The Solution for Concentration Measurements

Value Proposition

Compared to a traditional UV-Vis spectrophotometer, the *SoloVPE* saves both time and money with each measurement. With a typical ROI of 27% the SoloVPE investment will be paid off after a few months of use.

Real Time Savings:	
Time Savings for Production Runs: *Estimate Per Batch*	**11 Hours**
Time Savings Per Sample: *Compared to Previous Method*	**2 Hours**

Real Financial Savings:			
($) US Dollars	**Standard UV**	**SoloVPE**	**Savings/Year**
Hardware	$4,250	$10,200	($5,950)
Direct Indirect	$30,000	$1,500	$28,500
Indirect Labor	$180,000	$18,000	$162,000
		Total Financial Savings:	**$184,550**

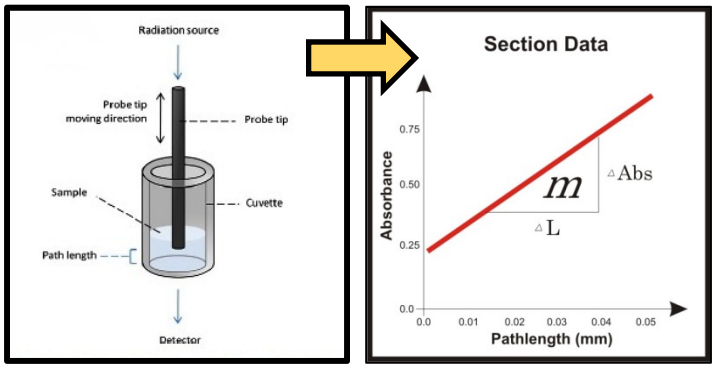
*Example based on 300 samples per year and 5 yr. depreciation model.

Rapid In-Process Sample Testing

The *push-button SoloVPE System* provides accurate concentration measurements in ***under a minute*** while comparable UV methods may take ***over two hours***. This difference translates into less time spent on cumbersome in process checks and more time spent confidently making product.

Principle of Operation

The SoloVPE is the newest evolution of UV-Vis spectroscopy. It uses a precision linear stage to rapidly collect variable pathlength *Section Data* (Absorbance/mm) from which Slope and R^2 values are determined. The Slope value is used to accurately determine the concentrations of neat samples quickly and without dilution error.



$$m = \frac{\Delta Abs}{\Delta L} = \varepsilon c$$

Straightforward Validation

Because the SoloVPE System is at its core a UV technique, validation of the instrument & methods is straightforward. SoloVPE methods are readily transferrable from site to site or from manufacturer to CMO. Security software is available for 21 CFR Part-11 compliant installations.

The *Table* below is a snapshot of actual intermediate precision data generated by (3) **three analysts** testing identical lot samples on (2) **two different** SoloVPE systems. The SoloVPE *%RSD* tolerance is ± 2% from user to user and system to system.

Intermediate Precision Sample Data Taken from a SoloVPE UV Validation						
1A	**1B**	**1C**	**2A**	**2B**	**2C**	**%RSD**
261.58	261.98	260.80	260.44	262.01	259.92	**0.80**
129.12	129.27	130.63	128.41	129.38	129.35	**1.16**
71.72	72.18	71.44	71.03	71.49	71.50	**0.96**
34.69	34.78	34.60	34.61	34.79	34.61	**0.52**
2.94	2.95	2.95	2.95	2.93	2.94	**0.68**
1A through 2C values presented in mg/ml						
Number represents system - Letter indicates chemist						

Universal Platform

The SoloVPE system is capable of analyzing samples across a wide range of target concentrations without the need for labor intensive and error prone dilutions. By using *Slope Spectroscopy®* methods, companies can now deploy a universal platform from Discovery to QC.

For More Information

For more information or to schedule a demo/presentation of the SoloVPE Variable Pathlength Technology contact:

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