

Fast, low-maintenance cyanide measurement



The Cynoprobe is an on-line cyanide measurement device developed by Mintek. The Cynoprobe uses a relatively simple technique to accurately and reliably measure cyanide concentrations in a pulp medium. The resultant signal can then be employed as part of a cost-saving cyanide management strategy.

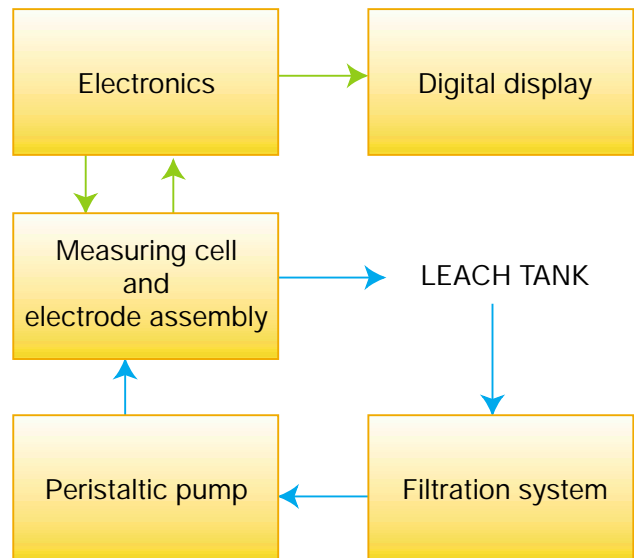
Benefits

- Dramatic reduction in cyanide consumption when used in a control scheme.
- Provides fast and accurate measurement of cyanide concentration.
- Results are highly reproducible, thereby eliminating human error.
- Very low level of maintenance is required and can be performed by relatively unskilled operators.
- Hassle-free sample preparation and filtration.



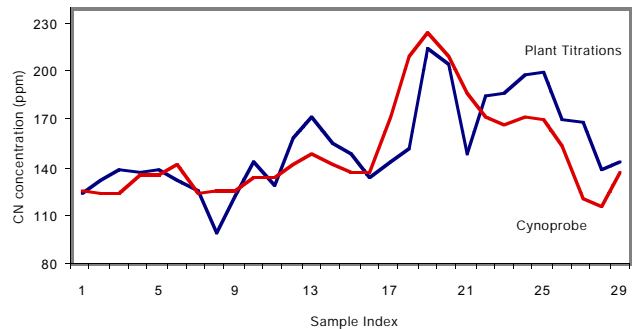
Principle of operation

The Cynoprobe uses an amperometric method to measure the cyanide available for gold leaching. The slurry is first filtered using a simple candle filtering system. The concentration of the cyanide is then determined using a three-electrode system. The Cynoprobe is fully automated through the use of an integrated microprocessor, which, amongst others, enables automatic calibration against a standard solution. Cleaning of the electrodes is done ultrasonically. This prevents scaling, thereby lengthening the lifespan of the electrodes and the time between recalibration.



Results

The Cynoprobe has produced accurate measurement of cyanide concentration on a variety of ore types. Extensive plant trials indicate excellent correlation with laboratory titrations.



Cynoprobe features

- Requires minimal maintenance.
- Simple and reliable.
- Fast sample analysis time.
- Automatic calibration.
- Digital display and 4-20mA output.
- Complies with IP65 protection rating.
- Can be used in any of the following applications: CIP, CIL, RIP, RIL and elution circuits.
- Technical support and 12 month warranty provided.

Cynoprobe requirements

The Cynoprobe is installed as close to the point of measurement as possible. All filter equipment and tubing is provided by Mintek. The only requirements are 100-240 V AC electrical supply and a vibration free mounting area.

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For more information visit the Measurement and Control Division's web page: <http://www.mintek.co.za/MaC>