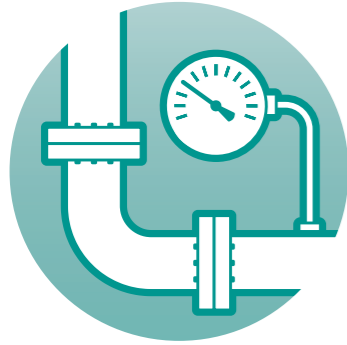


PROCESS SOLUTIONS



The Metrohm process analyzers take the famous Metrohm laboratory solutions a step further. Fully automated, online customizable analyzers facilitate process monitoring across a wide array of applications. Drawing on our core competencies in titration, spectroscopy, ion chromatography, and electrochemistry, we leverage our

applications knowledge to create reliable solutions for process analysis that optimize efficiency, decrease chemical consumption and create a safer work environment.

We back our systems with a team of experienced support personnel to offer you the full value chain of process analytics:

- Process Control
- Process Optimization
- An increased yield
- Reduced operational cost

QUALITY SERVICE

Metrohm Quality Service begins before you purchase your instrument and continues throughout its entire lifecycle. Product experts help you make the right decisions to satisfy your analytical and environmental requirements. Our specialists can assist you in the technical aspects, from application method development to troubleshooting, helping you run a more optimized process. Our certified service engineers are always on alert to provide emergency service in the shortest possible time – wherever you are.

Metrohm provides the same high standard of service all over the world by trained and certified service engineers based at local Metrohm offices. After all, who is better qualified to care for your instruments than the people who built them?



www.metrohm.com



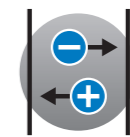
Get to Know Metrohm Process Analytics



Titration



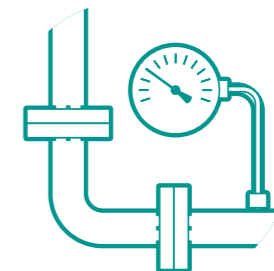
Photometry



Electrochemistry



Spectroscopy



Process

Your partner for chemical analysis

Metrohm Process Analytics is the brandname representing the well-known Applikon wet chemistry process analyzers as well as the Metrohm NIRSystems instruments for process analysis. Under this brandname we offer analytical systems for titration, spectroscopy, electrochemistry, photometry, ion chromatography, as well as ion-selective measurements.

Manufactured in The Netherlands since 1978, our analyzers have a unique reputation for their reliability and robustness. With thousands of installations worldwide, we are a world leader in wet chemical process analysis.

With our expertise and experience we do not just offer process analyzers, but an integrated solution to the end user. This helps to optimize process efficiency while reducing operation cost. Real time analysis as an integrated part of process control and automation will help you increase yields and improve production quality.

Whether it is replacing an existing analyzer, developing a new analytical solution, or answering your technical questions, we are here for you. Our local presence with offices and subsidiaries in over 50 countries allow us to offer you fast and efficient service and support. Metrohm is a familiar face and shares your professional background.

TITRATION



Since the first process titrator built in the late 70's we have developed a range of online titrators for your challenging and changing applications. The latest generations are based on the Swiss made and well known Metrohm titration systems. When a process titrator is needed, users all around the world choose Metrohm Process Analytics.

With high performance ion-selective electrodes from Metrohm using a dynamic standard addition technique, we furthermore offer a wide range of analysis possibilities for single components like ammonia, fluoride, and sodium.

- Potentiometric titration
- Karl Fischer titration
- Photometric titration
- Ion-selective measurements

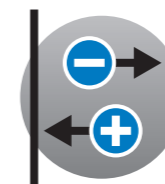
SPECTROSCOPY



Near-infrared (NIR) spectroscopy is a versatile analytical technique for rapid nondestructive in-situ measurements applicable in many industries. We have joined forces with Foss, an industry leader in spectroscopy, to provide superior technical advisement. Over 50 years of experience and numerous patents in NIR spectroscopy have resulted in unparalleled application knowledge, helping to meet your demands in process monitoring.

With a focus on accuracy and performance in harsh conditions, our instruments enable you to determine numerous chemical and physical process parameters quickly in a wide variety of matrices with no sample preparation.

ELECTROCHEMISTRY



Drawing on almost 30 years of experience, Metrohm Process Analytics provides precise analytical solutions for diverse fields as trace metal analysis and electroplating bath chemistry.

- Voltammetry for trace metal analysis
- Cyclic Voltammetric Stripping (CVS)

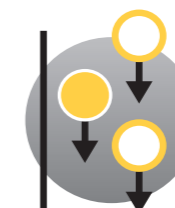
PHOTOMETRY



From the first analyzers in the 70's, photometry has been an important technology for the analysis of many components. The Metrohm Process Analytics analyzers use a differential absorbance method allowing correction for sample color and turbidity. The wide range of LED sources

and filters makes it possible to offer a solution to a wide range of applications, like COD, Ammonia, Chlorine, and Silica.

ION CHROMATOGRAPHY



Ion chromatography is synonymous with Metrohm, having more than 25 years of laboratory knowledge at our disposal. This experience has come to benefit the process world with the Process Ion Chromatograph, a rugged analyzer capable of monitoring ionic compounds in

aqueous media from ng/L to % concentrations.

The Process IC can monitor multiple components within a process, with a capability of up to 20 sampling points possible. The continuous monitoring of control values as well as the presentation of relevant parameters allows easy identification of process optimization changes and other events. Integrated eluent production and different ultrapure water feed options ensures the analyzer can run autonomously for long periods of time in less-frequented areas.