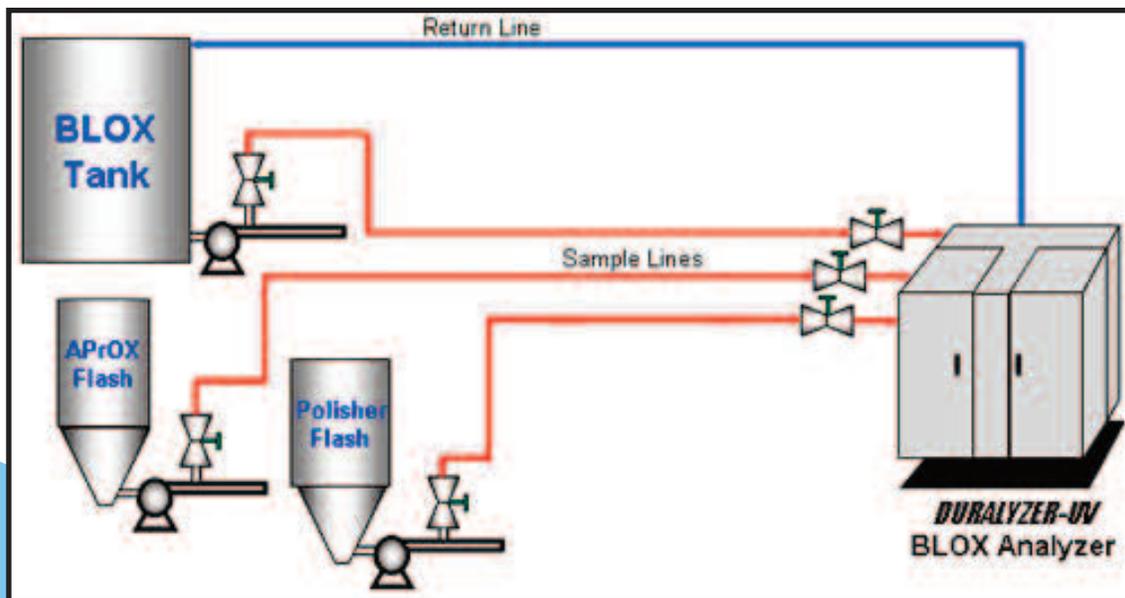
THE BLOX ANALYZER

The Black Liquor Oxidation Analyzer Solution

THE BLACK LIQUOR OXIDATION ANALYZER SOLUTION:

The DURALYZER-UV™ online black liquor oxidation (BLOX) process analyzer utilizes sample extraction technology coupled with ultraviolet attenuated total reflectance (UV-ATR) spectroscopy for sample analysis. Measurements of residual effective alkali (REA), residual sodium sulfide (RNa₂S), and percent total Dissolved solids (%TDS) are provided for each sample line.

THE DIAGRAM below illustrates the BLOX analyzer solution.



THE DURALYZER-UV™ BLOX PROCESS ANALYZER has been designed for ease of operation and the overall reduction of short and long-term maintenance requirements. This has a net effect of minimizing the overall cost of ownership.

SCHEDULED MAINTENANCE REQUIREMENTS INCLUDE: periodic bulb replacement in the light source enclosure, replacement/replenishment of sample cell optics cleaning acid, and replacement of the pinch valve hoses.

Yearly diagnostics and inspection of the analyzer is also required because conditions vary from mill-to-mill and an exact maintenance schedule would be difficult to forecast accurately. Unscheduled maintenance has been greatly reduced by minimizing the overall system component count as well as the design and implementation of proprietary high life cycle valves.

DIAGRAM BELOW:

SAMPLE MULTIPLEXING & CONDITIONING comprises the valving and peripheral hardware required for sample delivery to the analyzer for analysis.

ACID CLEANING SYSTEM & SAMPLING OPTICS includes the optical hardware that interfaces the spectrometer to the sample under analysis. Additionally, an automated acid-based cleaning system keeps the sampling optics free from scale buildup.

ELECTRONICS & PNEUMATICS contains the electronic and pneumatic hardware that interfaces the spectrometer to the sample multiplexing & conditioning and acid cleaning systems. IO point hardware and connections are also housed in this portion of the analyzer.

UV SPECTROMETER is the "brains" of the system which controls all aspects of sample extraction and preparation as well as the acid cleaning system. The spectrometer also analyzes the sample for chemical composition and the results are provided through industry standard IO.

