

Advanced Maxum Edition II Operation & Maintenance Course (SC-C-MAX2)

Short Description

This course covers more in depth operation, maintenance and calibration of the Maxum Edition II Gas Chromatograph and operation of the Maxum Workstation including GC Portal.

Objectives

The course is intended for individuals responsible for maintaining, calibrating and upgrading the Maxum Gas Chromatograph.

Content

Recap on chromatography basics

- Why a blend of components can be separated and detected as a combination of single peaks
- Parameters for optimal separation
- Back-T & Live-T valveless switching

MAXUM - Physical Structure and Electronic Design

- Hardware modules, Electronic Enclosure, Analytical Oven
- Safety relevant guidelines and safe operation of the analyser in possible explosive atmospheres.
- Maintenance

Networking

- Configure the PC
- Addresses, IP, LOOP, Unit
- Ethernet, DataNET, Data Hiway, ANG cards & DataHUB
- CAN Boards

MAXUM workstation GC Portal

- MAXUM table editor
- HMI, online operation
- Calibration with HMI
- I/O tables, alarms, limits
- The *.amd file, backup and restore
- Sequences
- Instrument Setup
- Peak tables and integration parameters
- Calibration with GCP
- Troubleshooting chromatograms

Development of a Method

- Applets and use of detectors
- Column switching
- Electronic pressure regulators and flow adjustment

Documentation

- Data sheet, nomenclature
- Using the On-Line Manuals
- Alarm Descriptions

Valves and their Maintenance

- Model 50
- Model 11
- Siemens Liquid Injection Valve
- Valco valve

Detector Maintenance

- Thermal Conductivity Detector (TCD)
- Flame Ionisation Detector (FID)
- Flame Photometric Detector (FPD)

Maxum Utilities

- Upgrading/downgrading Operating Systems
- Un/Uploading database, modbus, .txt files

Introduction to Maxbasic programs

- Add/modify Maxbasic programs
- Using Maxbasic programs within the application

Additional topics

- Topics can be added according to the trainees/customers requirements, e.g. modbus map

Prerequisites

Attendees need to have basic Chromatography skills and must have good experience with the Maxum GC analyser.

Type

Face-to-face training

Duration

3 days

Language

en

Fee

2,190 GBP