

Multiple Ion Analysis



Excellent Ion Analysis

from Thermo Fisher Scientific
and METTLER TOLEDO

High Performance Automated Ion Analysis
Flexible, Efficient, Reliable

METTLER TOLEDO

Two Experts, One Solution for Automated Ion Analysis

The Excellence Titrator T9, the DispenseSix liquid handler with InMotion™ Autosamplers from METTLER TOLEDO and the Thermo Scientific Dionex Ion Chromatographs for both anion and cation determinations are synchronised perfectly: the Excellence titrator measures and titrates accurately, the Ion Chromatographs (IC) efficiently performs the ion-specific determinations. All steps are automatically executed, and implemented as a turnkey solution. All results including the ion balance are compiled in one common report within the Thermo Scientific™ Dionex™ Chromeleon™ Chromatography Data System software.

High Performance and Efficiency

The sample is placed on the InMotion sample rack and the analysis is started with One Click®. The titrator first measures the conductivity. After that, the DispenseSix liquid handler doses a defined sample volume into a titration beaker for subsequent titrations and fills the IC sample loops. Based on the

previously measured sample's conductivity the Chromeleon software selects the best fitting injection loop. The chromatograms are recorded simultaneously during the running titration. All measurements are generally completed in about 15 minutes and the system is ready for the next sample – efficiency combined with ease of use.

Reliable and Flexible

Thanks to effective cleaning steps, carry-over is prevented. Samples with ion concentrations up to 300 mg/L can be analysed directly with high precision and accuracy. The Chromeleon data management software allows random sample access, the differentiation of sample types, e.g. unknown samples, calibration standards, independent validation standards, and more. System Suitability Tests can be performed automatically based on the user's choice. Chromeleon's control charts allow tracking the current IC, pH and conductivity calibration validity. If requested, the LabX® titration PC software can be used for independently archiving titration curves, measured value tables and results.





Multiple Ion analysis with the METTLER TOLEDO T9, DispensSix, InMotion and Thermo Scientific Dionex™ Integrion™ HPIC™ System

Up to 113 samples can be processed automatically and unattended using the InMotion autosampler. Depending on the requirement, the individual analysis can be programmed easily on the titrator and the Chromeleon software; an appealing solution for many industrial segments.

Thanks to the high-precision dosing capacity of the DispensSix liquid handler, anion and cation standards can be automatically prepared covering many concentration decades. Chromeleon software calculates and delivers the dilution factors so that the entire work flow of IC-calibration, including evaluation and results and reports storage, is completely automated.

METTLER TOLEDO Titration Excellence

One Click® Titration for every titration application – simple, efficient, secure and modular. Choose the perfect system based on your requirements. Obtain accurate results for many different titrations – it only takes One Click.



Dionex™ Integrion™ HPIC™ System

Meets your routine ion analysis demands using the easy-to-use and reliable Thermo Scientific™ Dionex Integrion HPIC system. This system performs versatile and efficient analyses through comprehensive application solutions and interactive wellness features. The Dionex Integrion system's flexible detector configurations meet your analysis needs for today and tomorrow. Use the system's automated eluent generation (EG) to eliminate error-prone manual eluent preparation and achieve better method reproducibility. Reagent-Free™ Ion Chromatography (RFIC™) is an integral technology of most Dionex IC-systems: eluents and regenerants are either automatically produced from ultra pure water or regenerated for uninterrupted continuous operation. Thus, time consuming and labor intensive preparation steps are minimized – the systems are always ready for analysis. The detection of anions and/or cations is based on the observed conductivity.



www.mt.com/titration-IC
www.thermoscientific.com/titrationIC

For more information

One Click is a Registered Trademark of METTLER TOLEDO in Switzerland, the European Union, Russia and Singapore. LabX is a Registered Trademark of METTLER TOLEDO in Switzerland, USA, China, Germany and a further 13 countries.

Dionex products are now sold under the Thermo Scientific brand. Chromeleon, Dionex, Reagent-Free, RFIC and Thermo Scientific are trademarks of Thermo Fisher Scientific Inc. and its subsidiaries.

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Analytical Instruments

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Subject to technical changes

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