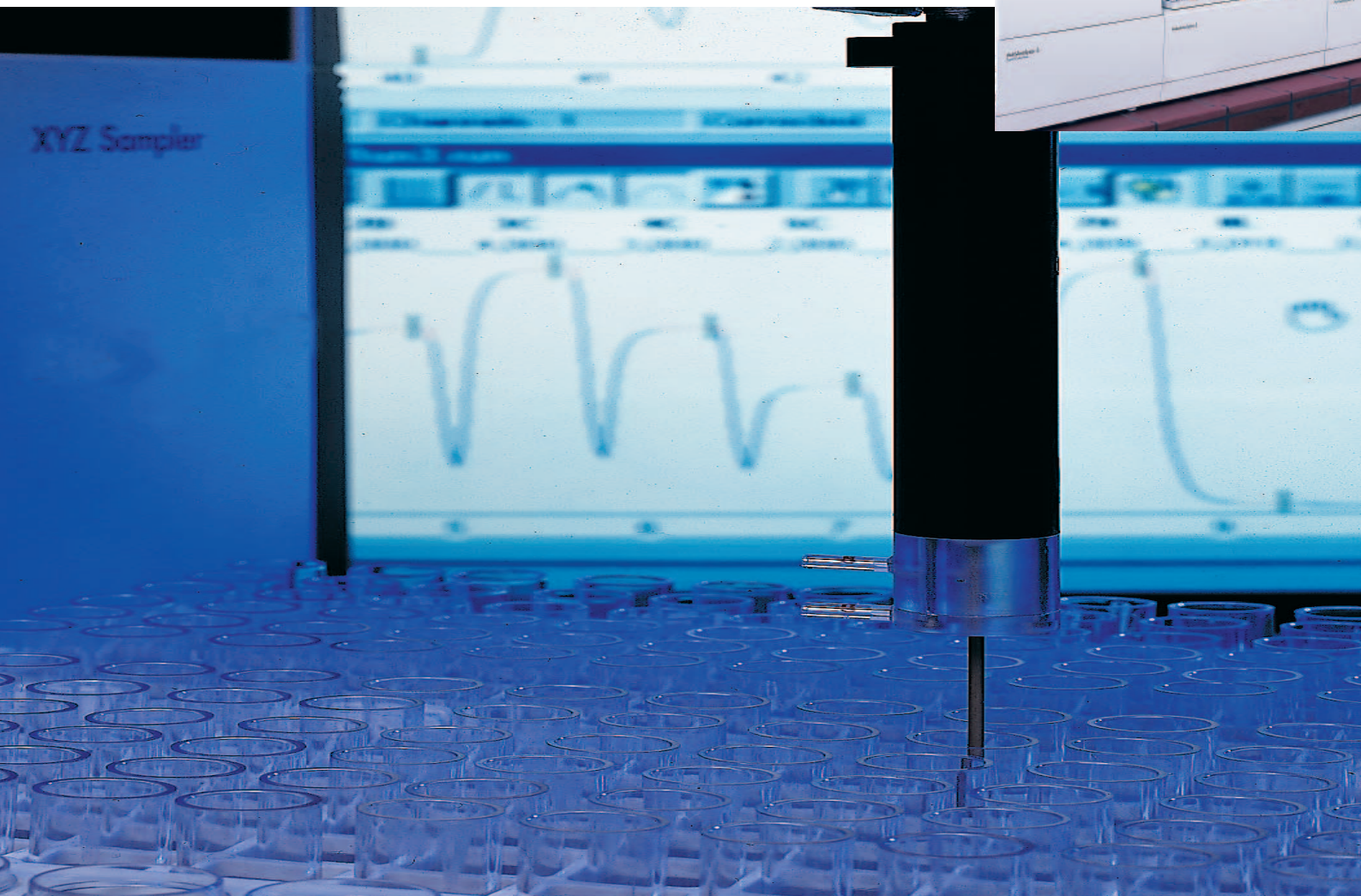


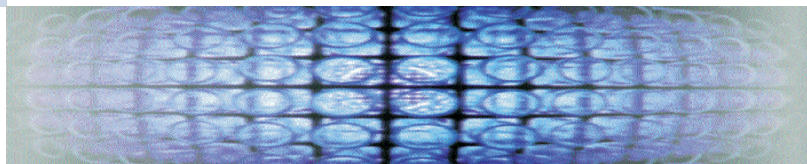
# AACE SOFTWARE

AUTOANALYZER CONTROL AND EVALUATION SOFTWARE  
FOR ALL CONTINUOUS-FLOW ANALYZERS



# AACE for Windows

Powerful, easy to learn, easy to use



**AutoAnalyzer Control and Evaluation software for all continuous-flow analyzers.**

**For large or small systems and high or low workloads: AACE makes daily operation quicker and easier.**

**Designed with the input of scientists worldwide, AACE is written and supported by SEAL Analytical's team of programmers.**

## Powerful

### ■ Fast

AACE for Windows takes advantage of 32-bit architecture and the power in Pentium processors to speed up calculation and reporting. Even operators of small analyzers notice the difference.

