

SPECIALIZED TRAINING EVENTS

SITRAIN™ TRAINING EVENTS AT ACD*

Register for trainings at www.sea.siemens.com/training or call ACD at 1-800-866-7740.

SIMATIC® S7

S7 TIA Programming 2 (newly added to schedule)

Weeks of: August 30, 2010 and December 6, 2010

This course is for SIMATIC S7-300/400 PLC users with basic engineering experience in the design and sustaining of SIMATIC automation systems and their application programs.

This course is the second in a three part series, which increases skills with Siemens STEP7 Totally Integrated Automation. Students will learn to leverage the power of Simatic software with advanced structured programming techniques. A systems approach to the integration of efficiently programming the S7300/400 PLC's, plus connectivity and functionality of an HMI and Micro Master Drive are the central focus of this course. Emphasis on Statement List (STL) programming for both direct and indirect addressing is an integral part of the course.

The core issues of efficient use of CPU resources, establishing communications, passing information, and managing integrated diagnostics are included. Skills in error management and extended diagnostics are reinforced throughout this agenda. This course includes classroom instruction, demonstration and considerable hands-on lab work.

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

- Understand the concepts of structured program creation.
- Leverage the power of Block and Function libraries.
- Use STL for advanced program development.
- Employ indirect addressing in a program.
- Incorporate System Functions (SFC) in a program.
- Integrate an HMI and Drive system with the PLC.
- Use Instance and Multi-Instance data Blocks.
- Use interrupt-driven and error processing program execution blocks.
- Leverage STEP7 advanced diagnostics

SIMATIC® S7

S7 System Tools & Troubleshooting 1

Week of: October 4, 2010

This course is designed for industry "first responders" to operations controlled with Siemens STEP 7 automated control systems. Students not requiring programming skills, such as maintenance technicians, electricians, supervisors and others, who need an understanding of their Siemens control system to maximize line uptime, should attend this course. This course also makes a great platform for those new to automation systems and industrial electronics. PLEASE NOTE: If PLC programming as a job skill is required; one may consider the S7 Programming I, instead.

This course provides students with a solid base of STEP 7 PLC tools and skills necessary for successful system diagnostics and repair. This course is ideal for environments with high uptime requirements and stable control system programs. Fully functional application programs are used for the student to understand key process flow information, diagnostics tools and repair techniques. This course also focuses on core hardware issues for system commissioning, upgrades or system repair needs.

Modular in design, this course is fully customizable for those interested in on-site training. Topics can be added or removed to meet specific needs. Call 1.800.241.4453 for more details.

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

- Identify and maintain the components of a typical automation system.
- Perform basic hardware assembly, cabling, wiring and testing.
- Establish communications with the PLC with multiple technologies.
- Use standard S7 tools for testing and debugging hardware and software problems in an existing program.
- Retrieve, Archive, and Download programs.
- Use the hardware configuration editor to inspect and troubleshoot hardware problems.
- Use SIMATIC Manager tools for basic program administration tasks.
- Follow program power/logic flow and interpret/modify basic program elements.
- Access system support tools and information pertinent to maintaining equipment uptime.

*each class is a 4 1/2 day course

ADVANCED CONTROLS & DISTRIBUTION



1100 RICO ROAD, EAST BUILDING
MONROEVILLE, PA 15146
WWW.ACDIST.COM

TRAINING SCHEDULE
WORKSHOPS

MORE DETAILS INSIDE THIS ISSUE
REGISTER AT ACD: 1-800-866-7740

Ethernet Infrastructure
Hands On
September 15, 2010 9:00 am

WORKSHOPS AT OUR
ELKVIEW, WEST VIRGINIA OFFICE

SIMATIC RF300 - Basics of Radio
Frequency Identification
November 10, 2010 9:00am

Ethernet Infrastructure
Hands On
September 14, 2010 9:00am

WORKSHOPS AT OUR
MONROEVILLE, PENNSYLVANIA OFFICE

ACD CONNECT

PA: PITTSBURGH, ERIE, STATE COLLEGE | WV: MORGANTOWN, CHARLESTON

ACD IS NOW A PEPPERL+FUCHS DISTRIBUTOR

As ACD grows we are always looking for the right product lines to add to our line card. PEPPERL+FUCHS (P+F) was the right fit at the right time. Today many distributors are looking to just get through the current economic time, but at ACD we want to grow and that means having the products that our customers want.

