

## PR2100 Gas Chromatograph: Performance, Flexibility & Sensitivity

- > Large capacity oven, high security (double door), with reliable temperature regulation (fan)
- > Possibility to mount 2 injectors and 2 detectors simultaneously
- > Large choice of injectors:
  - Classical
  - Split / Splitless
  - Multi-injector combining all injection modes: classical, split/splitless, Programmable Temperature Vaporizing (PTV), important volume, direct thermodesorption of solid samples
  - Static or dynamic desorption system
  - High pressure gas sampling & injection system: online micro-sampling system under high pressure (up to 60 MPa)
- > Available detectors: TCD, FID, ECD, FPD, PID
- > Dedicated autosamplers (liquid or headspace injection)
- > Monitored by user-friendly and intuitive software: customizable analysis reports, automatic or easy manual integration of chromatograms.



PR2100 Gas Chromatograph

## ALS 104 Autosampler

- > Liquid injection mode
- > Capacity: 105 vials of 2mL (other volume in option)
- > Autonomous operation or fully monitored by PC



ALS104 Autosampler

## Injectors for PR2100 gas chromatograph

### UNIQUE

#### High pressure gas sampling & injection system : online micro-sampling system under high pressure (up to 60 MPa)

- > Liquid or gas samples
- > Connection to an autoclave, a chemical reactor or a process line
- > Adjustable sampling from 1µg to a few mg
- > Sampling temperature up to 350°C
- > Applications: process monitoring, petrochemicals analysis, other.



High pressure gas sampling & injection system

#### Multi injector: “universal” injector including all injection modes

- > Classical or programmable (temperature & pressure : PTV mode) Split or split-splitless, big volume injection, direct desorption of solid samples
- > Temperature range : ambient to 650°C (increment: 1° C)
- > Air cooling (option: LCO2)
- > 4 temperature ramps : from 1°C to 999°C/min
- > Pressure range : 0-400 kPa (increment: 1 kPa)
- > Dedicated to high boiling point products or highly volatile products.

### **PR1350 Thermal Desorber: dynamic system for headspace generation**

- > Desorption, Re-concentration, Injection
- > Desorption by flash heating (40°C/s) programmable from ambient to 250°C
- > Cold trap: -100°C (Liquid nitrogen) or -50°C (liquid CO<sub>2</sub>)
- > Software monitored
- > 4 configurations available:
  - desorption oven for solid samples
  - bubbler for liquid samples
  - oven for desorption tubes
  - system for online gas analysis.



*PR1350 Thermal Desorber*

### **Applications in R&D, Process Monitoring, Quality Control, Online Analysis**

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| <ul style="list-style-type: none"><li>&gt; Volatile and semi volatile compounds</li><li>&gt; Organic solvents</li><li>&gt; Alcohol in blood</li><li>&gt; Pesticides</li><li>&gt; Insecticides</li><li>&gt; Hydrocarbons in water</li><li>&gt; Diacetyl in beer</li></ul> | <ul style="list-style-type: none"><li>&gt; Heavy compounds</li><li>&gt; Simulated distillation</li><li>&gt; Crude oils and hydrocarbons</li><li>&gt; Diesel oils, biodiesels</li><li>&gt; Natural gases, LPG, refinery gases</li><li>&gt; Fatty Acid Methyl Esters (FAME)</li></ul> |
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