



polymetron

"helping to make a safer world..."

On-Line **CYANIDE** Analyzer *HIGH RANGE*

- no filtration and sample preparation
- instant results with continuous performance validation
- manual sample entry system for spot-check analysis
- easy mode of operation

if your application is

- ✓ **WASTE WATER EFFLUENT**
- ✓ **ELECTROPLATING / ETCHING BATHS**
- ✓ **GOLD MINING**

your solution is the

POLYMETRON Model 8810 CYANIDE Analyzer

THE METHOD

Utilizing the proven silver nitrate titration method, the 8810 will perform under severe process conditions reliably and accurately.

After capturing the sample, a Sodium Hydroxide solution is added to condition the sample pH above pH10. Next the Silver Nitrate solution is injected to react with the free Cyanide.

This reaction results in the mV potential change, which is detected by the Silver Sulphide Ion Selective electrode.



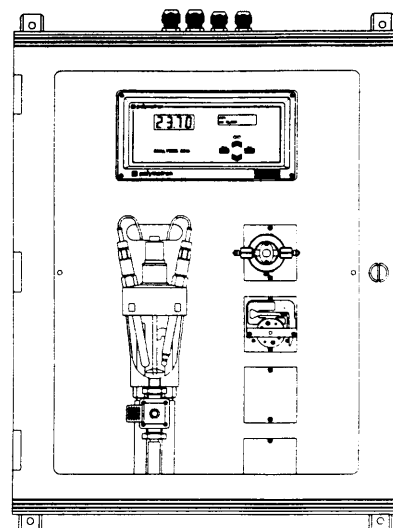
By tracking the mV changes versus the amount of titrant solution consumed, the point of inflection or the endpoint will equal the concentration of CYANIDE.



application note

Technical Specifications

| | |
|-------------------------|--|
| Lower detectable limit: | 0.02 mg/l CN/ \pm 0.01 mg/l CN |
| Measuring range: | 0...1 / 10 / 100 / 1000 mg/l CN |
| Detection Method: | ISE Titration |
| Calibration: | Automatic / Manual / Process calibration |
| Chemical consumption: | 10-20 ml/hr |
| Operating temperature: | 40...130° F (5...55 °C) |
| Sample frequency: | typically 6...10/hr up to 25 application dependent |
| Sample streams: | 1, up to 6 with sequencer Model 8811 |
| Sample volume/cycle: | 200...1000 ml |
| Sample temperature: | 40...160° F (5...70 °C) |
| Sample pressure: | 7...90 psi (0.5...6 bar) |
| Sample flow rate: | 20 l/hr |
| Power: | 110/220 VAC 50...60 Hz |
| Compressed air: | 75...105 psi (5...7 bar) |
| Signal output: | 2 0/4...20 mA Analog output 3 potential free relay contacts 1 RS 232/422 Serial output |
| Enclosure rating: | NEMA 12 / 4 / 4X or Ex proof |



System Configuration

| | | |
|--------|--------------|---|
| 1 each | 368810.54116 | Analyzer Model 8810, ORP base unit, 110V - 60Hz |
| | includes: | Measuring electrode, Silver / Sulphide |
| | | Reference electrode |
| | | Titration solution pump, micro piston, for: |
| | | 0.01M Silver Nitrate titrant solution |
| 1 each | 368810.70060 | Reagent pump, peristaltic, for: |
| | | 1.0N Sodium Hydroxide Conditioning solution |

OPTIONS

| | | |
|--------|--------------|---|
| 1 each | 368810.52000 | Automatic sample dilution system |
| 1 each | 368810.56000 | Automatic chemical cleaning system |
| 1 each | 368810.60000 | Automatic calibration system |
| 1 each | 368810.65000 | Manual sample entry system |
| 1 each | 359097.00160 | Reagent / Calibration solution level sensor |
| 1 each | 368810.40000 | NEMA 4X Fiberglass enclosure, wall mount |
| 1 each | 368810.45000 | NEMA 12 Steel enclosure, floor mount |

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