Pepperl+Fuchs introduced the world's first industrial proximity sensor in 1958, and ever since that time they have been providing the automation industry with the highest quality industrial sensors.

Pepperl+Fuchs' sensors are crafted using state-of-the-art components and the latest technologies to ensure precision, reliability, and functionality. Their industrial sensors' combination of durability, high accuracy, and quick response times make them an invaluable tool in industrial automation.

Their inductive and capacitive sensors along with photoelectric and ultrasonic technologies are the backbone of the P+F Factory Automation

product line. Other products include rotary encoders, positioning systems, AS-Interface, RFID, and barcode systems. •



WHY BUY FROM PEPPERL+FUCHS?

50+ Years of Pioneering Work and Continuous Innovation...

In 1958—50+ years ago—the proximity sensor was invented in a Mannheim laboratory owned by Pepperl+Fuchs. What was originally conceived as a customer-specific solution for an intrinsically safe current circuit in the chemical industry, has since become the universally recognized industry standard for non-contact switching. That makes the proximity sensor one of the oldest electronic components in automation.

This achievement was possible because we never stopped improving this enabling technology, continually expanding its capabilities. We improved switching distance, IP ratings, electromagnetic shielding, and developed models for use in extreme environmental conditions. Eventually, we integrated an amplifier, power electronics, and even a micro controller directly into the sensor, turning the inductive proximity sensor into a success story that has become an integral part of today's factory automation.

50 YEARS
DEVELOPMENT OF THE
PROXIMITY
SENSOR

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ACD

ADVANCED CONTROLS & DISTRIBUTION

WWW.ACDIST.COM

PEPPERL+FUCHS PROTECTING YOUR PROCESS

Inductive Sensors

Inductive proximity sensors are the preferred choice for the majority of applications requiring accurate, non-contact detection of metallic objects in machinery or automation equipment. As a pioneer and market leader, Pepperl+Fuchs offers innovative, high quality inductive sensors to meet the needs of the worldwide automation and process control markets. Their experience, flexibility and customer focus continues to allow them to offer custom designed solutions for the most unique and demanding applications.



Standard Inductive Sensor Product features:

- Smooth or threaded stainless housings
- Polarity reversal and short-circuit protected
- LED status indication
- Connection styles include M8, M12 or terminal connection models
- Models with PVC, PUR or silicon cable
- Outputs in 2-, 3-, 4-wire DC, AC, NAMUR, and AS-Interface versions

Application Specific Inductive Sensor features:

- Analog output models with 4-20 mA output signal
- Integrated speed monitor with up to 100 Hz operation
- Pressure resistant cylinder sensors for up to 500 bar
- Sensors approved for gas and dust Ex zones
- Models with stainless steel sensing face
- Protective class of up to IP68/ IP69k (submersible/ high pressure water jet resistant)
- Weld resistant designs with PTFE-coated surface
- Reduction factor of 1, all metals sensed at same distance
- Exclusive ferrous and non-ferrous detection models
- Safety function sensors
- Extended temperature range: -40 °C up to +250 °C
- Call Advanced Controls & Distribution for more information.

Weidmüller

The Optimum Connector for Tough Environments - New M12 Connecting Cables with Plastic Coupling Nuts



Weidmüller announces an extension to their M12 connector family to include new connecting cables with plastic coupling nuts. M12 connectors are commonly used in many industries and are standard in industrial applications. Weidmüller's new connecting cables are designed for use in harsh and corrosive environments, and are a cost-effective alternative to stainless steel versions.

