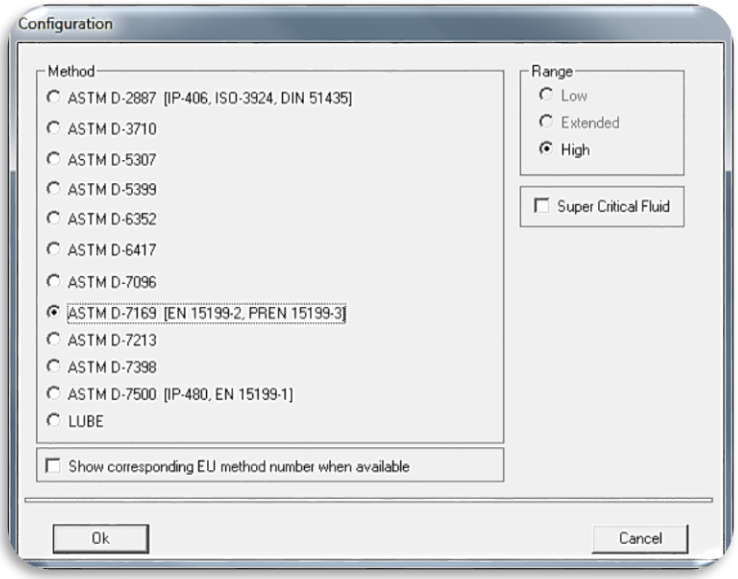
Separation Systems, Inc.
Experts in Gas Chromatography

SimDis® Expert

Unleashing the Power of Simulated Distillation

SimDis® Expert Software

Highlights of SimDis® Expert

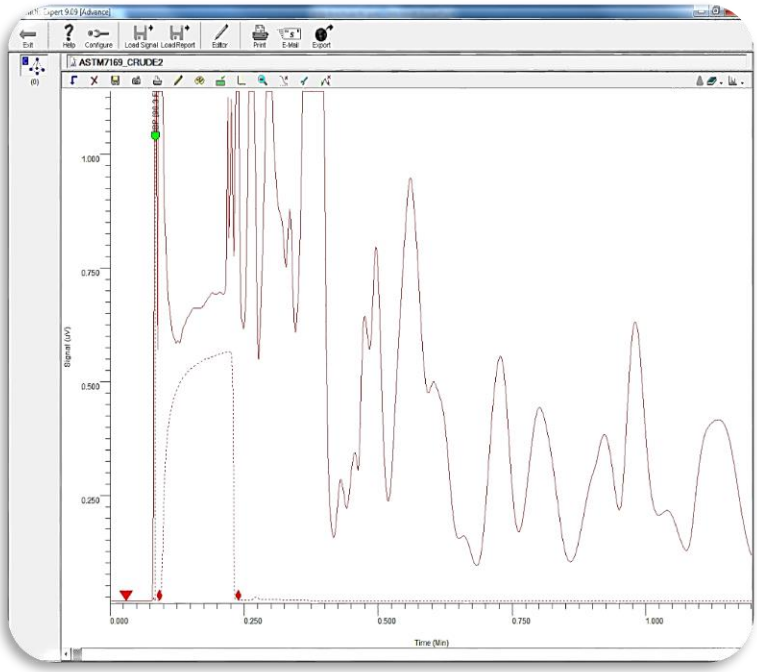


Always up-to-date

Test methods are added to the software as soon as they are approved or proposed by ASTM or other international standards organizations

Solvent Quenching Tool

The software has an algorithm to auto-detect the quenching window which changes as the column ages. However, the start and end of elution of the solvent peak can be easily adjusted using the graphic interface



