

ThermoFisher
S C I E N T I F I C

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Advanced SOLA Training Agenda

Day One

- Introduction and lab safety presentation
- Advanced written examination
 - Set knowledge base bench mark.
 - Open discussion of test
- Review of SOLA II theory of operation
- Lunch
- Review of SOLA II mechanical/ electrical components
- Review of SOLA II maintenance
 - Valco valve
 - Pyrolyzer
 - Bench Assembly
- Leak Check of SOLA II in QC lab on operational SOLAII
 - Each student to perform

Day Two

- SOLA II Bench Cleaning
 - Review procedure for cleaning
 - Bench electronics diagnostics overview by Jim Knierien
 - Exercise - bench cleaning and bench preparation for testing on fixture. Two benches to outgas and stabilize for testing on third day
- Lunch
- SOLA II wiring schematics
 - Watlow circuit and overtemp protections
 - Watlow alarm wiring connections
 - Customer I/O connections
- SOLA II Communications
 - Overview of SOLA II Bridge Option
 - Terminal Mode Diagnostics
 - Firmware Update
 - Download CVS data file for evaluation
 - Overview of LookOut Workstation Software

Day Three

- Basic Sampling Systems Presentation
- Density Compensation Presentation.
- Sola Flare / CV Presentation.
- Bench Cleaning
 - Check out of cleaned benches from day two to verify proper operation
 - Apply cal gas to gather performance data
- Lunch
- Bench Cleaning (cont)
- Inject Valve timing change from 30 seconds to 1 minute & review of statistical data (Mike Landers PDF)

Day Four

- Exercise – Repair of Pyrolyzer assembly
- Discuss Watlow LOC 0 vs LOC 4 mode and possible filament burnout due to inadvertent changes.
- SOLA II Configurations and configuration spreadsheet
- Bench Cleaning
 - Gathering of bench data and analysis to verify adherence to performance specs
- Lunch
- Written exam
 - Retake and review discussion. Lead in for troubleshooting.
- SOLA II Troubleshooting – by Doug Frye and Alberto Pasquale
 - Electronics
 - Applications
- Course Appraisal