

Metrohm-Spark Triathlon Autosampler



Metrohm-Spark Triathlon Autosampler: flexibility and endurance

Triathlon

A triathlete is an all-round sportsman with exceptional endurance. The Metrohm-Spark Triathlon reaches for the gold medal and fulfills all the requirements of a modern Autosampler; it achieves top results regarding

- Precision,
- Micro volume handling,
- Biocompatibility, and
- Adaptability to widely varying applications.

With the Metrohm-Spark Triathlon you are safely on track and sure to be a winner.

The Triathlon's outstanding features

- Injection of micro volumes
- Multiple injections from small-volume samples
- «Partial Loop» injection technique
- System calibration
- 96 sample positions
- economical, sealable standard sample vials
- complete remote control with Metrodata IC-Net software
- straightforward integration into IC systems, even complex ones
- biocompatible thanks to the metal-free sample flow path



Front view of Metrohm-Spark Triathlon

Precision and reliability

The Triathlon offers the injection performance you may expect from state-of-the-art autosampling technology:

- 0.3% RSD (Relative Standard Deviation) for «Flushed Loop» injections,
- 0.5% RSD for «Partial Loop» filling.

«Flushed Loop» means that the whole loop volume is injected. In the «Partial Loop» technique the loop is only partially filled, e.g. with 5 μ L sample, the remaining loop volume being filled with eluent.

No cross-contamination

After every injection the sample flow path is thoroughly rinsed with a solution of your choice. This practically rules out cross-contamination.

Special sampling needle

The sampling needle for small volumes is not necessarily the right needle for puncturing the sample vial's septum. This is why the Triathlon uses two different needles. The puncturing needle pierces the septum for the sampling needle. The result: perfect sampling.

Metal-free system

Biological samples require metal-free systems. The Triathlon's whole sample flow path is made of high-quality plastic material. The sample never gets into contact with metals.

Calibration

The «Partial Loop» filling technique can be used for the easy and reproducible calibration of the IC system. Only a mouse click is required to inject different solutions with different concentrations for multipoint calibrations.

Small volumes

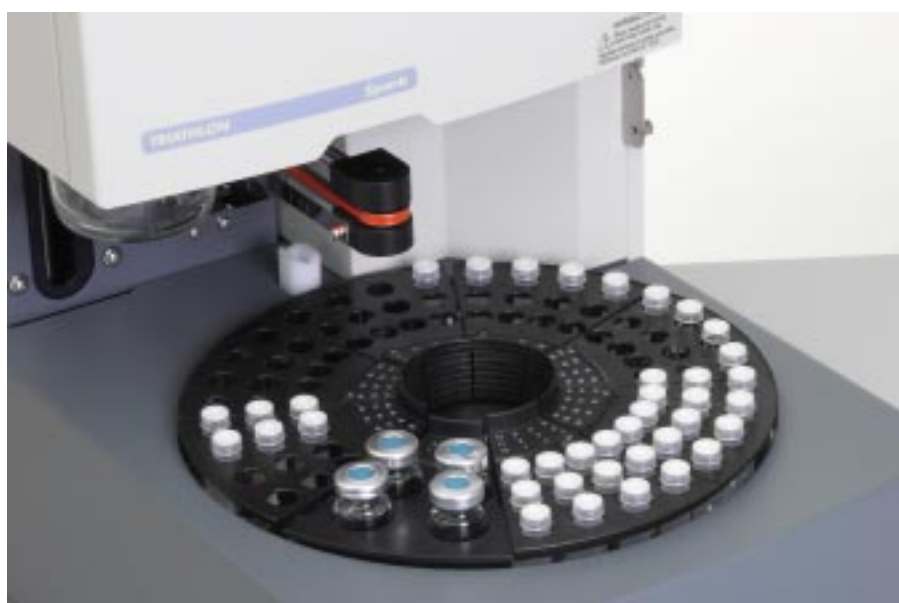
In the «Pick Up» mode, where a transfer solution is used, an analysis can be carried out with just 5 μL sample. In the «Partial Loop» mode 35 μL sample are sufficient for transfer and sample introduction.

Enduring value

More than 10 000 Spark sample changers in the laboratories are proof of excellence in features, performance and endurance. Spark's decade of experience in manufacturing sample changers, combined with Metrohm's half-century of experience in ion analysis, result in an attractive offer that will facilitate your work in the laboratory and make it more perfect at the same time.



Close-up showing the switching valve, the lift mechanism as well as the bottle for the rinsing solution



Sample table of the Metrohm-Spark Triathlon with vials of differing size in the different segments

Ordering information

2.135.0100 Metrohm-Spark Triathlon Autosampler

- 6.9010.037 750 μ L polypropylene vials, 100 pieces
- 6.9010.030 750 μ L polypropylene vials, 1000 pieces
- 6.9010.027 100 μ L polypropylene vials, 100 pieces
- 6.9010.020 100 μ L polypropylene vials, 1000 pieces
- 6.9010.017 Septum vial covers, 100 pieces
- 6.9010.010 Septum vial covers, 1000 pieces



 **Metrohm**
Ion analysis

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