

TWO PROVEN WAYS TO HELP SOLVE ONE COMMON PROBLEM



Up to 80% of all analytical instrumentation issues can be traced to faulty sampling systems. Many industry experts, however, believe that percentage is much higher because of the inherent difficulty in identifying exactly where troubles exist. And even though process analyzers have greatly evolved, sampling systems aren't much different than they were 50 years ago.

SO, what's the solution? *There are actually a few:*

Sampling System Evaluation

Bring Swagelok Field Engineers into your facility to help determine the causes for time delay that lead to inadequate process control. Sometimes, just a sampling system design adjustment is all that's needed. We can also assist you with finding the "right" analyzer technology to ensure that your sampling system delivers a healthy return-on-investment. Lastly, we can make certain that you obtain a truly representative and undistorted sample to satisfy your overall control objectives.



Analytical Instrumentation Training

Sampling System Problem-Solving & Maintenance (SSM): 2-Day Course

Ideal for technicians, maintenance personnel, and system engineers

- Know how to troubleshoot a vast variety of common sampling issues – process line through sample disposal
- Recognize and diagnose design flaws that cause excessive time delay and yield poor samples
- Get the formulas, calculations, and engineering principles that will greatly improve your current troubleshooting practices
- Understand how to optimally maintain your system – with fewer errors and better overall integrity



Process Analyzer Sampling System (PASS 1): 5-Day Course

Suited for system/design engineers, chemists, integrators, and highly skilled technicians

- Apply our expert design principles to prevent costly sampling system problems
- Know how a sampling system functions from the process line and tap through the transport lines and stream switching, sample conditioning, and analyzer/disposal procedures
- Find out how to identify the root causes of system design troubles
- Grasp how to ensure accurate process analyzer readings



Process Analyzer Sampling SubSystems (PASS 2): 5-Day Course

Meant for experienced sampling engineers, design engineers, integrators, and highly skilled technicians

- Develop an understanding of complex system subassemblies
- Master how to design and build subsystems into complete, optimized sampling systems
- Learn the five standard subsystems: Sample Extraction, Sample Disposal, Sample Conditioning, Calibration Switching, and Field Preconditioning



Analyzer Technician Training: 2-Day Course

Particularly relevant for those new to sampling... as well as analyzer and laboratory technicians

- Hands-on learning that will hone your ability to find and address root causes of challenges
- Evaluate an existing sample and apply acquired knowledge to reverse engineer a system
- Get the engineering principles, formulas, and calculations to eliminate system guesswork
- Among multiple other learnings, fully understand the severe and unsafe consequences of inaccurate sampling



For complete details on how we can keep you safer and more productive, contact:



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