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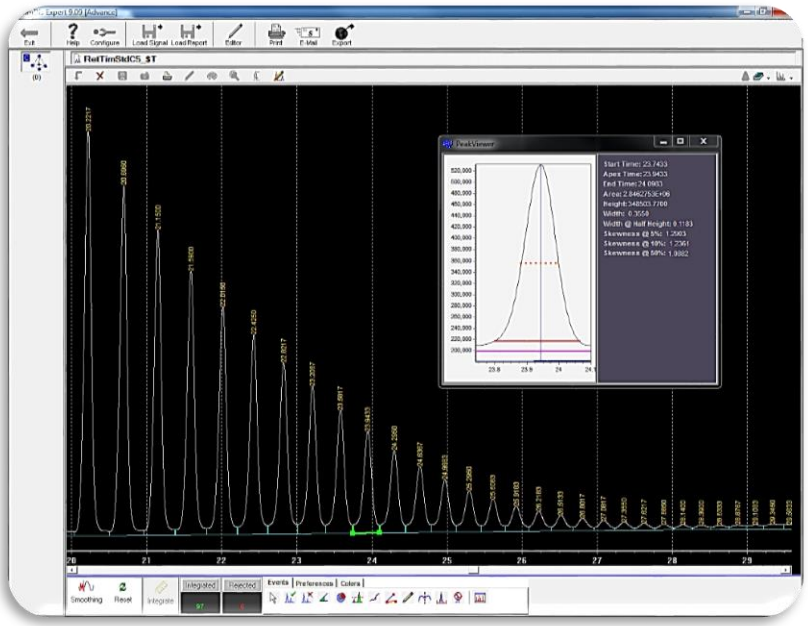
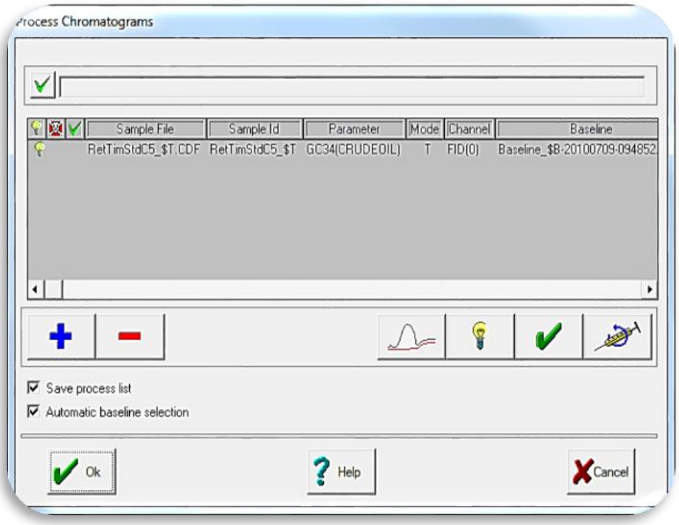


Peak Integration

With the built-in integrator, making adjustments to the integrated peaks is simple. There's no need to switch out to the GC data acquisition system. This is useful when handling retention time calibration standards containing heavy carbons such as n-C110 and n-C120

Automatic Baseline

When loading a signal for interactive analysis, the software can automatically locate the most suitable baseline.
When the software operates unattended (automatic execution after each injection) the user can define whether samples should be corrected using the baseline obtained prior to the sample or using one acquired at a later time.



