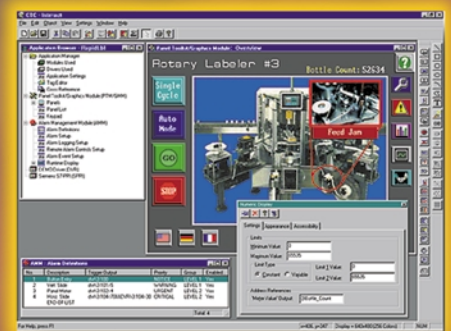


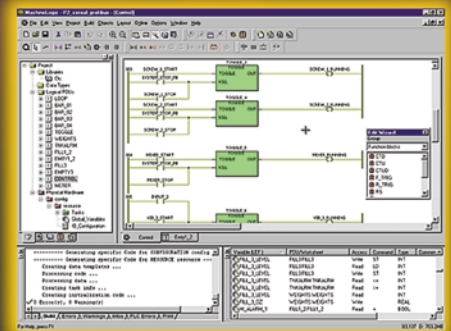
Software



INTERACT



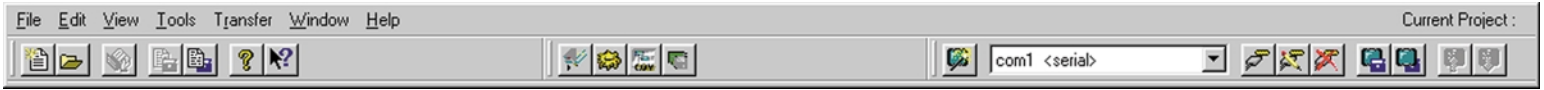
MachineLogic™



The Shortest Distance Between Man and Machine



Fully Integrate Your HMI and PC-Based Control With MachineShop™



Project Management

MachineShop's Project Management is a simple, intuitive way to configure and manage automation projects. It conveniently collects configuration data and runtime files into a central location. By allowing MachineLogic and Interact projects to appear in a single, unified environment, development tasks are simplified.

Project Management allows the user to...

- Backup and restore data from storage devices such as disks, hard drives and networks
- Document all project information
- Access data on runtime storage requirements and components used for the application
- Easily perform project tasks with the guidance of "Wizards"
- Use a common tag list for MachineLogic and Interact

CTC Parker Automation's MachineShop™ is an integrated suite of Windows-based software tools for developing Interact HMI and MachineLogic PC-based control applications.

MachineShop's convenient toolbar includes Project Management, Environment Navigation and PowerStation Transfer. Whether you buy Interact, MachineLogic, or both, these tools make it easy to manage, create, integrate and transfer your machine applications.

MachineShop runs on a standard PC, as well as CTC's full line of PowerStations, integrating all of these products into a bundled solution that can fit the requirements of any machine.

For a complete machine control solution, integrate MachineLogic control with Interact HMI software - and run it on one of CTC's PowerStation workstations.

PowerStation Transfer

Once an application has been developed, MachineShop's PowerStation Transfer manages and transfers files that are needed to create or update a runtime project. These convenient tools simplify the transfer process, so projects can go online quickly.

PowerStation Transfer can...

- Automatically transfer runtime projects including Interact and/or MachineLogic
- Back up and restore runtime projects
- Transfer projects via the Internet
- Transfer with a serial connection or direct to Compact FLASH
- Help users select transfer options, using Wizard-based guidance



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Run Your MachineShop applications on any of CTC's PowerStations.



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INTERACT – HMI Software

The #1 Rated HMI Software

Development:

- Easy to use Windows development environment
- Intuitive menuing and on-line help simplify application development
- Unique modular architecture that allows applications to meet future HMI needs
- On-line testing from your office PC
- Easily import 256 color bit-map images into applications
- Interact's tag editor makes it easy to design a standard application and adapt it to new machine requirements. Tags can even be exchanged with MachineLogic.

Runtime:

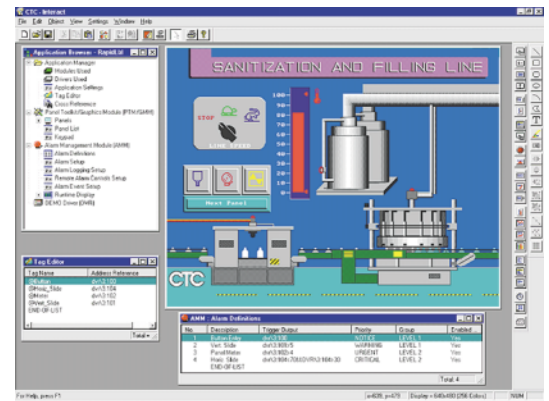
- Runs on any PC or can be bundled on CTC's full line of PowerStation industrial workstations
- Operator-friendly monitoring and alarming features create an intuitive HMI for operators, maintenance and support personnel
- Highly reliable DOS run-time environment
- Device drivers for most PLCs and control equipment are part of the standard Interact package

Human-Machine Interface Software

The #1 Rated HMI Software Package

Interact is a feature-rich software package that can be tailored to meet the needs of any HMI project. It provides the ease of use of Windows for development, with the reliability of DOS in a run-time environment. Interact's event-driven kernel enables reliable, high-speed program execution.

