

Programmable Logic Controllers Hands-On



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WHERE & WHEN

For a list of where and when this seminar is being presented, click [here](#).

DAILY SCHEDULE

8:00 a.m. - 11:30 a.m.

Lunch Break

12:30 p.m. - 5:00 p.m.

WHO SHOULD ATTEND

This seminar provides valuable knowledge to operators, maintenance personnel, technicians, management and engineering personnel who want to understand programmable logic controllers. If you learn by doing, this is the class for you. Aside from a small amount of classroom time in the morning and in the afternoon, this class is nearly 100% hands-on working with PLC modules and software.

WHY YOU SHOULD ATTEND

Improper operations can lead to increased maintenance, problematic performance and possible downtime. A good understanding of programmable logic controllers contributes to reduced maintenance and an increase in overall plant efficiency. It is vital to understand the impacts of valve adjustment and feed water changes when you're operating an automated system. The information, tips and techniques you'll learn in this seminar are practical and immediately usable to improve the performance of your system(s).

WHAT YOU'LL RECEIVE

8 hours of interesting, easy-to-understand hands-on PLC training

A comprehensive workbook packed with procedures, datasheets and techniques

Personal attention! DHP hands-on seminars are limited to a maximum of 6 attendees

Break refreshments and lunch

INSTRUCTORS



Jason Turner



Robert Decker



Scotty Gann



Bill Dees

Every instructor for the hands-on seminars is/was an instructor at one of DHP's on-campus Associate Degree in Advanced Water Treatment programs. The hands-on seminars are held at DHP's Farmington, NM facility or at one of three college-program location using the same equipment, labs, instruments and training aids as our college students. Each DHP college instructor is a graduate of the four-semester Advanced Water Treatment Program. You won't find anyone more dedicated to students and more excited about water treatment than DHP instructors. DHP instructors have trained over 13,000 water treatment professionals worldwide since 1988.

OVERVIEW OF HANDS-ON TRAINING

- Controlling Your PLC
- Troubleshooting Techniques
- PLC Language
- Analog and Digital Number Systems
- Hands-On Troubleshooting Programming
- Difference Between Hardware and Software
- Logic symbols
- Ladder Logic
- Gaining Confidence
- Watchdog Timers



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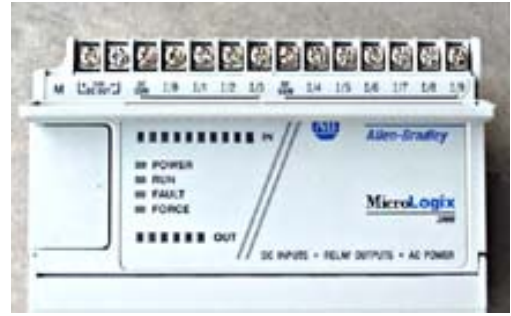
WHAT YOU'LL LEARN

The purpose of the "Programmable Logic Controllers Hands-On" seminar is to provide the water treatment professional, from the inexperienced to highly experienced, with the fundamental background information that is so often missing in "Operations and Maintenance (O & M) Manuals" and in on-the-job training. Being equipped with the fundamental knowledge allows operators, engineers, maintenance personnel, and managers to use their own intellect, experience, and creative abilities to identify, to evaluate, and to troubleshoot many situations that arise.

AGENDA

Day 1

Introductions: Speakers, Participants, and Agenda
 Introduction to Programmable Logic Controllers
 Relay Logic
 Basic Electronics
 Ladder diagrams
 Workshop 1
 Workshop 2

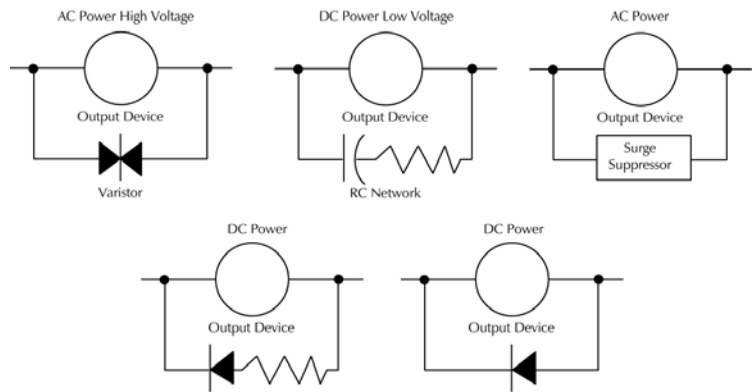


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Day 2

Binary numbers
 Octal numbers
 Hexadecimal numbers
 Workshop 1
 Ladder diagrams
 Programming in Ladder Logic
 Workshop 2

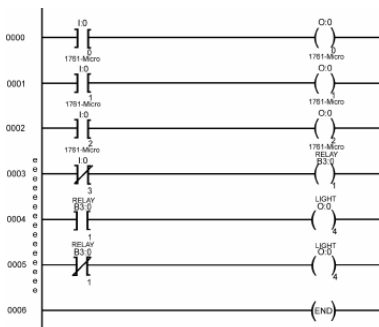
Surge Suppression for Inductive ac Load Devices



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Day 3

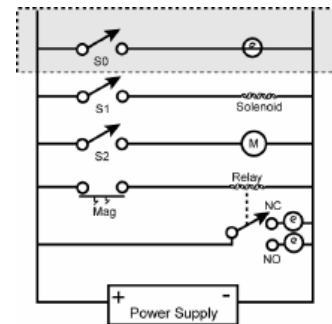
Hardware
 Troubleshooting
 Cross Talk
 Watchdog Timers
 Motors



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CERTIFICATE OF COMPLETION

Each attendee will receive a DHP *Certificate of Completion* following the seminar.

WHAT OTHERS SAY ABOUT DHP HANDS-ON SEMINARS

DHP has trained over 13,000 water treatment professionals worldwide since 1988. Trainees include industrial, governmental and drinking water clients. The average rating given by attendees for DHP seminars is over 9 (on a scale of 1-10, with 1 being a terrible rating and 10 being an outstanding rating). The following are typical comments from attendees:

“I enjoyed the class very much and would highly recommend it to anyone in the industry.”

Janet Drozda, Operator, Intel

“Outstanding course. Best training program that I have attended in the water treatment industry!”

George James, Reaction Engineering, Inc.

“Instructor was very knowledgeable and thorough. Course will have large impact on our cleaning procedure.”

John Paul Robb, Plant Engineer, Trigen Colorado Energy

“Excellent Course! The hands on portion served very well in firming up the concepts and increasing retention. Level of instruction was good balance of theory and practical...well presented.”

Finley Jones, Sr. Account Manager, Nalco

“Probably the best hands-on course I've had in my 10 years as a technician.”

Andy Gutierrez, Technician, Amgen

“Hands-on experience was a valuable experience.”

Melody Martin, Plant Chemist, Oklahoma Gas & Electric

“I thought I knew a good amount about RO systems. After taking this course I realized how little I actually did know.”

Chris Corsetti, Facilities Engineering Supervisor, Genzyme Corp.

“Excellent instructors. I should have taken this course ten years ago. I could have saved the company thousands of dollars and weeks of time.”

Charles Hagen, Lab supervisor. Ameradahess

“DHP training took me from having no idea what RO is to being a confident and knowledgeable RO decision maker.”

Kenneth Gaskill, Maintenance Supervisor, Warner Lambert Co.

“Great course, great teachers, great equipment. I liked the use of multimedia...videos, illustrations, computers, etc.”

Evan Francis, Operator, Monterey Bay Aquarium