### ■ Flexible

Other Windows applications can run in the foreground or background while an analysis is in progress. Windows' pre-emptive multi-tasking makes sure that the analyzer programs always receive the correct priority.

### ■ Compatible

AACE runs all current Bran+Luebbe continuous-flow analyzers and will be compatible with future systems.

### ■ Ideal for LIMS and networks

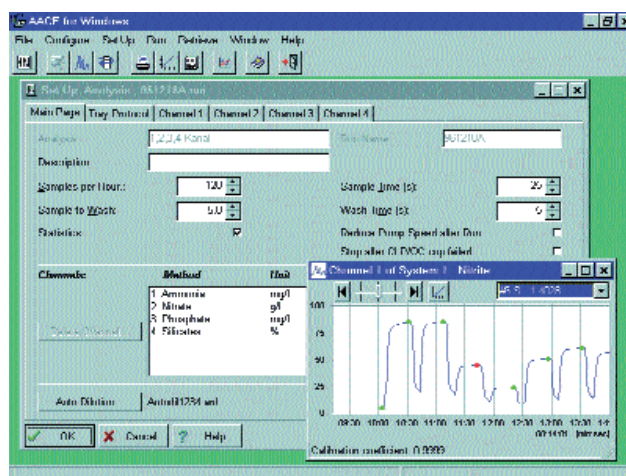
Networking and 2-way data transfer run using the standard Windows facilities, even during an analysis.

### ■ Expands to meet your needs

Two completely independent analyzers with up to 16 channels can run from one PC.

### ■ Powerful data handling

After a run you can make any change to calibrants, calibration fit or tray protocol and recalculate the results into a new file. It is possible to change the peak-picking parameters and re-run the entire analysis from stored data in a few seconds.



On-screen windows let operators set up the screen the way they like to work.

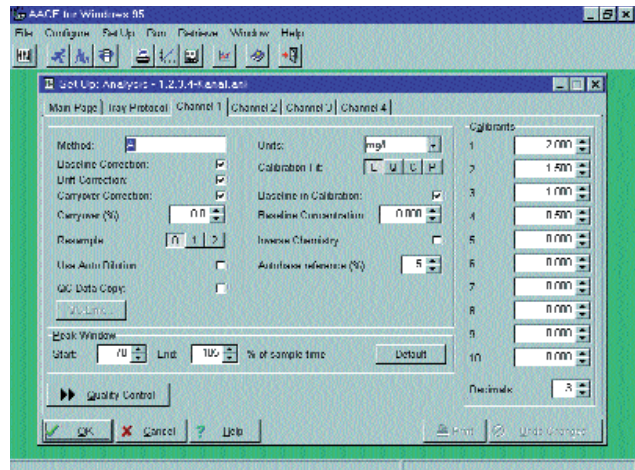
## Easy to learn

- **Only the options for your analyzer appear on the screen**

When you install AACE the software is configured to match your system: so if you have a 2-channel analyzer, only the options for 2 channels appear on the screen.

- **Full range of help**

AACE uses all the Windows' help facilities - hints, labels and fully indexed context-sensitive text. Just click on the Help button on each screen to go to the relevant place in the operating manual.

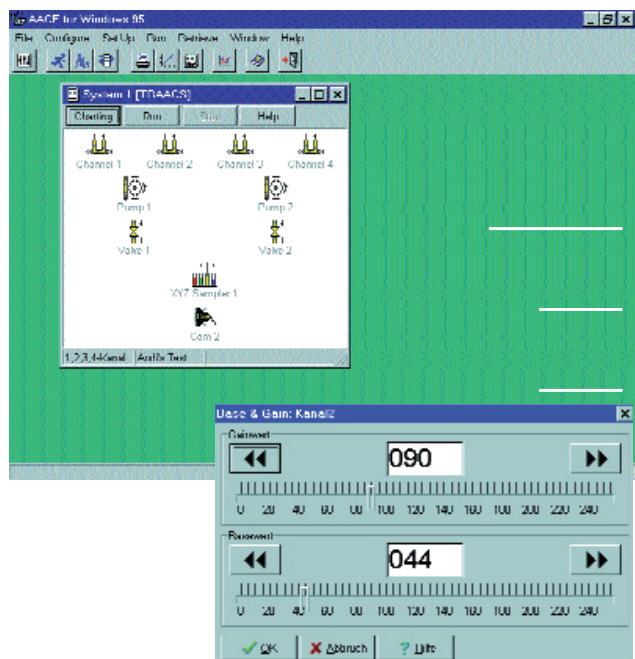


### Analysis set-up screen for a 4-channel system

The complete run data for one channel can be seen at a glance. Only fields where appropriate data entries are possible are lit. AACE checks for valid data before the file can be saved.

