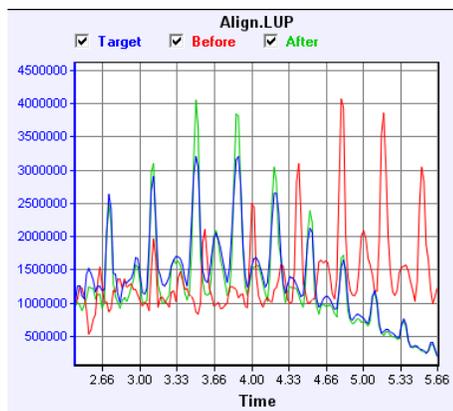


## Infometrix LineUp v.3.5 Chromatographic Data Alignment Software

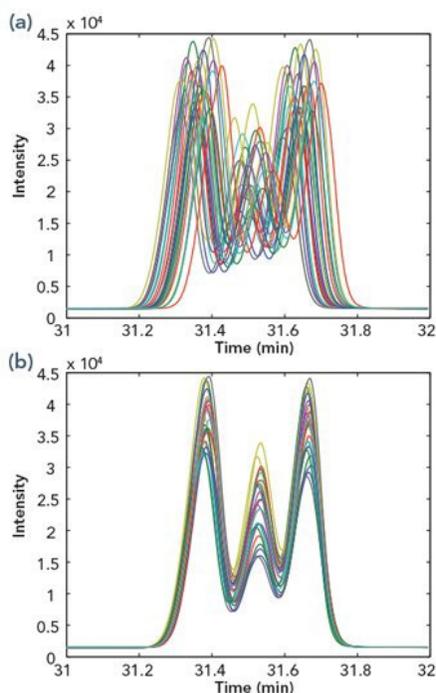
Infometrix LineUp™ creates a more precise and predictable gas chromatography experience, while boosting productivity and reducing costs.

The measurement of retention time variation is the essence of GC analysis. As analyses move toward a more routine quality control or process environment, maintenance of retention time reproducibility in chromatography becomes a challenge. Recent changes to chromatographic hardware alleviate the problem to some extent, but GC column aging, column loading, changes in sample flow and other factors can cause variations in retention time that are not indicative of real variation in the substance measured.



These **retention time shifts** can cause false identification of chromatogram peaks, which, in turn, can spawn inaccurate analysis. This often forces the processing of samples to be interrupted. Production is slowed or stopped. Errors

in production and quality management may result. Costs increase by the minute.

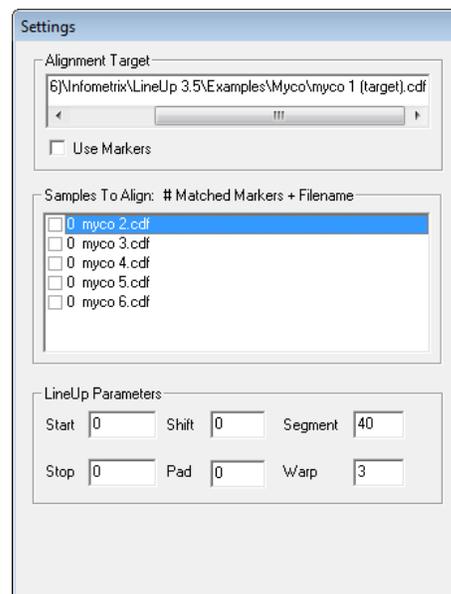


**LineUp software** is a tool for adjusting retention times that does not require any prior information. Using a multivariate correlation method, LineUp will adjust a chromatogram's retention axis to more closely resemble that of a target chromatogram.

This process also produces accessible data that allow the user to **measure column degradation** and **predict when the column should be replaced**. In the meantime, LineUp will continue to automatically correct any retention time shifts due to column aging.

In fact, the **service life** of columns and other components that may inadvertently impact retention time variance as they age can be **extended**, adding significant **replacement cost savings** to the **predictive maintenance** value of LineUp.

LineUp can be run manually, but is also designed to run invisibly. The user needs only to specify the alignment standard and place a call to LineUp in the chromatographic software. When LineUp has finished, it writes a new, aligned file, in the same format of the input data.



And with LineUp in the software bundle manual adjustments to correct for retention time shifts are eliminated. The speed and efficiency of the measurement process are increased significantly, as

well as any process decision dependent on the GC measurement.

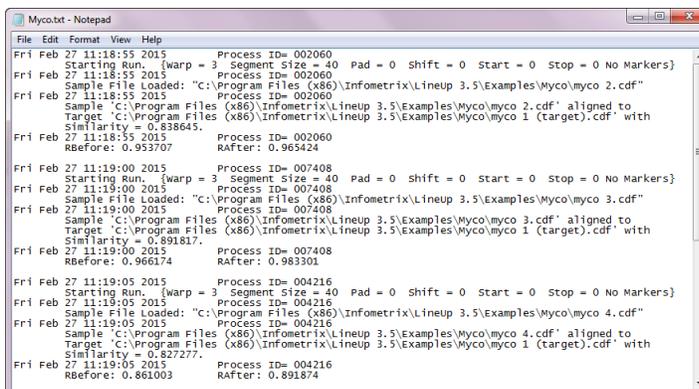
Production, quality assurance, feedstock and operating costs are all positively impacted by the addition of the LineUp software to the system. When used in combination with pattern recognition LineUp may even eliminate the need to review chromatograms in many routine analyses.

LineUp is very economical to purchase and requires no specialized computer hardware or training. When you measure LineUp's productivity boosting and cost-saving benefits against the software's minimal purchase and implementation costs you will realize an **amazing return on investment**.

LineUp works with a wide range of GCs, chromatographic software systems and PC operating systems. Visit our website <http://www.infometrix.com> to see LineUp applications in process and laboratory settings and to see how the software is used in the petrochemical, pharmaceutical and food industries.

You can purchase **LineUp** software direct from **Infometrix** or ask your GC maker to add **LineUp** to your GC software bundle before shipment.

To discuss the value of **Infometrix LineUp** software directly with our staff, please contact us using the information at the bottom of the first page.



```

Mycotxt - Notepad
File Edit Format View Help
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Fri Feb 27 11:18:55 2015 Process ID= 002060
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Fri Feb 27 11:18:55 2015 Process ID= 002060
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Target 'c:\Program Files (x86)\Infometrix\Lineup 3.5\Examples\Myco\myco 1 (target).cdf' with
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Fri Feb 27 11:19:05 2015 Process ID= 004216
Sample 'c:\Program Files (x86)\Infometrix\Lineup 3.5\Examples\Myco\myco 4.cdf' aligned to
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Fri Feb 27 11:19:05 2015 Process ID= 004216
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```

### LineUp Specifications version 3.5

Windows Vista, 7 – 512 MB+ RAM

#### Data File Formats Supported

Agilent 5890, 6850, 6890, 7890 (\*.CH)

ChemStation format

American Instrument Association (AIA;

\*.CDF) format

Thermo GRAMS (\*.SPC) spectral data format

Infometrix ASCII (\*.DAT)

#### Automating Alignment

ChromPerfect by Justice Laboratories

Chemstation System Version A.06 or later, 16– and 32-bit

EZChrom Elite System Version 3.1.4 or later, Version 3.3.1 or 3.3.2 for integration into Elite or Enterprise.

Instructions included for integration with Agilent, Thermo, PerkinElmer, Siemens and Waters software.

