

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 T90 Excellence Titrator, Liquid Handler with Rondo sample changer 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 Rondo sample rack and the analysis is started with One Click®. The titrator first measures the conductivity. After that, the 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 T90-Liquid Handler-Rondo 30 - Thermo Scientific Dionex ICS-1600 System

Up to 30 samples can be processed automatically and unattended using the Rondo 30 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 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 ICS-1600 Ion Chromatographs

The Dionex ICS series ranges from integrated compact systems to modular ion chromatographs. 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. Large dynamic working ranges are achieved for both anion and cation determinations thanks to high capacity columns, electrolytic suppression and auto-ranging detectors. Dionex IC systems combined with the METTLER TOLEDO Excellence titrators: two experts, one solution for automated ion analysis and your benefit.

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.
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