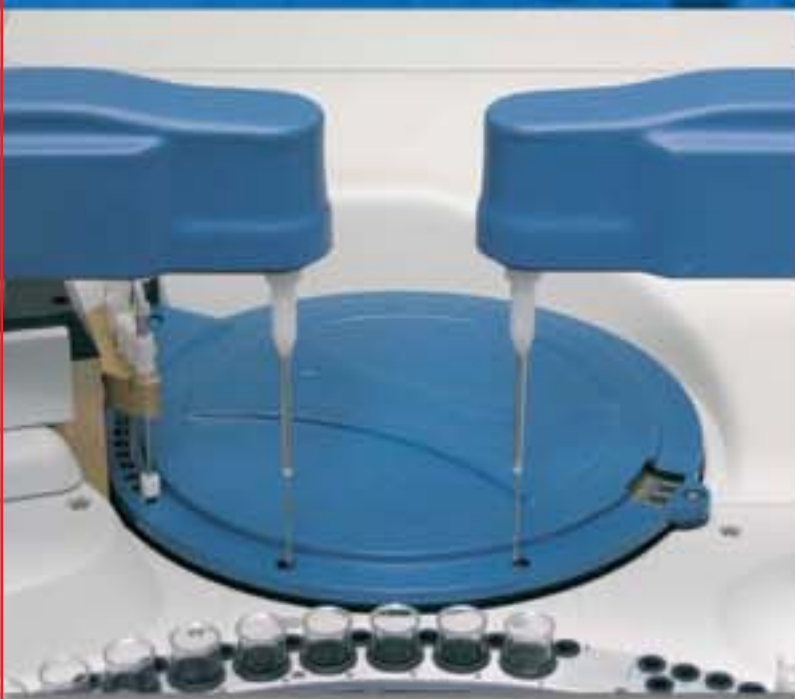


# PURE RANDOM ACCESS



## Sampling arms

EasyChem Pro utilizes two dispensing arms. One dedicated to samples, and the other dedicated to reagents. Both are equipped with a pre-heat system for liquids, a shock sensor, and a liquid level sensor. Both arms take a maximum of 7 seconds for sampling, dispensing, and re-washing operations. Separation between sampled liquids and washing solution is assured by the use of an electro-mechanical rocker valve for each arm. Fluid circuits are made of long life Teflon® tubing. **EasyChem Pro: the power of proven quality.**

## Dispensing dilutors

In order to achieve very high accuracy and reproducibility in drawing and dispensing reaction fluids, each sampling arm is equipped with a high-precision diluter. The diluters are advanced micro-metering pumps with an acrylic head and ceramic plunger driven by a stepping motor. The diluters have a resolution of 0.193 µl per pulse. Each arm dispenses up to 500 µl per each machine cycle. Compared to traditional syringes normally used in this class of analyzer, the dispensing system maintenance is drastically reduced.

**EasyChem Pro: state of the art.**



## Electronics

EasyChem Pro is controlled by flexible modular low-consumption electronic assemblies, fully designed and produced by Systea S.r.l. using SMD technology. Particular attention has been given to reduce maintenance, through high reliability components and modularity. Inside EasyChem Pro, several micro-controllers are linked together through a double bus for synchro and functional operation. Micro-stepping drivers allow high speed precision mechanical movements. Universal power supply module with PFC interface and input transient protection. **EasyChem Pro: evolution of technology.**



## EasyChem Pro

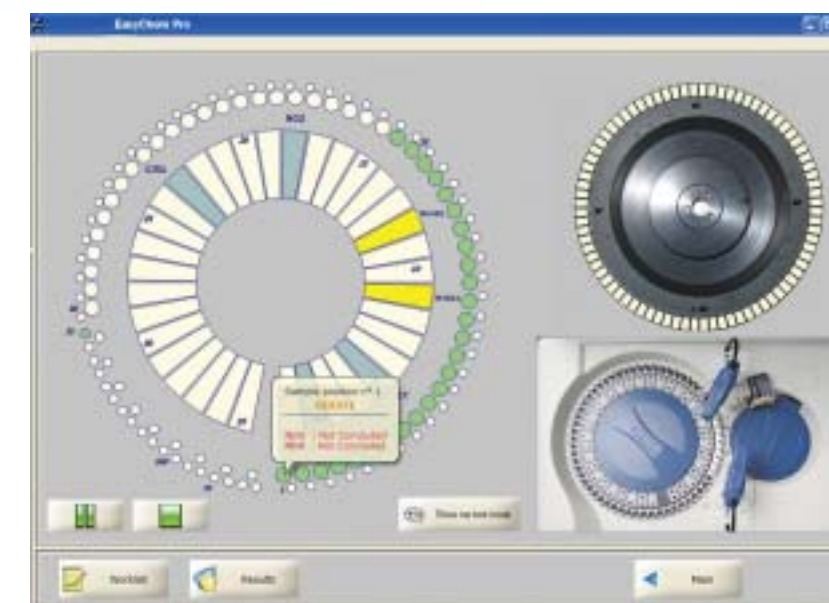
EasyChem Pro is the new random access analyzer developed by Systea S.r.l. that supplies more than 5,000 customers worldwide.

