

# Cyanco CCS<sup>®</sup> - CN<sub>Free</sub> Control System

Panel-Mounted Model

TECHNICAL DATA SHEET

CYN-TDS-APT-04  
Revised on: 02-14-24

Cyanco's CCS<sup>®</sup> - CN<sub>Free</sub> provides periodic cyanide analysis with a degree of accuracy not found with manual titration. All units are designed to analyze free cyanide with minimal interference from other cyanide complexes. This system can be combined with a CCS<sup>®</sup> - CN<sub>WAD</sub> system to achieve monitoring and additional control of sodium cyanide use through the entire cyanide circuit.

## What It Does

Cyanco's CCS<sup>®</sup> - CN<sub>Free</sub> Cyanide Control Systems help control leaching processes by accurately analyzing free cyanide with minimal interference from other cyanide complexes. The CCS<sup>®</sup> unit enables continuous adjusting and monitoring of cyanide levels during leaching. Automated monitoring and control of cyanide levels means more predictable results, more accurate forecasts, and better use of resources.

**Each unit is custom designed to fit each customer's specific applications, with the technology that best matches your mine's unique needs.**

The output signal from any CCS<sup>®</sup> can be analog/digital or Ethernet (TCP/IP) and can be used to control cyanide addition to closely reflect the set point desired. The signal from the control unit can be used to operate virtually any controllable valve through the mill's control system.

## CCS<sup>®</sup> Features:

- » Provide up to 6-8 analyses per hour
- » Handle up to four separate streams
- » Meets UL<sup>®</sup> specifications
- » Each unit is design for your specific production process

## How It Works

Cyanco's CCS<sup>®</sup> - CN<sub>Free</sub> analytical system:

- 1 TOP:** Operator interface and data processing.
- 2 MIDDLE:** Sample analyzer, including pumps for adding reagents and detector that provides CN<sub>Free</sub> results.
- 3 BOTTOM:** Reagents stored here. The system is also equipped with sample pump and reservoirs, which provide the clear sample used for analysis.

**NOTE:** Training of personnel is conducted during installation with refresher training available



## CUSTOMER BENEFITS



**COST SAVINGS** Avoid waste and reduce detoxification costs

**PROCESS EFFICIENCY** Benefit from more predictable use of cyanide, improved forecasting and better use of resources

**BETTER CYANIDE UTILIZATION** Reduce the fluctuations of cyanide concentrations (see graph) to prevent cyanide overdosing and gold/silver losses due to low cyanide concentrations in the leach

**AUTOMATION** System minimizes the need for manual sample analysis, reducing turn-around times and employee costs, which contributes to further savings