The high quality PBT material is corrosion resistant and offers excellent protection against aggressive chemicals and harsh cleaning agents, as well as oils, fats, petroleum and brake fluids. This ensures safe and reliable connections in wash-down, high humidity and harsh environments in industries such as packaging, water wastewater and other process applications.

The new M12 connecting cable with plastic coupling nuts is the economical alternative to costly stainless steel versions," says Susanne M. Walker, Product Manager. As with all Weidmüller M12 products, these new cables are IP67 water and dust-tight and resistant to shock and vibration. They feature self-securing ratchet coupling nuts for safe and reliable installation. This provides a significant savings in wiring time and machine commissioning time.

Weidmüller offers M12 single-ended and double-ended cables in 3, 4 and 5 pole configurations. These high flex PUR/PVC cables are rated for over 20 million bending cycles in continuous flex applications. Versions featuring PVC cables, which are especially suitable for food and beverage processing applications, are also available.



iba products & systems

iba is the world-wide leader in large-scale process monitoring, quality data acquisition, and portable measurement systems.

iba's systems are great for troubleshooting and diagnosing control systems problems. Scalability from a single channel to thirty-two thousand channels is a product feature not many systems can match from a price/performance perspective. iba's product line includes both hardware and software that can be mixed and matched to meet your needs.

A simple modular design of the hardware and software components enables you to integrate a system according to your own specifications. In addition, they provide turn-key measurement solutions for industrial process control.

SIEMENS

ACD's Product of the quarter

We will be offering special pricing on starters so give us a call at 800-866-7740



Siemens. Leading the Industry With the Largest Selection of NEMA Starters

Siemens is leading the industry with the largest selection of NEMA Starters. Typical applications include use with machine tools, air conditioning equipment, material handling equipment, compressors, hoists and various production and industrial equipment, as well as in demanding automotive applications.

NEMA starters are ideal for applications requiring dependability and durability. These starters are built rugged to withstand the most severe and demanding industrial and continuous duty commercial applications in the industrial and construction markets. This includes standard full NEMA sizes and motor matched half sizes exclusive to Siemens. Starters are available as open and enclosed with electronic and bimetal overload protection, as well as a wide selection of accessories and spare parts.

WORKSHOPS

Register for training with ACD at 1-800-866-7740

WORKSHOPS AT OUR MONROEVILLE, PA OFFICE

Ethernet Infrastructure Hands On

September 14, 2010 starting at 9:00am

This event will show how to implement an effective industrial Ethernet solution on the plant floor. Topics to be covered include the configuration and network management of Managed Switches, setup and configuration of wireless architectures, setting up a simple firewall, and protection from an unauthorized network.

SIMATIC RF300 - Basics of Radio Frequency Identification

November 10, 2010 starting at 9:00am

This event will introduce both the RF300 system and the S7 FB45 RFID programming functions. Some of the topics to be covered in the session include basic RFID concepts, hardware and software architectures, communication capabilities, and programming RFID Systems.

WORKSHOPS AT OUR ELKVIEW, WV OFFICE

Ethernet Infrastructure Hands On

September 15, 2010 starting at 9:00am

This event will show how to implement an effective industrial Ethernet solution on the plant floor. Topics to be covered include the configuration and network management of Managed Switches, setup and configuration of wireless architectures, setting up a simple firewall, and protection from an unauthorized network.

Vince Gianfrancesco ACD's New Sales Manager



Vince is one of our longest tenure employees and has been promoted to Sales Manager at ACD. Vince has

distinguished himself as a leader and someone that you can trust. If you have had the pleasure of working with Vince you know his dedication to his customers comes first.

This dedication and customer service approach is what Vince will bring to the entire sales team at ACD. Please join me in congratulating Vince to his new position. Give Vince a call at 412-600-5885. •

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ACDCONNECT Available Online.

The ACD CONNECT newsletter is now available online. To receive your newsletter electronically, send an e-mail to Steve Battaglia (sbattaglia@acdlist.com) with the subject line: ACD CONNECT VIA EMAIL.