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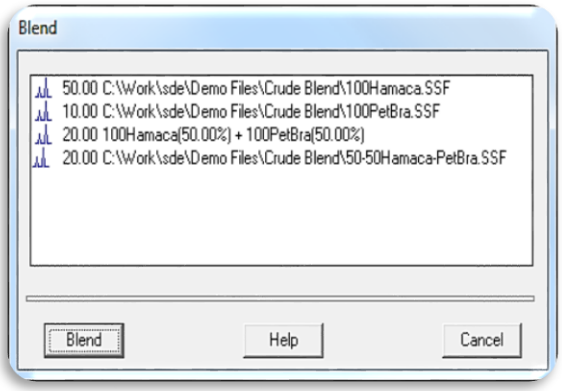
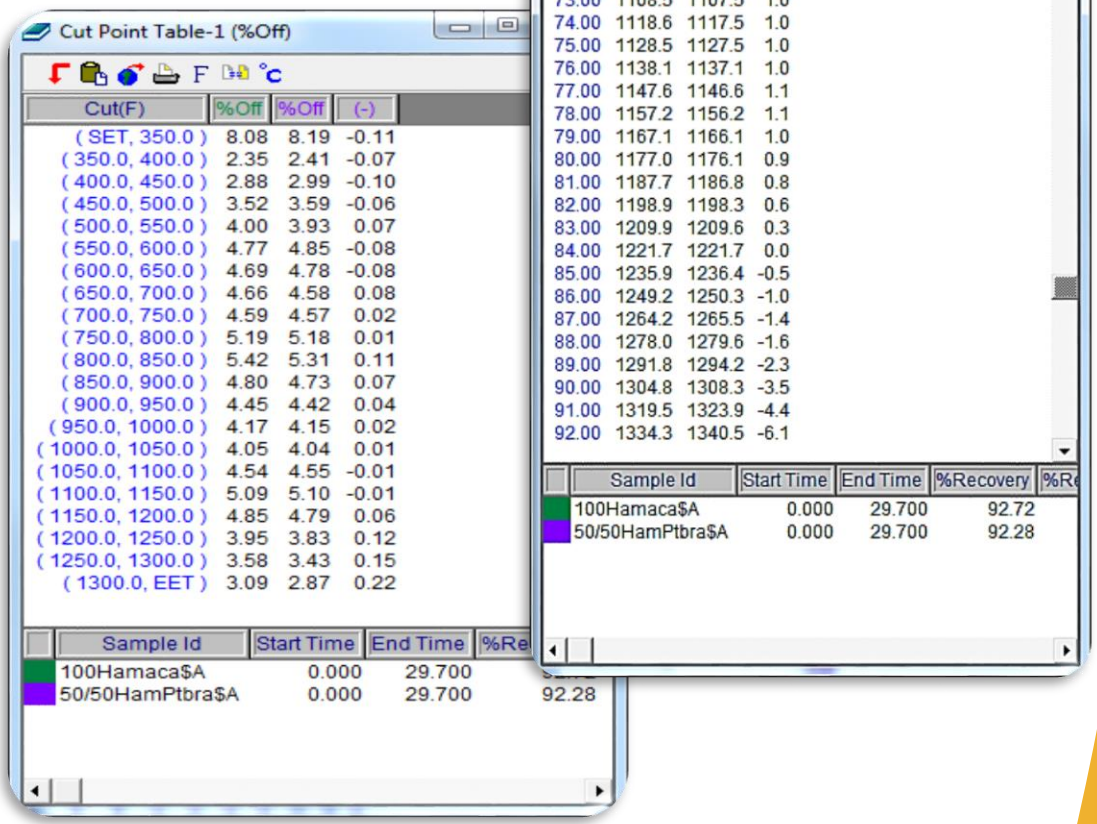


Blending Simulation for Crudes and Fully Eluting Samples

Save time and money by simulating the gravimetric blend of up to 20 samples. With a single click of the mouse the software creates a virtual signal that has similar properties of the simulated gravimetric blend..

Accuracy of simulated blend (**green**) vs. actual blend (**purple**)



