

## Tasteful water: Iron control optimised

Endress+Hauser complements its analyser portfolio for drinking water and process water monitoring. The new Liquiline System CA80FE colorimetric analyser offers precise monitoring of dissolved iron content in water and supports plant managers in complying with stipulated limit values.

Drinking water not only has to be free from harmful substances and tolerable but must be aesthetically pleasing and tasteful. At concentrations commonly found in drinking water, dissolved iron is not harmful to human health. However because it impairs water taste and color, local authorities stipulate strict containment limits for iron. Elevated iron concentrations can also lead to build-up of deposits and settling of microorganisms in distribution systems and household water supplies. This is undesirable for consumers and utilities responsible for treatment of water for industrial processes, as iron deposits can cause corrosion or encrusting of pipes, turbines and vessels leading to expensive repairs or even complete system replacement.

With the Endress+Hauser Liquiline System CA80FE, waterworks and plant managers can rely on high-precision online monitoring of iron. The analyser uses the standardised ferrozine method to deliver regulation-compliant measured values and features detailed logbooks that allow comprehensive documentation of the iron values. Plant managers are well prepared for audits and can prove compliance to water authorities at any time.

### **Saving energy in iron removal**

Iron removal is achieved by oxidising iron to form iron oxide hydrate which is insoluble and can be removed by filtration or sedimentation. Liquiline System CA80FE monitors the iron removal online and delivers measured values fast – helping to optimise the control of air blowers and thus save energy in the oxidation process. Fast measurements also help plant operators to detect potential process disturbances quickly and advanced diagnostics with remote access support them in prompt analysis and remedy.

### **Low reagent consumption and optimised maintenance**

Liquiline System analysers are designed with highly precise dispensers for reagent and standard dosing guaranteeing reduced consumption and low operating costs. Automatic cleaning and calibration functions ensure that the analyser and its sample preparation and reagents work reliably and without manual intervention over a longer period of time. Maintenance tasks can be carried out easily and with minimal tools, reducing maintenance costs and increasing process uptime.

### **Easy operation and integration**

Liquiline System shares the user-friendly operation that plant personnel already know from other online analysis parameters such as pH or chlorine - operating errors are virtually eliminated. Its integration into process control systems is also seamless via Modbus, PROFIBUS and EtherNet/IP digital fieldbuses. Additionally, Liquiline System can be easily upgraded to a measuring station by connecting up to four Memosens sensors. The analyser then adopts the transmitter functions resulting in a reduction of the investment costs in the plant.

**Flexible sample preparation**

The self-priming version of Liquiline System CA80 is the best choice for particle-free water. It is ready for operation without any additional settings. For applications where sample preparation is needed, the CAT810/ CAT820 sample preparation systems are available. They are fully controlled by the analyser via Memosens communication and thus easy to commission and operate.

Liquiline System CA80FE helps waterworks and plant managers keep their water treatment under control and comply with the strict regulatory limits, while making daily life easier for operators.

For further information, please visit <http://bit.ly/1SPqnDx> or [www.za.endress.com](http://www.za.endress.com)

**Enquiries:** Jan Swart  
Product Manager – Analytics  
Endress+Hauser (Pty) Ltd  
Tel: (011) 262 8000 Fax: (011) 262 8062  
[Jan.Swart@za.endress.com](mailto:Jan.Swart@za.endress.com)

**From:** Endress+Hauser (Pty) Ltd  
**Submitted by:** Su-Anne Willemse  
**Tel:** (011) 262 8080

**URL Tracking:** Please note that if this PR is placed on any digital platform, please use/embed the following URL for our tracking purposes. <http://bit.ly/1SPqnDx>