

# Maxum Edition II Operation & Maintenance Course (SC-C-MAX1)

#### **Short Description**

This course covers 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 and calibrating the Maxum Edition II Gas Chromatograph.

#### Content

Introduction to Chromatography

- Why can a blend of components be separated and detected as a combination of single peaks.
- Parameters for optional separation
- Different types of detectors
- Valveless 'LIVE' Column 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
- 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
- Development of a method
- Sequences
- Instrument Setup
- Peak tables and integration parameters
- Calibration with GCP

Documentation

- Data sheet, nonmenclature
- Using the On-Liine Manuals
- Alarm Descriptions

Valves and their Maintenance

- Model 50
- Model 11
- Siemens Liquid Injection Valve

Development of a Method

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

Detector Maintenance

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

### **Prerequisites**

It would be an advantage for attendees to have basic Chromatography skills.

### Туре

Face-to-face training

#### **Duration**

3 days

## Language

en

#### Fee

