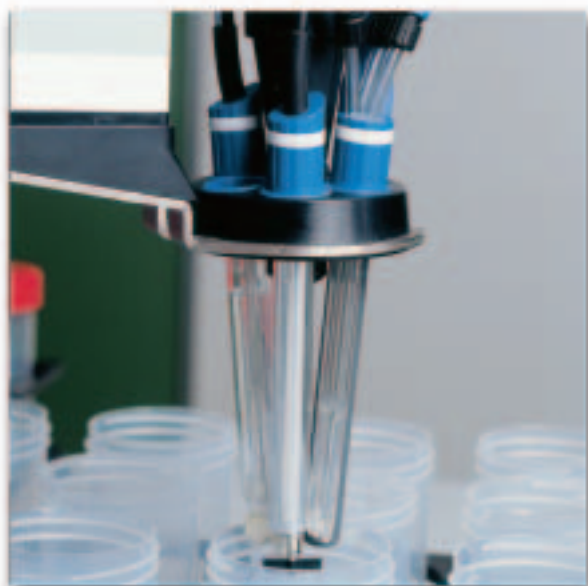


# Sample Changers for TitraLab® and MeterLab®

Automation:  
the key to efficiency  
in *YOUR* laboratory



***Under pressure to  
increase throughput?***

You need a large sample batch capacity.

***Can't predict the  
future?***

You need a system that is easy to upgrade.

***No time to waste?***

You need quick exchange of prepared trays.

***More important  
things to do?***

You need unattended sample handling, even overnight.

# Effortless sample handling...

Radiometer Analytical sample changers ensure reliable and convenient sample handling whatever the number and type of analyses. Whether you choose the SAC80 or SAC90, our sample changers work tirelessly for you.

## SAC90 Sample Changer

### **High sample throughput**

Up to 126 samples can be handled automatically in a single run depending on the tray and number of extension tables mounted.

### **Time and cost-saving operation**

Thanks to its large sample capacity, valuable manpower can be released for more important tasks while the SAC90 gets on with the job – day and night. Removable trays mean samples can be prepared away from the sample changer and quickly exchanged when the current batch is finished.

### **Great flexibility**

In conjunction with one of our Titration Managers and PC titration software, you can choose to perform different analyses in different beakers, add reagents automatically, introduce a time delay, degas the sample - whatever your analysis requires.

### **Safe measurements**

To prevent contamination of unmeasured samples, the electrodes are moved by safe routes to and from the rinse beaker. Drips are virtually eliminated as the electrodes are raised from a sample. Up to three rinses can be selected for further security. As for all our electrode heads, easy-slot bayonet sockets keep all electrodes and accessories firmly in place.

