sciemetric

SCIEMETRIC TRAINING

COURSE CATALOG

Contents

About Sciemetric Training

Sciemetric offers a range of instructor-led on-demand courses to help customers improve their understanding of their Sciemetric systems and software and maximize the value they provide. These courses are tailored to the customer's application and can be offered at our training facilities in Rochester Hills, MI, Windsor, ON or on-site as required. Sciemetric has delivered training to customers around the world.

Our highly-rated instructors are manufacturing test specialists with years of hands-on experience working with test and data technologies and applications. We apply a hands-on approach to learning using the customer's own application of Sciemetric technology

If you do not see the course you are looking for in this catalog, please contact your Sciemetric representative or email inquiries@sciemetric.com. We deliver customized training to fill any knowledge gaps or to address specific requirements.

InspeXion® Maintenance

The InspeXion Maintenance course prepares engineering and maintenance personnel to effectively troubleshoot and maintain their Sciemetric equipment. The session will be customized to cover the specific equipment at the customer location.

Overview

InspeXion software is at the core of every Sciemetric system. This course instructs personnel to quickly troubleshoot and diagnose problems on their Sciemetric equipment using reference drawings, operational diagrams and a troubleshooting checklist.

Participants get a thorough overview of their Sciemetric hardware platform(s) to understand the associated troubleshooting and maintenance procedures. Upon completion, they will be able to backup and restore application files, calibrate test sensors, diagnose and recover from system faults and remove and replace major system components.

The session is approximately 50% hands-on, allowing ample time for familiarization with the entire Sciemetric system.

Who Should Take this Course

The session is for electricians, technicians and other plant personnel who are responsible for maintaining Sciemetric equipment on the plant floor.

Learning Objectives

Upon completion of the course, participants can:

- Identify and understand the function of key components of their Sciemetric hardware platform(s);
- Operate the test platform and navigate the menu structure;
- Use diagnostic screens to troubleshoot and recover from system faults;
- Perform sensor setup and calibration;
- Understand the hardware status indicators and hardware connections;
- Verify system operation and, if necessary, replace certain components;
- Understand Sciemetric I/O and PLC handshaking schemes;
- Interpret common terms and acronyms used with the Sciemetric equipment;
- Backup and restore software applications; and
- Troubleshoot and diagnose common problems with Sciemetric equipment.

Course Details

Course length is 8 hours. Recommended maximum class size is 10 participants to effectively deliver content and allow direct interaction with the system.

InspeXion® Engineering

This training prepares engineers and test technicians to effectively operate, program and examine test results on their Sciemetric equipment. The course is customized to cover the specific equipment at the customer site.

Overview

The InspeXion Engineering Course trains engineering-level personnel in the configuration and editing of their Sciemetric test software.

Participants get a comprehensive overview of the advanced settings of their Sciemetric test system. This class enables participants to understand and navigate the InspeXion User Interface and system shell, view and examine test results, adjust data collection parameters, set and modify test limits and make basic changes to existing programs. Upon completion, participants will have a solid understanding of the parameters and settings associated with their test application.

Who Should Take this Course

The course is design for manufacturing or test engineers, programmers and plant floor technicians responsible for implementing and managing the test processes on the production line.

Learning Objectives

Upon completion of the course, participants can:

- Understand application screens and navigate through the menu structure;
- Comprehend the system settings and parameters associated with their test application;
- Change test limits and system variables;
- Add new part models, operations and test configurations;
- Understand the basic programming and file structure of a Sciemetric application;
- Interpret common terms and acronyms used with the Sciemetric equipment;
- Explain the Sciemetric handshaking scheme;
- Navigate the InspeXion System Shell and understand its associated settings; and
- Use the Sciemetric InspeXion Development Environment (IDE) at a basic level.

Course Details

Course length is 8 hours.

Recommended maximum class size is 10 participants to effectively deliver content and allow direct interaction with the system.

Prerequisite: Participants must have completed the InspeXion Maintenance training.

InspeXion® Operator

This course trains station operators to use Sciemetric Test equipment on the plant floor. It is customized to cover the specific equipment at the customer location.

Overview

This course trains operators to understand the test results presented on the screen and quickly verify that the station is performing within the specified limits of the manufacturing process. The operator will be able to navigate each of the InspeXion test stations covered in the course, view test results, understand station status indicators and recover from operational faults.

The session is approximately 50% hands-on, allowing ample time for participants to operate the Sciemetric systems covered.

Who Should Take this Course

Operators and plant floor personnel responsible for the operation of machines or test stations containing Sciemetric equipment will benefit from this session.

Learning Objectives

Upon completion of this course participants can:

- Identify and describe the purpose of the Sciemetric test equipment;
- Interpret common terms and acronyms used with the Sciemetric system(s);
- Operate the equipment and navigate the menu structure in the software;
- Read the test system display and determine status of a part
- Comprehend test station results
- Recall and review data from previously tested parts.
- Understand status indicators and recover from operational faults; and
- Apply their understanding of the Sciemetric test platform to effectively operate their station or machine.

Course Details

Course length is 4 hours.

Recommended maximum class size is 10 participants to effectively deliver content and allow direct interaction with the system(s).

