ABB PGC 2000 Advance Training Course Synopsis

ABB PGC 2000 Gas Chromatograph Training Course
ABB PGC 2000 Training Synopsis

Course type and Goal

This is an instructor led course with interactive class room discussions, presentations, and practical exercises.

This course will cover Theory, Operation and Maintenance of Gas chromatographs and sample conditioning systems.

This course provides knowledge of the functional capabilities of ABB Gas chromatographs PGC 2000.

Learning Objective

Upon completion of this course the participants will be able to,

- Understand Basic Gas chromatography.
- Different parts of Gas chromatograph.
- Understand PGC 2000 Operation.
- Identify PGC 2000 hardware components.
- Install /remove PGC 2000 hardwares / electronics.
- Analyze PGC 2000 Operation.
- Configure PGC 2000.
- Enter and Edit table/method.
- Perform normal maintenace & trouble shooting activities.
- Operate PGC 2000 with GCCRUI software.
- Identify the alarms and confirm the healthiness of PGC 2000.
- View chromatograph, reports and confirm that components are identified correctly.
- Perform regular maintenance & trouble shooting activities.
- Collect PGC 2000 backup.

Prerequisite

Students attending this course should have basic knowledge of gas chromatography.

Course Duration

The duration is 3 days.
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Day 1

PGC 2000 Hardware.

- PGC 2000 controller.
- Detailed study of controller hardware electronics components.
- PGC 2000 printed circuit boards.
- PGC 2000 sub-assemblies circuit boards.
- Chroma I/O board.
- Single board computer (SBC)
- SBC Details.
- Resetting SBC board.
- DTC back panel and temperature zones.
- How to use alarm status and LED information to troubleshoot problem.
- Temp zone board jumper settings.
- EPC Multi-Bus board.

- Electronics signal to DCS.
- Detailed study of different electronics signal components.
- Trend boards.
- Analog boards.
- Digital boards.
- VistaNET communication boards.

DTC Back Panel

- Two Sections
- Over Temp
- Temp Control
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Day 2

Status/Backup/Data collection.
- Analyzer status messages & Errors.
- History of results and chromatographs
- Save / Restore analyzer configuration.

Maintenance activities.
- Understanding PGC Application Test Data sheet
- Daily routine checks.
- Perform calibration.
- Perform Validation /Benchmark.
- Trouble shooting.

Electronics accessibility

PGC 2000 controller section.
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Day 3

Serviceability.

- LSV (Liquid Sample Injection Valve)
- LSV seal leaking symptoms.
- How to perform LSV Valve maintenance / Overhauling.

- Diaphragm valve (DV 22).
- How to perform DV 22 valve maintenance / Overhauling.
- Diaphragm leaking symptoms

- M2CP Valve. (Slider valve)
- M2CP valve (Slider valve).
- Replace 10 port slider.
- Replace Wedges/ red cushion.
- How to perform M2CP valve maintenance / Overhauling.

PGC 2000 Flow setup.

- Test data sheet.
- Checking PGC valve schematic.
- Set PGC 2000 pressure zone.
- Checking, Setting & Balancing Carrier Flows.
- Understand Sample injection, Backflush and selector valve function.
Training Fees / Terms & Conditions

Course Fee : 

Course Duration : 

Training Location:
- Tuition accommodates minimum 6 to maximum 10 students per class
- Comprehensive colored printed Training Manuals are included at no extra charge

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