

CUSTOMIZE YOUR CLASS

Please let us know what additional topics you wish included in your class, so we can completely address your Protec P3000(XL) Leak Detection requirements. (For example, you would like advice on how to select the values in addition to programming the settings.) We must receive your requests 3 weeks prior to the training, so we can prepare your workbooks. Please be advised that additional topics could extend the time required for the class and that additional charges may apply. We will advise you of timing and costs based on your specifications.

PRICE

1 Day\$ 3,500.00
 Additional Day (back-to-back)\$2,000.00

Price includes:

instructor travel, per diem & training class kit

- Registration form is required 4 weeks prior to the start of class.
- Purchase orders must be received 2 weeks prior to the start of class.
- A 25% fee is assessed for cancelling less than 5 business days prior to scheduled class.
- Written quotation available upon request.

REGISTER

For more information, to sign-up for a class, or to receive terms and conditions:

phone 1.315.434.2518
 or
 email reachus@inficon.com
 and put "Protec training"
 in the subject line

SERVICE TRAINING

Protec® P3000(XL)
 Helium Leak Detector



I. INTRODUCTION TO PROTEC P3000(XL) HELIUM LEAK DETECTION

Theory, Operation, Setup, Preventive Maintenance

Introduction

- leak detection techniques
- what is a tracer gas
- helium is the ideal tracer gas
- types of helium leak detection
- the sniffer method
- the fundamental concept of sniffing
- the Wise Technology™ sensor
- how the Protec® P3000(XL) works

Functional Description

- theory of operation
- components, power supply, cpu, pump, etc.
- operating modes
- valve sequencing

Operation

- video illustration
- hands-on operation

Protec P3000(XL) Setup For Your Application

- introduction to the technical manual/
spare parts list
- setting confirmation via reports
- how to program the settings:
 - gas equivalent
 - trigger values
 - search levels
 - leak rate units
 - zero, zero time
 - flow limits
 - stand-by delay optimization
 - contamination limit (function)
 - audio functions
 - display settings
 - I•Guide™ setup/editing (if used)
 - interface setup (if used)
 - RS232 protocol (if used)
 - miscellaneous settings

Protec P3000(XL) Accuracy Optimizing Functions

- how to proof calibrate
- how to calibrate
- how does Protec P3000(XL) + PRO-Check optimize calibration <temperature, elapsed time>
- how does Protec P3000(XL) know when to advise you to recalibrate

Maintenance

- how to replace sniffer tip filters <felt, sintered> and determine if re-calibration is needed
- how to clean the probe
- main unit exterior filter exchange
- main unit interior (Thomapor) exchange
- how to replace the PRO-Check gas reservoir

Using Stored History Lists To Analyze

Protec P3000(XL) Performance

- error list
- calibration history

ABOUT THIS CLASS

- 4 hour class
- customer provides leak detector and basic tools
- training certificates awarded at completion
- 6 students per class
- 6 training manuals included

II. ADVANCED UPTIME TECHNIQUES FOR PROTEC P3000(XL)

Troubleshooting, Error Simulations and Solutions, Teardown, Reassembly and Alignment

Use Of Troubleshooting / Repair Manuals

- errors and warning messages in format
- code description
- recommended actions
- repair instructions

Field Service Troubleshooting

- service experience
- correlation of feedback

Error Simulation and Solutions

- Protec P3000(XL) provided with multiple, prearranged conditions, that will generate error codes
- service personnel will diagnose, repair, or correct the Protec P3000(XL) trainer unit
- discussion of the error code generation, isolation, cause and effect

Teardown

- disassemble to component level
- fuse locations
- diaphragm pump rebuild
- reassembly procedure

Alignment of the Protec P3000(XL)

- pressure and flow using standards

Confirm Performance and Setting

- calibration
- information pages

ABOUT THIS CLASS

- 4 hour class
- INFICON Protec P3000 (XL) will be provided
- training certificates awarded at completion
- 6 students per class
- includes all training materials:
 - 1 Pilot® gauge with fittings; 6 training manuals;
 - diaphragm pump shims; 1 flow standard;
 - 6 tweakers; 6 chip extractors