PAL RSI

Reliable routine analysis



Example Configuration · Image: CTC Analytics

Configure flexibly. Introduce samples precisely.

CONCEPT

PAL RSI automates sample introduction for gas and liquid chromatography. RSI stands for Robotic Sample Injection: robot-assisted sample injection.

The open, modular platform supports liquid injection, headspace and solid phase microextraction depending on the equipment. The tool is changed manually; the change is possible in a few minutes.

YOUR BENEFITS

Robust in everyday life
For the reliable automated sample application in the routine laboratory.

Flexible equipment
Syringes, valves and sample racks are chosen to suit the application.

Growing with tasks
A later upgrade to RTC functionality with automatic tool change is possible.

TYPICAL WORKFLOW

Take sample → Inject → Clean tool → Next sample

Before the start, the appropriate tool is used. In the case of headspace and solid-phase microextraction, temperature control and enrichment can be added. The order depends on the method and the installed modules.

A system for different tasks - with the possibility of later RTC upgrade.

Equipment and achievable throughput depend on the chosen configuration and method.

CHROMTECH GmbH
Carl-Zeiss-Strasse 20 · 65520 Bad Camberg
info@chromtech.de · www.chromtech.de

Tools and equipment

The configuration follows your application.

SELECTED TECHNICAL DATA

Tool change	Manual; later upgrade to automatic RTC tool change possible
Liquid syringes	0.5-100 µl; 250-1,000 µl; 5 / 10 ml with suitable tools
Headspace syringes	1 / 2.5 / 5 ml for the gas phase over a sample
Extraction procedure	SPME fiber and SPME Arrow; additional procedures depending on configuration
Standard axis PALbase 850	Workspace: 735 × 255 × 420 mm (width × depth × height)
Instrument dimensions, standard feet	915 × 795 × 770 mm (width × depth × height), PALbase 850
Capacity, four tray holders	Up to 648 vessels of 2 ml or 180 vessels of 10 / 20 ml

Values for the mentioned embodiments; Capacity with corresponding racking. Tools, modules and larger axes are assembled as needed.

CONTROL AND INTEGRATION

Chronos also plans time-overlapping preparation steps. PAL Method Composer supports graphical method creation. The connection to GC, LC and data systems is matched to the existing device environment.

CHROMTECH OPTIONS

Single Magnet Mixer (SMM)

Magnetic stirring and tempering.

SPDE - The Magic Needle

Dynamic solid phase extraction.

Fachgrundlage: CTC Analytics, PAL RSI; PAL RSI and PAL RTC, Rev. 8, Februar 2026, S. 6-7, 10-11, 54-55. CHROMTECH-Optionen gemäß Product programme.

CHROMTECH GmbH
Carl-Zeiss-Strasse 20 · 65520 Bad Camberg
info@chromtech.de · www.chromtech.de