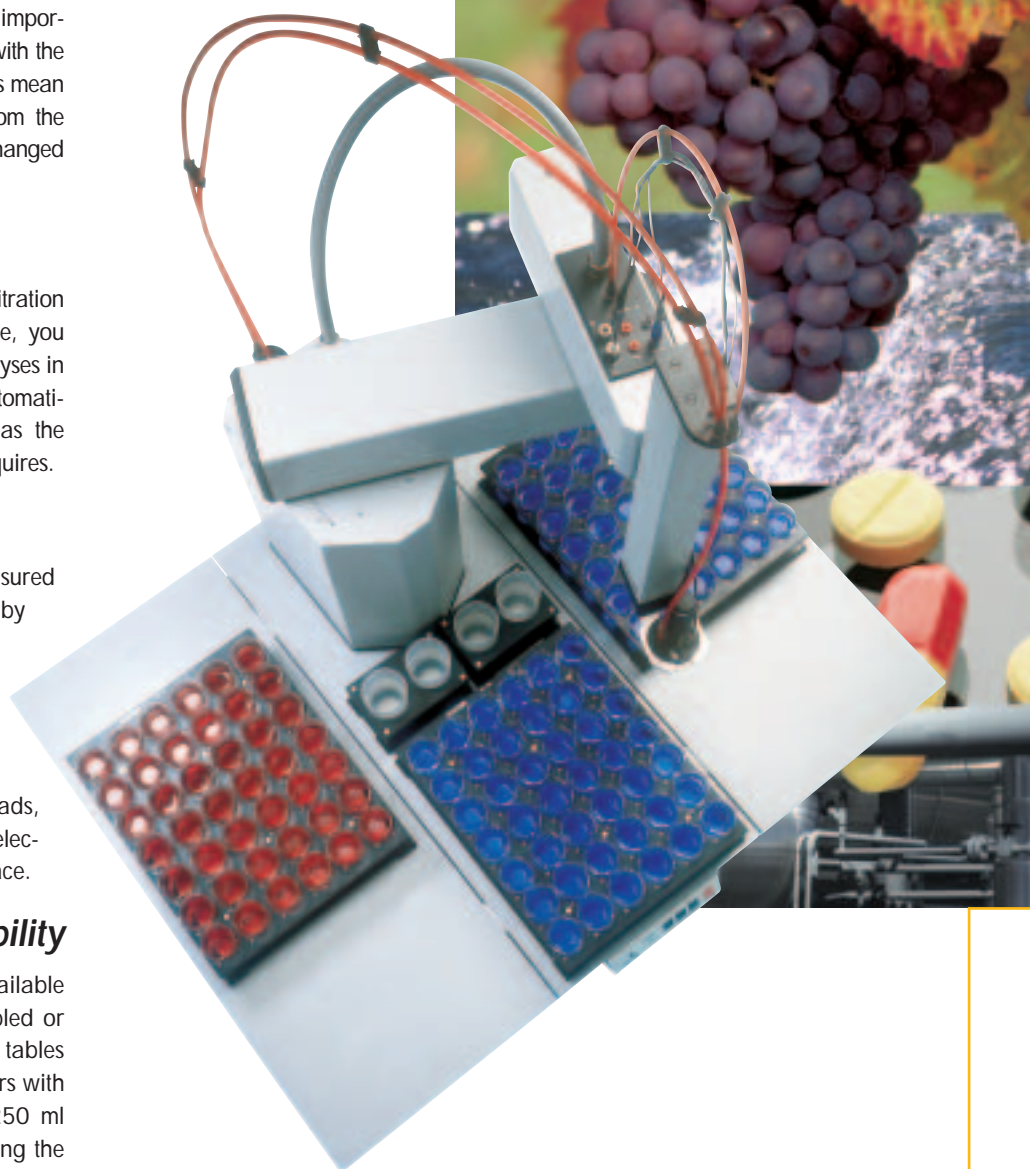
### **Expandability and adaptability**

12, 20 or 42-position trays are available and sample capacity can be doubled or tripled by adding one or two side tables as your workload increases. Beakers with volumes varying from 50 ml to 250 ml can be analysed by simply changing the tray and electrode head.

### **Make the right choice for**

When you are expected to handle increasing the number of operators automation is your only solution.

Our sample changers are capable of titrations, direct pH, pX and conductivity measurements efficiently. Add a titrator or a direct measurement module without PC software selected from our range and your laboratory will virtually



...through total automation

## your laboratory

more and more samples without  
or the size of your laboratory,

of handling multiple combinations  
ductivity measurements fast and  
t measurement meter with or  
our complete laboratory product  
ually run itself!

## SAC80 Sample Changer

### **Minimum bench space and maintenance**

The SAC80's compact design means it takes up very little space on your bench - only 0.2 m<sup>2</sup>. What's more, it's easy to keep clean and all electromechanical parts are maintenance free.

### **Safe and flexible electrode head**

The unique bayonet concept is designed to keep electrodes and delivery tips securely in place. This helps to ensure reproducible results and safe handling and allows any combinations of electrodes, temperature sensors and delivery tubes needed for your analyses.

### **Full automation**

10, 15 or 20 positions can be handled automatically in each run depending on the turntable and the number of rinses selected. Beakers with volumes varying from 400 to 25 ml can be analysed by simply changing the turntable and the electrode head.

### **Ease of use**

Sample preparation and collection are effortless thanks to the removable turntable. And, when used with one of our Titration Managers and PC titration software, the SAC80 lets you carry out specific analyses in different beakers.



