How to Register

To register for a course, call CTC's Technical Training Coordinator at **800-233-3329**. Upon confirmation of enrollment, you will receive a registration packet that includes an agenda and directions to CTC. If you have not received confirmation within five days of your class date, please call to verify your enrollment. A full refund will be given for class cancellations if notification is received at least 3 days prior to the course. To limit class size, we may find it necessary to add or change training dates; please call to confirm all courses prior to enrolling.

In-House Training

Regularly scheduled classes are offered on all products each month at our state-of-the-art facility in Milford, Ohio. CTC's training center is equipped with individual PC workstations for a 100% hands-on class. Class size is limited to ensure a low student-to-instructor ratio.
Tuition: $950 per person

On-Site Training

If several individuals require training, another option is our on-site training program. This convenient, cost-effective alternative gives you the ability to have a course tailored to meet your specific training goals. Special attention is paid to engineering, operators and maintenance personnel as needed.
Tuition: 3 days, 7 people - $4500 *(On-site pricing varies according to class size and number of days.)*

2003 Course Schedule

InteractX

3-Day Training Course Dates
Tuesday - Thursday

January 7-9
February 4-6
March 11-13
April 8-10
May 13-15
June 10-12
July 8-10
August 12-14
September 9-11
October 7-9
November 4-6
December 2-4

Interact HMI

4-Day Training Course Dates
Tuesday - Friday

January 21-24
March 25-28
May 27-30
July 22-25
September 23-26
November 18-21

MachineLogic

5-Day Training Course Dates
Monday - Friday

February 24-28
April 28-May 2
June 23-27
August 25-29
October 20-24
December 15-19

CTC Technical Training

InteractX™
Interact HMI
MachineLogic™ *PC-Based Control*
PowerStation Workstations

Parker Automation

Parker Automation

InteractX Training Class Overview

This 3 day in-depth course covers all aspects of the InteractX Windows-based HMI software. Major topics include panel creation, graphic animation, alarming and networking. This class also includes advanced features like how to incorporate Visual Basic, ActiveX Controls and 3rd-party OPC Servers into an application.

Topics covered in this training class include:

The InteractX Development Environment: familiarization with the advanced programming features of InteractX. Includes customizing the workspace and designing personal styles and templates.

Panel Tools: creating custom panel displays using pre-configured panel tools. Using the InteractX Toolbin and Object Properties Window to gain the maximum advantage in developing projects in InteractX.

Graphics: utilizing the advanced graphic features of InteractX to create graphical representations of a machine or process. Creating graphic animation based on real world output from the control device.

Alarms: configuring alarm trigger conditions that can be monitored, displayed and logged in run mode. This section includes multiple ways to alert the operator to alarm conditions as well as the various means of logging and printing alarm data.

InteractX COMMServer: the InteractX COMMServer supports more than 30 device drivers that allow it to communicate to all major control devices. COMMServer setup and device driver configuration and addressing are covered in detail.

3rd-Party OPC Server Connectivity: setting up 3rd party OPC Servers, OPC Clients and tag addressing for OPC data in InteractX.

Networking: connecting multiple InteractX applications on a TCP/IP network.

VBA: introductory programming of Visual Basic for Applications in InteractX using the Visual Basic Editor. This section includes an overview of the InteractX object model as well as how to access panel objects and tag data from a Visual Basic program.

ActiveX Controls: incorporating and controlling ActiveX controls in InteractX.

Project Management: methods for transferring files to a runtime workstation, retrieving files from a runtime workstation and making project backups.

PowerStations: creating and customizing your Parker MachineShop project to include multiple Parker Hannifin Electromechanical components. Maintaining and troubleshooting PowerStation hardware.

Interact HMI Training Class

This 4-day comprehensive course provides training on the complete Interact HMI package. All aspects of the software are covered in detail. This course is a good way to learn about the software pieces you are currently using, and also about the extended capabilities of the product.

Topics covered in the training class include:

- **MachineShop Development:** Interact configuration in the MachineShop Windows environment
- **Application Manager:** setting up and customizing your application
- **Panel Toolkit Module:** creating control panel displays using pre-configured tools
- **Graphics Monitoring Module:** adding animated graphics to alarm conditions
- **Alarm Management Module:** monitoring and controlling alarm conditions
- **Data Transfer Module:** transferring data from similar or dissimilar control networks
- **Recipe Module:** creating applications using recipe up/downloads
- **Machine Configuration Module:** creating applications for product changeover and machine configuration
- **Historical Trending Module:** logging and viewing data in tabular or line-trend format
- **Report Module:** creating free-form reports
- **Networking:** connecting Interact applications over a NetBIOS network
- **DDE Server:** connecting the factory floor and MIS/MES environments
- **Driver Interface:** connecting to your control equipment
- **PowerStations:** maintenance and download procedures using the MachineShop Toolbar

MachineLogic™ PC-Based Control Training Class

This 5-day course provides a comprehensive understanding of MachineLogic PC-based control, including detailed instruction on all aspects of MachineLogic project development from I/O network configuration to integration with Interact and InteractX HMI. Prior knowledge of Interact is strongly recommended. Topics covered in this class include:

- **MachineShop Development:** Interact configuration in the MachineShop Windows environment
- **Understanding the IEC-61131-3 Standard:** overview of IEC-61131-3
- **I/O Network Configuration:** setting up your I/O bus network for MachineLogic
- **I/O and Task Configuration:** task I/O assignment and bus driver interface setup
- **Ladder Diagram:** programming in ladder diagram
- **Structured Text:** programming in structured text language
- **Instruction List:** programming in instruction list language
- **Function Block Diagram:** using function block diagram
- **MachineLogic and User-Created Functions:** using and developing functions and function blocks
- **Sequential Function Chart:** using sequential function chart
- **Working with the MachineLogic Control Adapter card:** MachineLogic's runtime components
- **Data Types:** creating and using user-defined data types and arrays
- **Integrating PC-based control with Interact HMI:** addressing format and tag list configuration
- **PowerStations:** maintenance and download procedures using the MachineShop toolbar

Parker
Automation