- **Stores your preferences**

A wide range of options for reports, automatic data transfer, display and system operation can be set to customize the software the way you like to work.



### Control screen system

Clicking on the colorimeter icon opens up the colorimeter control window. Baseline setting can be manual or automatic.

## Easy to use

### ■ Easy sample tray generation

Just click on easy-to-remember coloured symbols to create the sampling protocol.

### ■ 10-second quick start

When only the number of samples changes each day, the operator just enters the number and AACE works out the analysis details automatically.

### ■ Sample tray can be changed any time

If unexpected extra samples need to be analyzed, the tray can easily be changed as needed - even during a run.

### ■ Data can only be entered if applicable

If you select an option such as quality control or sample limits, the relevant part of the screen lights up. Otherwise it remains dim, so it is impossible to make an inappropriate selection.

### ■ Automatic file and sample naming

File names can be generated from the date, or from a user-defined template. A template can be used for sample names too, numbering upwards or downwards, with single or duplicate cups.

### ■ AACE remembers how you like to work

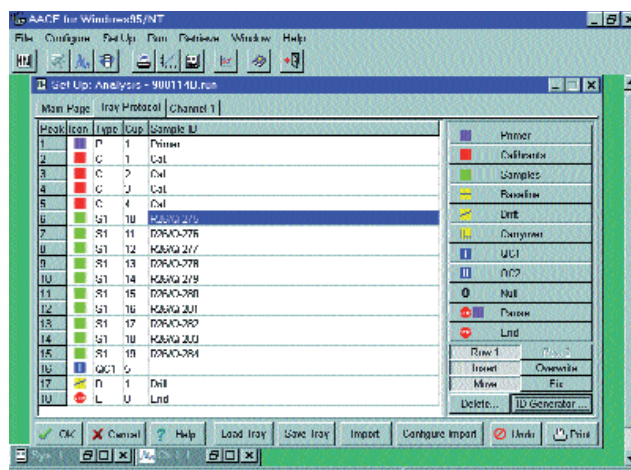
Facilities you use regularly, like printing a calibration curve or chart, can be programmed to run automatically.

### ■ Easy system control

To send a command to the sampler, pump, colorimeter or dilution valve, just click on the icon.

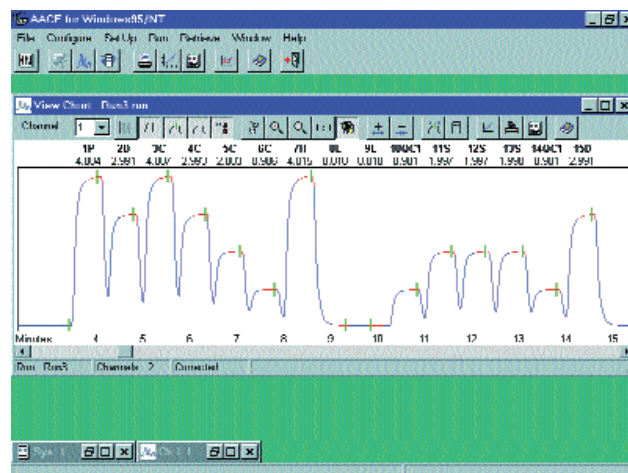
### ■ Real-time information

During a run, AACE displays the sample results, calibration correlation, sensitivity and other important information. Peaks can be printed in real time or after the run.



### Sample tray set-up screen for a 1-channel system

Different colours for each type of sample or standard show the run layout at a glance. Sample names and numbers can be downloaded or generated automatically. An Undo button makes it easy to correct mistakes.



### Peak viewing screen

After a run, all peaks, results and raw data can be recalled. Markers show which part of each peak was used for height averaging, and the position and value of the chosen peak height marker. The peak marker can be moved manually: moved markers are shown in a different colour and flagged in the database.

## Quality control

### ■ Check standards

AACE recognizes ten different quality control standards, for checking the calibration and the reproducibility and accuracy of results.