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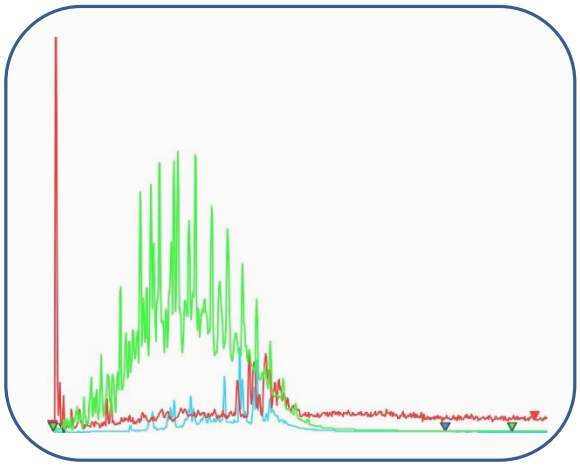
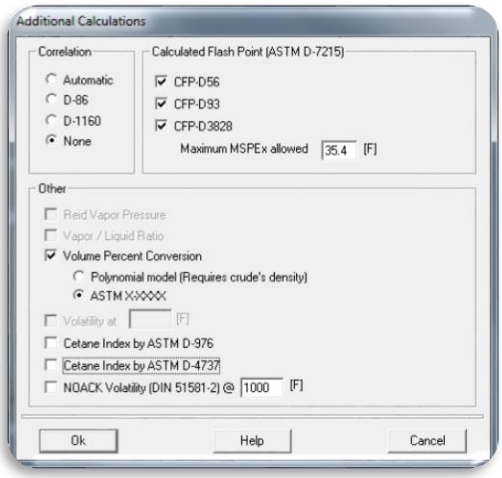
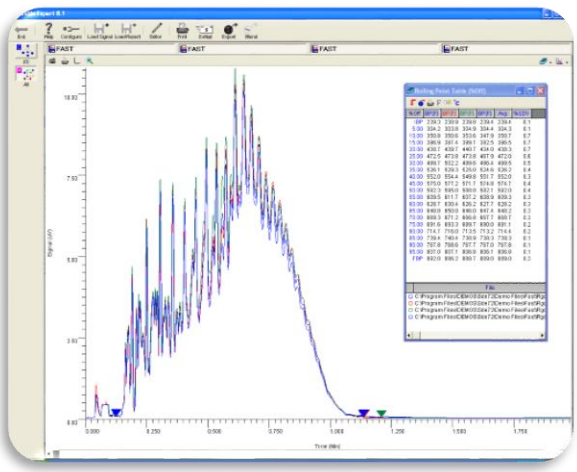


Multi-Signal Capability

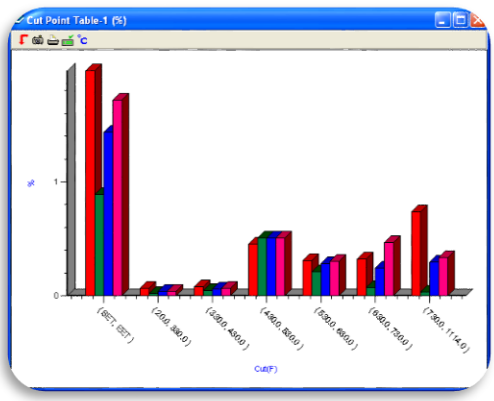
Seamlessly handle signals from multiple detectors. Extend traditional simulated distillation to sulfur, nitrogen, hydrogen, metals, etc. Extend your results with addition calculations and user-define formulas





Exceptionally Easy to Use

Highly intuitive graphic interface makes it easy to review data, compare signals, generate plots and utilize custom calculations.



