

## Process Analyzers

# Maxum - Performance Tools

### General Information

Course Code: PIA-PAMAXSTAT  
Length: 2 Days

### Audience

This course is intended for individuals responsible for maintaining the Maxum Gas Chromatograph and for users responsible for improving performance monitoring of the Maxum Process Gas Chromatograph using Siemens Gas Chromatograph Portal (GCP) workstation software.

### Prerequisites

- Basic computer skills
- Basic process gas chromatography skills
- Maxum Operation GCP 1 Course - PIA-MAXGCP1

### Profile

Use existing functionality to monitor the performance of Maxum applications using enhanced tool sets such as Maxum Statmon. These elements of the Maxum allow the user to improve the value received in Maxum installations. Achieve higher performance levels using the Statistical Monitoring table.

This course can be taught at the customer's site and customized to meet the customer's needs.

### Objectives

*Upon completion of this course, the student shall be able to:*

- Setup the Statmon table to collect data from analog input registers at a given frequency in the Maxum Database
- Setup the Statmon table to collect chromatographic data, including peak attributes, at the end of cycle.
- Configure the Statmon table to calculate statistical information on the collected data.
- Read the data in the Statmon table and export to an external file.
- Setup limits and alarms which trigger on changes in the collected data.

### Topics

1. Statmon
  - a. Introduction to Statmon
  - b. Store I/O data
  - c. I/O Key Performance Indicators
  - d. Locating source attribute values (data addresses)
  - e. Store Peak Attributes
  - f. Peak Attribute Key Performance Indicators
  - g. Activating Peak Attribute calculations
  - h. Accessing statistical data
  - i. Using Data Viewer
  - j. Export Data
  - k. Setup Rules
  - l. Setup a User Alarm
  - m. Trigger an Alarm
2. Understand how to use other Peak Attributes and read the Peak Attributes Definition table.

#### Labs Statmon

- a. Setup and monitor Oven Temperature as a frequency based I/O item
- b. Setup and monitor an EPC channel as a frequency based I/O item
- c. Activate Peak Attribute Calculations
- d. Setup and monitor peak resolution as an end of cycle statistic
- e. Setup and monitor peak theoretical plate values.
- f. Setup and monitor a result values, response factors, peak area and noise.
- g. Compare chromatogram changes and statistical changes in the data.
- h. Export data and view in Excel.
- i. Create and alarm and trigger the alarm from Statmon