



# 2029 Manganese Analyzer from Metrohm Process Analytics

Better value in a smaller footprint

## HIGHLIGHTS

- Manganese can be measured in 1 or 2 sample streams
- Compact footprint for tight industrial spaces: 326 x 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



# Powerful and compact single method online analyzer

Manganese (Mn) is an important trace mineral which it is naturally present in soil, water, and air. It is an essential nutrient that does not possess any risk to human health. However, in many water related industries the monitoring of Mn is important at the *inlet water stream* to prevent out-of-spec final products (e.g. water discoloration and bad taste). Mn levels in source waters (ground or surface) can change significantly over time due to seasonal water inversion that directly impacts the water treatment process in place. Therefore, constant monitoring and control of Mn in inlet waters is needed to adjust and optimize chemical oxidant additions to enhance the quality of the water. Additionally, Mn monitoring at the *effluent water stream* is necessary to comply with the strict regulations from the environmental authorities.

Because of water quality standards and regulations, the analysis of Mn is of vital importance to measure accurately in the water inlet and waste water effluent. The **2029 Manganese Analyzer** from Metrohm Process Analytics is the most straightforward and easy-to-use tool to do so online.

### About the Manganese application

Manganese is determined photometrically with 1-(2-Pyridylazo)-2-Naphthol (PAN) as indicator, measured at a wavelength of 572 nm. The analyzer is able to handle a wide range of manganese concentrations, from **µg/L to mg/L**.

### Applications for Mn:

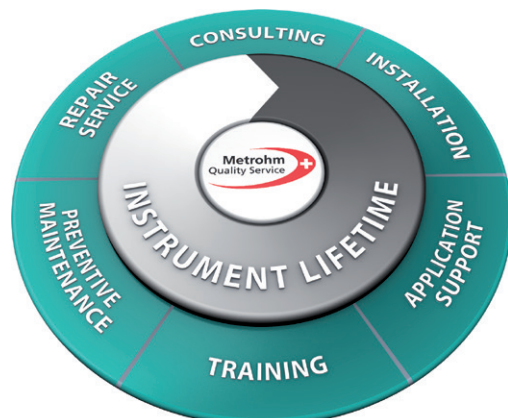
- ... in wastewater treatment plants / (environmental)
- ... in groundwater for beverage production / (food/beverage)
- ... in drinking water / (potable water)
- ... in Nickel production / (Waste water treatment plant)



2029 Manganese Analyzer

### 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, reagents kept separately
- Save money by reducing downtime: analyzer sends alarms for out-of-specification values which inform the operator sooner



For more information, visit our website: [www.metrohm.com](http://www.metrohm.com)