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Key Capabilities Summary

- ✓ All the simulated distillation methods are supported in one application
- ✓ Support of additional calculations: User defined cut points, user-optimized D-86 & D-1160 correlations, Liquid / Vapor ratio, Reid Vapor Pressure, Motor Oil Volatility
- ✓ On-screen peak identification. This feature allows the user to visually verify and correct time calibration. The retention time chromatogram is displayed on the screen with components' name on the apex of each identified peak. No typing is required to make corrections
- ✓ On-screen sample analysis. Sample chromatograms, calculations and plots are displayed on the screen.
- ✓ Customizable printed reports
- ✓ Users and access levels can be defined for security purpose.
- ✓ Multiple stored reports can be compared, both on screen and on paper, against the sample being analyzed.
- ✓ Several chromatograms can be overlaid in the analysis mode
- ✓ Automatic update of all the calculations and plots when the start or end of elution mark is changed on screen.
- ✓ Automatic adjustment of the elution detection algorithms. While in the on-screen sample analysis mode, the software can be instructed to learn the user defined elution marks
- ✓ Blank chromatogram can be changed or removed while analyzing a sample
- ✓ Customizable boiling point table. Any percent off can be added or removed from the table
- ✓ Customizable resolution points
- ✓ Expanded integration parameters
- ✓ Special baseline algorithm enhances the shape of the blank signal before is subtracted from the sample chromatogram
- ✓ A new algorithm for samples with slow elution can be used instead of the ASTM procedure
- ✓ End of sample can be set based on the retention time of the last carbon in the calibration
- ✓ The option to zero the signal or shift the chromatogram can be defined for negative time slices
- ✓ User-defined correlation points can be added and optimized
- ✓ Carbon numbers can be used to define cut points
- ✓ Carbon number versus percent off can be plotted
- ✓ Volume calculations for crude samples
- ✓ Customizable ASCII reports
- ✓ Customizable on screen color layout
- ✓ Multi-Channel ready. Different types of signals can be handled on the same session: Carbon, Sulfur, Nitrogen, Hydrogen, etc.
- ✓ Sample blending simulation
- ✓ Boiling point correction by Detailed Hydrocarbon Analysis (via Merge Expert included in Advanced Version)
- ✓ Calculation of average and percent standard deviation during report comparison
- ✓ Multiple cut point tables
- ✓ Cut points can be labeled
- ✓ Graphic view of cut point tables: Bar and Line charts
- ✓ Views can be sent to Clipboard or Windows Enhanced Metafiles
- ✓ Baseline signal can be viewed with sample signal
- ✓ ASCII reports can be sent to another application
- ✓ Special application can be executed automatically on QC failure
- ✓ Results can be exported to MS Excel (requires MS Excel)
- ✓ Average and standard deviation can be calculated when comparing results
- ✓ Ratios can be used when comparing results
- ✓ Built-in peak integrator
- ✓ Interactive distillation. Displays the percent distilled and temperature in any point of the signal chromatogram.
- ✓ NOACK volatility calculation by DIN 51581-2
- ✓ Measures skewness of multiple peaks
- ✓ Measures response factors of multiple components
- ✓ New ASTM D7096
- ✓ CETANE Index by ASTM D-976
- ✓ CETANE Index by ASTM D-4737
- ✓ Calculated Flash Point
- ✓ Custom calculation formula editor
- ✓ The report comparison can be exported to ASCII or MS Excel
- ✓ **And more……**

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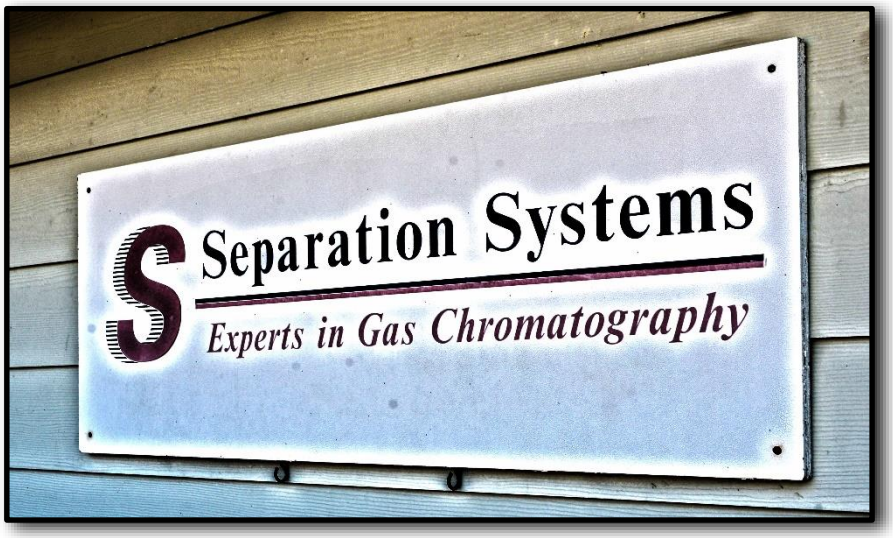
For additional information please contact us:

Phone: 800-340-3302
E-mail: sales@separationsystems.com



Or visit us at www.separationsystems.com

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