Note:
This course covers only Sciemetric provided equipment. Additional operator training may be required to cover all aspects of the test station or manufacturing process.

QualityWorX® Data Analysis

This course trains engineers and quality managers to make effective use of the data collected in QualityWorX. It covers all Sciemetric data analysis tools including QualityWorX Engineering Workstation Analyst (EWA) software, Dashboard application, and Sciemetric Studio products.

Overview

Participants learn how to perform in-depth analysis and generate detailed reports to identify trends, optimize tests, and determine the root cause of issues affecting quality or yield. The fundamentals of data analysis using EWA are covered, including: viewing part history, using the trend browser tool, configuring defect and failure Pareto charts, generating first time yield reports, and using the What-if analysis tool. Customers with Sciemetric RBM systems will also learn how to manage them using the configuration tool software.

Hands-on training on the QualityWorX Dashboard application shows students how to create and maintain customized dashboards, set personal preferences, create charts to track custom trends and understand the library of standard reports.

The session is approximately 50% hands-on, allowing ample time for participants to work directly with the software applications.

Who Should Take this Course

The QualityWorX Data Analysis course is for test engineers, quality engineers, Six Sigma Blackbelts or anyone who is required to generate detailed reports or needs to conduct in-depth analysis of data stored in their QualityWorX database.

Learning Objectives

Use the EWA Software

- Log in and navigate through the menus of the EWA software;
- Understand the settings of the Query editors;
- Query the database for a single part history;
- Analyze data for trends;
- Display failures or defects as a Pareto chart and print a failure report
- Set up and configure first time yield (FTY) reports;
- Display real-time status of the system; and
- Understand the What-if analysis tool.

Set up Web Dashboards

- Use Dashboard report manager;
- Set personal preferences and default settings;
- Configure and run standard Dashboard reports such as FTY, Trend Browser, Failure Report, Failure Pareto;
- Configure Dashboard charts; and
- Generate summary reports and analysis grids.

Course Details

Course length is 8 hours.

Recommended maximum class size is 10 participants to effectively deliver content and allow direct interaction with the software.

QualityWorX® RBM Operator Training

This course trains participants in how to operate QualityWorX RBM software at a Repair, Regress or Rectification station.

Overview

The RBM Operator Course teaches plant floor personnel to effectively process parts with our software in their manufacturing environment. Participants learn how to introduce new parts into the bay, view part history records, enter defect and repair data, add or remove components from the repair bay, and recover from operational system faults. The session is approximately 50% hands-on, allowing ample time for participants to work directly with the RBM(s).

Who Should Take this Course

This course is intended for plant floor Repair Bay operators and other personnel, including supervisors and technicians, who use RBM software to process parts in their manufacturing area.

Learning Objectives

Upon completion of this course, participants can:

- Understand how the RBM software works within the QualityWorX system;
- Navigate the menu structure, use the toolbar, and read the status bar;
- Understand the Defect, Component, Repair, Location (DCRL) structure of the RBM;
- Retrieve part history and review the operational results for a part;
- Add or remove parts and components using the RBM;
- Enter defect and repair information for a particular part using the Repair Parts feature;
- Generate reports by single part number or model number;
- View and clear fault log;
- Determine if RBM is connected to a server or a local database and understand the difference between the connections; and
- Understand how the RBM is used to evaluate, repair, and reprocess parts in a repair or regression bay environment.

Course Details

Course length is 4 hours.

Recommended maximum class size is 10 participants to effectively deliver content and allow direct interaction with the software.

QualityWorX® for IT Administrators

This one-day session teaches IT administrators to maintain and configure their QualityWorX system. The course will utilize the customer's own QualityWorX database.

Overview

In this course, IT Administrators learn how to maintain user access data and health of their QualityWorX (QWX) system. Participants receive instruction in the use of the QWX Config Tools to add or remove users, adjust system parameters and configurations, and understand the status and health of the database and connected stations. They will also learn how to use the QWX Archive Tool to manipulate, remove, copy and delete data from the database to ensure optimum system performance.

The session includes best practices on maintaining the health of a QWX system, storage requirements, archiving procedures, and disaster recovery.

The course is approximately 50% hands-on, allowing ample time for participants to perform discussed operations on their own QualityWorX system.

Who Should Take this Course

This course is intended only for IT administrators or system engineers who are responsible for the health and security of their QualityWorX system. Attendees should have database system administrator rights.

Learning Objectives

Upon completion of this course, participants can:

- Understand the structure of QWX data on their server;
- Understand the relationship between plant floor systems and the QWX server;
- Manage and add new/existing QWX user accounts;
- Edit line configuration information;
- Modify Component, Defect, Repair and Location lists;
- Use the QWX Config Tools application;
- Add or remove stations from the QWX system;
- Use proper disaster recovery planning to avoid data loss;
- Use the QWX Archive Tool to remove or backup data from the database; and
- Apply best practices to maintaining server storage space.

Course Details

Course length is 8 hours. Recommended maximum class size is 4 participants to effectively deliver the detailed technical content.

sigPOD® Press/PSV Engineering & Maintenance

This course teaches engineers and maintenance personnel how to troubleshoot and configure their sigPOD Press or PSV-based application(s).