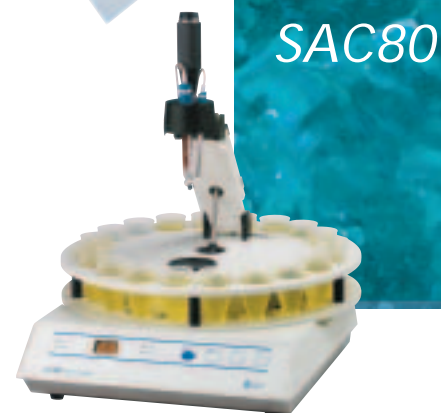
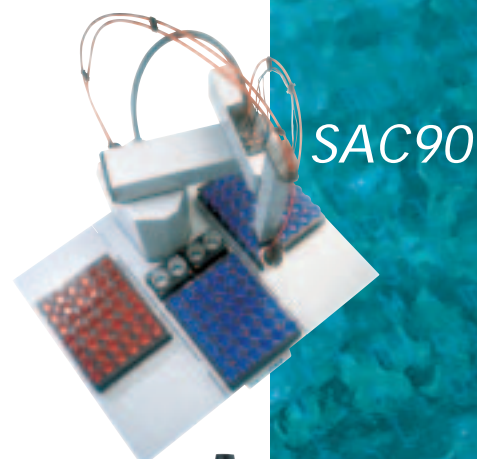
## A complete solution

### **All the elements are provided for a fully functional system**

- A sample changer with cables and accessories for installation
- A versatile bayonet electrode head support with a full set of adapters
- A propeller stirring kit
- A sample tray with a set of polypropylene beakers
- A long tubing for connection to your burette stand

## Technical specifications

SAC90	SAC80
<b>Sample capacity</b>	
From 12 to 126 samples depending on the table setup and sample tray/sample volume used	From 10 to 20 samples depending on the sample tray/sample volume used
<b>Electrode head capacity</b>	
Maxi: 6 x 12 mm	Maxi: 6 x 12 mm
Macro: 3 x 12 mm + 3 x 7.5 mm	Macro: 3 x 12 mm + 3 x 7.5 mm
	Standard: 2 x 12 mm + 3 x 7.5 mm
<b>Rinses</b>	
1, 2 or 3 rinses and 1 park position	1, 2 or 3 rinses
<b>Stirring</b>	
Propeller stirrer	Propeller stirrer
<b>Finish</b>	
Chemical resistant splashproof cabinet	Chemical resistant splashproof cabinet
<b>Inputs/Outputs</b>	
RS232C Serial interface for connection of control unit	RS232C Serial interface for connection of control unit
Power socket for connection of the propeller stirrer	Power socket for connection of the propeller stirrer
2 sets of BNC sockets for connection of electrodes and temperature sensors for signal transmission to final input	
<b>Dimensions (H x W x D)</b>	
1200 x 485 to 1010 x 1050 mm	470 x 410 x 480 mm
<b>Weight</b>	
29 kg	12 kg
<b>Power requirements</b>	
47.5 – 63 Hz, 65 VA	47.5 – 63 Hz, 34 VA
100/240 Vac ±10%	115/220 Vac ±15%
<b>CE marking</b>	
Complies with EMC directive 73/336/EEC	Complies with EMC directive 89/336/EEC
Complies with LV directive 73/23/EEC	Complies with LV directive 73/23/EEC
Complies with Machine directive 89/392/EEC	
91/368/EEC, 93/44/EEC	
<b>Environment for use</b>	
5 to 40°C ambient temperature	5 to 40°C ambient temperature
20 to 80% relative humidity	20 to 80% relative humidity



### Ordering information

#### SAC90 Sample Changer

SAC90, 230 V

SAC90, 115 V

Kit, 12-position tray for SAC90, beakers 250 ml Ø75 mm, low form.

Kit, 20-position tray for SAC90, beakers 150 ml Ø64 mm, low form.

Kit, 20-position tray for SAC90, beakers 100 ml Ø54 mm, PP beakers.

Kit, 42-position tray for SAC90, beakers 50 ml Ø43 mm, PP beakers.

#### Extensions

Side table complete

Tray 4 x 3 (250 ml)

Tray 4 x 5 (150 ml)

Tray 4 x 5 (100 ml)

Tray 6 x 7 (50 ml)

#### SAC80 Sample Changer

SAC80, 230 V

SAC80, 115 V

Kit, 10-position turntable for 400 ml glass beakers, tall form.

Kit, 10-position turntable for 250 ml glass beakers, low form.

Kit, 15-position turntable for 150 ml glass beakers, low form & 100 ml PP beakers.

Kit, 20-position turntable for 50 ml glass beakers, low form, 45 ml PP beakers & 25 ml PP beakers.



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