2029 Copper(I & II) Analyzer

From Metrohm Process Analytics

Due to the physical properties of copper, it is mainly utilized for electrical applications. Copper can be found in the wiring as well as in printed circuit boards (PCBs) and chips. Many other purposes vary from use as an animal nutrient to the creation of metal alloys (bronze, brass). The amount of Cu(I & II) in wastewater is restricted and many industries measure the concentration before disposing the water or treating it. The copper in the sludge formed by wastewater treatment plants (WWTP) is removed in sludge incineration or waste incineration plants. Depending on the type of industry, effluent cannot exceed concentrations >1 mg/L of copper.

Because of its role in many different production and environmental processes, it is of vital importance to closely monitor the concentration. The **2029 Copper(I & II) process analyzer** from Metrohm Process Analytics is the most straightforward and easy-to-use tool to do so online.

About the Copper(I & II) application

Copper is determined photometrically based on the Bicinchoninate method, measured at a wavelength of 550 nm. The analyzer is able to handle a wide range of Cu(I & II) concentrations, from **µg/L to mg/L**.

Benefits for online analysis

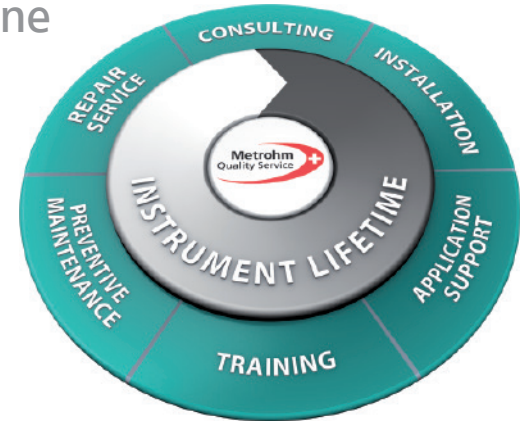
- Protect expensive company assets by monitoring your processes
- Process data available at your fingertips 24/7 means no waiting for slow, manual laboratory methods
- Increased safety for employees – no manual sampling necessary, no exposure to unsafe, hazardous environments
- Save money by reducing downtime: analyzer sends alarms for out-of-specification values which inform the operator sooner

Applications for Cu^{+}/Cu^{2+}

- … in electrolysis baths / (metals/galvanic)
- … in the development of PCBs / (semiconductor)
- … in the smelting process / (mining)
- … in surface water monitoring / (environmental)
- … in production of copper products / (metals)
- … in development of bead wire for tires / (automotive)
- … in effluent & scrubbing towers / (industrial wastewater)

Cu^{+}/Cu^{2+} analysis performed safely online

- Copper(I & II) can be measured in 1 or 2 sample streams
- Compact footprint for tight industrial spaces: 326 × 273 mm
- Safe, rugged enclosure designed to IP66 specifications is ideal for process environments
- A 7" full color touchscreen shows trend graphs and allows action modifications
- Remote access and control via Ethernet and Modbus TCP/IP, with USB for data export
- Easy maintenance due to simplicity of the layout
- Automatic data and/or alarm transfer to a DCS system



For more information, visit our website: **www.metrohm.com**

Metrohm Process Analytics

8.000.5273EN – 2018-08