Overview

This course trains personnel to become familiar with the setup, configuration, and troubleshooting of their SigPOD Press or PSV based application. Participants will get a thorough overview of their SigPOD platform(s) and be able to understand the necessary troubleshooting and maintenance items associated with it. Upon completion, they will be able to backup and restore application files, calibrate test sensors, and diagnose and recover from system faults, as well as make changes to configuration parameters and test limits. The course is approximately 50% hands-on, allowing ample time for participants to familiarize themselves with the sigPOD software.

Who Should Take this Course

Electricians, technicians, engineers and other plant personnel who are responsible for the maintenance and configuration of their Sciemetric test systems.

Learning Objectives

Upon completion of this course, participants can:

- Identify the key features of a sigPOD;
- Understand and navigate through the application screens and menu structure;
- Review test data and part history;
- Use diagnostic screens to troubleshoot and recover from system faults;
- Perform sensor set-up and calibration;
- Understand and configure sigPOD I/O and PLC handshaking schemes;
- Identify and replace defective sensors or verify sensor operation;
- Use the features and settings of the sigPOD System Shell;
- Backup and restore software applications;
- Add new models, operations and test configurations;
- Understand test parameters, data collection rates and data processing and analysis settings;
- Set up and adjust test limits;
- Add new sensors and/or test configurations; and,
- Set up and configure SPC features.

Course Details

Course length is 8 hours. Recommended maximum class size is 10 participants to effectively deliver content and allow direct interaction with the sigPOD and its software.

Note:
Due to the time required to cover the information, this class focuses on either the SigPOD Press or the SigPOD PSV application (not both). It is recommended that customers purchase two separate classes if they wish to cover both of these software platforms.

sigPOD® Press/PSV Operator Training

This course trains operators on how to use the sigPOD Press or PSV software. It is customized to cover the specific application used at the customer location.

Overview

The sigPOD Press/PSV Operator Course is intended for the plant floor operators of sigPOD Press or sigPOD PSV test stations. It trains operators to understand the data presented on a sigPOD screen and quickly verify that the station is performing within the limits of the manufacturing process. The course covers startup and shutdown of the application and how to view test result data and navigate through the operator screens. It also provides an overview of error messages and recovery from operational faults.

Both sigPOD Press and PSV can be covered in this one class. The course is approximately 50% hands-on, allowing ample time for participants to familiarize themselves with the sigPOD software.

Who Should Take this Course

Plant floor machine operators, production supervisors and other floor personnel that are responsible for the operation of Sciemetric PSV or SigPOD Press test stations should take this course.

Learning Objectives

Upon completion of this course, participants can:

- Identify the sigPOD Press or PSV application and understand the basics of the test process;
- Comprehend common terms and acronyms used with the sigPOD;
- Operate the equipment and navigate the menu structure;
- Read the display and determine if the current part is good or has been rejected;
- Comprehend test station results
- Recall and review data from previously tested parts.
- Understand status indicators and recover from operational faults; and
- Apply their understanding of the Sciemetric test platform to effectively operate their station or machine.

Course Details

Course length is 4 hours.

Recommended maximum class size is 6 participants to effectively deliver content in the time allocated and allow direct interaction with the sigPOD software.

3520 Series Leak Test Training

This session is focused on how to set up, configure, troubleshoot, and maintain a 3520 Series leak test system to ensure its optimized performance.

Overview

Designed to provide an understanding of the 3520 Series leak tester, the course covers a range of topics including leak test theory, 3520 unit hardware, PSV-based leak test software, and leak test station setup guidelines. Participants will receive a thorough overview of the 3520 Series leak test platform and learn the necessary steps to set-up, troubleshoot, and perform basic configuration changes.

The course is approximately 50% hands-on to provide participants the opportunity to familiarize themselves with the 3520 Series.

Who Should Take this Course

Plant engineers, technicians, maintenance staff and any other plant personnel responsible for managing the 3520 Series on their production lines will benefit from this course.

Learning Objectives

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

- Understand the capabilities of the 3520 Series
- Understand leak test theory and factors that affect leak testing;
- Set up and configure the sigPOD/PSV software leak test controller;
- Back-up and restore application files;
- Calibrate test sensors;
- Perform system self-test;
- Adjust leak test settings; and,
- Diagnose and recover from system faults.

Course Details

Course length is 8 hours.

A maximum class size of 6 participants is recommended to ensure effective hands-on time and instruction.

Training Bundle

The training bundle is a package of courses designed to cover the necessary materials required for the complete launch of a new production line.

The training bundle includes the following sessions:

- InspeXion Maintenance;
- InspeXion Engineering;
- InspeXion Operator Training;
- QualityWorX Data Analysis;
- QualityWorX for IT Administrators; and
- RBM Operator Training.

Each session is as described in this document. In addition, the bundle includes one additional evening class to cover both of the operator-level classes (InspeXion and RBM) to train evening shift workers.

To request a quotation or more information on our training services, please contact your Sciemetric representative, email us at inquiries@sciemetric.com or call 1-877-931-9200.

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