### ■ Results are checked during the run

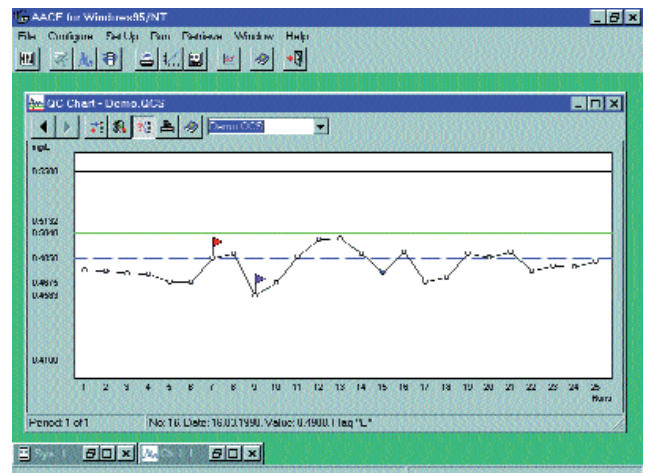
As each standard is analyzed, AACE compares the result to its specification. If there is a problem, AACE shows a warning; the user can choose to ignore it or to stop the run, manually or automatically.

### ■ Post-run reporting

After the run, AACE shows the limits for the QC standards and prints a symbol to show at a glance whether each one passed or failed.

### ■ QC charts

The results of quality control standards are automatically transferred to AQC-specification charts which show warning and control limits and calculate the mean, standard deviation, maximum and minimum of the QC results. Flags indicate when a QC cup exceeds a control limit, when 2 out of 3 successive results exceed a warning limit, when 7 successive results show a rising or falling trend, and when 7 successive results are above or below the mean.



Quality control chart

## LIMS connection

### ■ Data transfer

User-selected data can be automatically transferred to an internal or network drive at the end of an analysis, in text or Excel format. Sample names can be imported from a central computer.

### ■ Networks

AACE is compatible with all Windows-supported networks.

User-selection for data export

# AACE SOFTWARE

## AACE GLP

This special Good Laboratory Practice version of AACE was developed for laboratories needing to meet the requirements of 21 CFR Part 11 and other audit or accreditation programs. The key features are:

### ■ Date protection

Data are protected from change. All changes are stored in a separate file with a unique name. If required, run data can automatically be transferred to a server and deleted from the local PC after a run.

### ■ User and activity identification

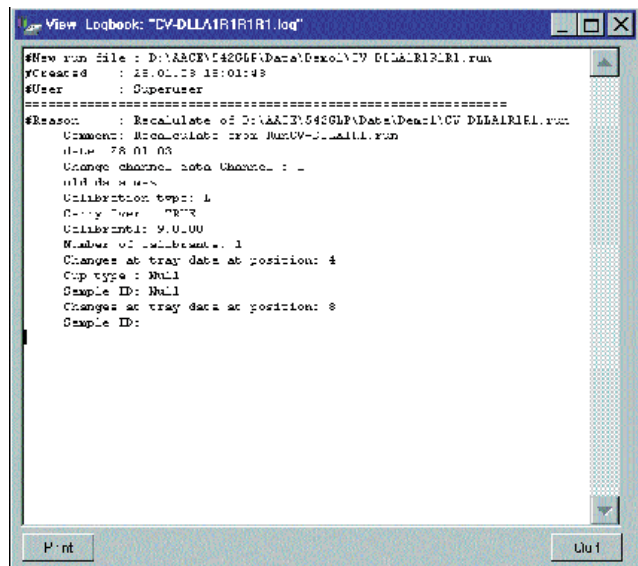
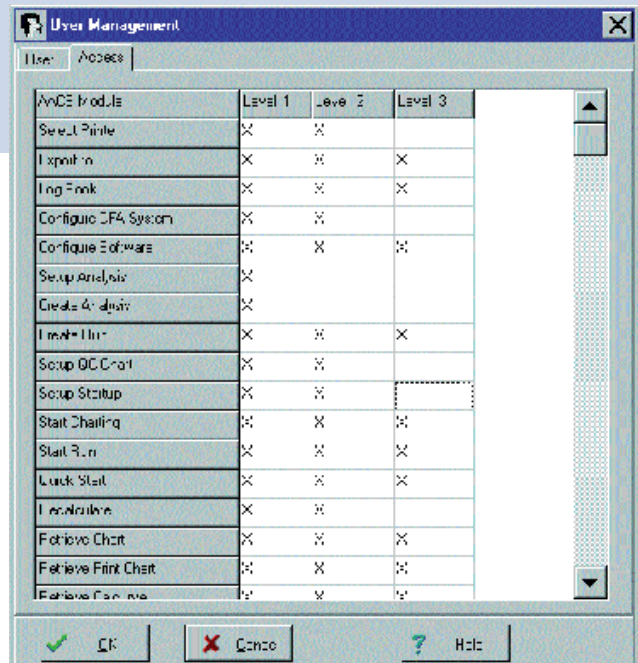
Users must log on using a password with an administrator-defined expiry period. Each user is assigned to a user level, and the access rights for each level are completely selectable by the administrator.

All log-ins and system functions are stored in a system logbook which is encrypted and checksum protected.

The system can be set to automatically log off users after a defined period of inactivity.

### ■ Audit trail

Each run has an attached logbook file which records any changes and the person who made them.



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