

2029 Zinc Process Analyzer

From Metrohm Process Analytics

Due to its properties, zinc is used in a wide range of consumer, infrastructure, agricultural, and industrial products. In many production cycles, zinc is used and there are concerns when the concentrations are too high in the industrial waste water. If this water is not sufficiently purified, the concentrations will become too high for a healthy environment. Zinc on the other hand is essential for all the life on earth, so it needs to be monitored in all water streams, from inlets for water plants to the outlets of industrial production sites.

To ensure that the concentrations of zinc do not exceed the limits, constant monitoring of the waste water is important for many industries. The **2029 Zinc process analyzer** from Metrohm Process Analytics is the most straightforward and easy-to-use tool to do so online.

About the Zinc application

Zinc (II) is determined photometrically. The zinc forms a blue colored complex with addition of a zircon reagent, and can be measured at a wavelength of 620 nm. The analyzer is able to handle a wide range of zinc 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 dangerous environments
- Save money by reducing downtime: analyzer sends alarms for out-of-specification values which inform the operator sooner

Zn²⁺ analysis performed safely online

- Zinc 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



Applications for Zn²⁺

- ... in biomass reactors / (energy/power)
- ... in the steel production process / (galvanic)
- ... in zinc production / (mining)
- ... in effluent treatment plants / (steel/metal)
- ... in river water monitoring / (environmental)
- ... in the waste water treatment plant (WWTP) / (textile)
- ... in industrial waste water / (chemical)