- 300 photometric tests per hour.
- Up to 35 stored test parameters.
- 50 sample positions for test tubes or cups; a dilution cup for each sample.
- Pre and Post-run dilutions.
- Automatic preparation of calibrants from a stock solution.
- 18 positions for standards and QC.
- 35 reagent container; 60ml each.
- Positive identification of samples and reagents by integrated bar-code (optional).
- 6 micro-sample positions.
- Controlled by an external PC through a bi-directional serial link.
- Continual loading of samples and reagents.
- Multiple work-list management.
- Real-time monitoring of reagent volumes, system solutions and waste levels.
- Real-time monitoring of sample status (processing phase).
- Real-time monitoring of sample results.
- Bi-directional connection with LIMS.
- 3 levels of security.
- Data reprocessing.
- User friendly Windows® based software interface.
- Bench top or instrument stand (optional).

**EasyChem Pro is this and much more.**

## Software

EasyChem Pro software, developed by Systea, utilizes Windows® XP Pro operating system. A user friendly interface assists the operator and simplifies the daily work routine. Real time checks of sample results, sample status, liquid levels, and system functions. Usual combinations of methods can be pre-defined as "profiles" in the software setup, for ultra-fast startup on a routine basis. Up to five levels of real time QC can be used. QC results are automatically stored and plotted in a user defined QC chart. Three levels of security. Bi-directional LIMS capability. **EasyChem Pro: the art of simplicity.**



## Reagents

EasyChem Pro wants to simplify your work routine. Systea offers a complete CE marked reagent panel, ready to use in containers for environmental, industrial, pharmaceutical, and enzymatic tests. Positive identification of reagents gives the end user the assurance to work without compromising quality. 35 - 60ml volume, temperature controlled reagent containers, ensure reagent integrity, and allows extended operational time without operator intervention. Continual loading of samples and reagents is also possible with the integrated bar-code reader option. EasyChem Pro gives you the flexibility to create special methods and ranges. **EasyChem Pro: customize your instrument.**



# EasyChem *Pro*



System: random access  
Throughput: 300 tests/hour  
Number of arms: 2, for sampling and reagents  
Number of reagents: 35 on board, refrigerated 60ml containers  
Number of samples: 50 samples (test tubes or cups) + 6 micro-size, each with a dilution cup  
Number of standards & QC: 18 positions  
Analytical methods: End-point, fixed time, kinetic, differential, differential sample blank, bi-chromatic  
Diluter: 2, long life low maintenance ceramic plunger 500  $\mu$ l max volume  
Reagent volume: 3-500  $\mu$ l (0.193  $\mu$ l pulse resolution)  
Sample volume: 3-500  $\mu$ l (0.193  $\mu$ l pulse resolution)  
Reaction liquid level: 200-400  $\mu$ l  
Calibration curves: linear regression, polynomial, cubic spline, piece-wise  
Automatic dilutions: from 1:1 to 1:100  
Reading Cuvettes: 80 re-washable cuvettes  
Reaction temperature: programmable +/- 0.1°C  
Wavelengths: 9 interference filters 340 – 880nm  
Light source: long life halogen lamp with extended UV emission  
Photometric linearity: 0-3.0 OD  
Cuvette washing: enhanced automatic washing station  
Reagent cooler: T = 12°C +/- 2°C up to 15°C below ambient temperature  
Bar-code: positive identification of samples and reagents (optional)  
Real-time electronics: modular, 4 micro-controllers, SMD technology  
Power supply: 100 – 240Vac nom, f = 47 – 63Hz, PFC, P = 650Wmax  
Personal Computer: external, Pentium® IV 2.0GHz or more, 512MB RAM  
Peripherals: DVD ROM, HD > 40GB  
Monitor: external, 17" digital flat panel display  
Operating system: Windows® XP Pro  
LIMS: compatible, bi-directional  
Dimensions: W = 114cm, D = 72cm, H = 58cm  
Weight: 80kg



Systea Scientific, LLC

# EasyChem *Pro*

R A N D O M   A C C E S S   A N A L Y Z E R



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