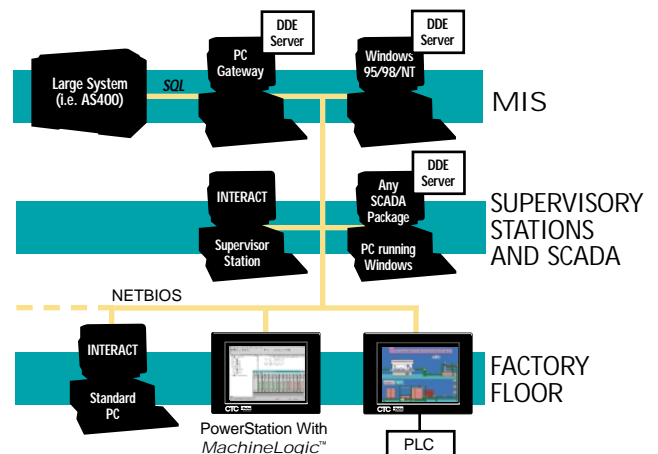
Interact lets you build an application by selecting from a complete family of software modules, ranging from 3-D panel tools, to trending, networking and machine configuration.



INTERACT Development Screen

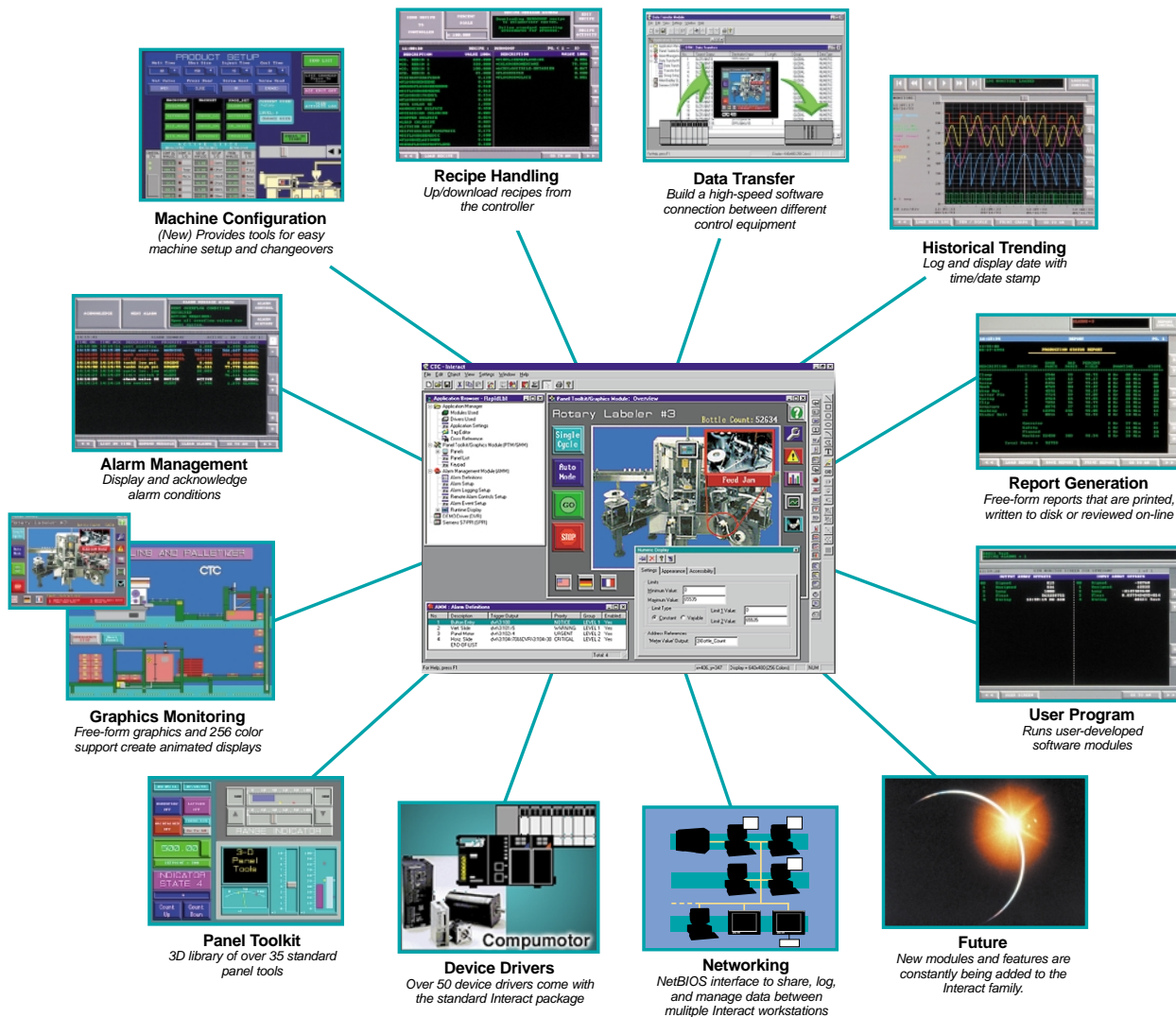
Networking:

- Transfers multiple Interact applications throughout the manufacturing facility - or in remote locations using off-the-shelf LAN/WAN operating systems
- "Network aware" software architecture simplifies "centralization" of applications and/or program files on a network server
- Shares real-time data between factory floor workstations
- Sends real-time data directly from the plant floor to MIS or Supervisory stations
- Connects to remote nodes via modem over public telephone lines



INTERACT – HMI Software

A Modular Architecture For Future HMI Needs



The core Interact package includes the Interact Application Manager, all Device Drivers, the Panel ToolKit Module, Graphics Monitoring Module and Alarm Management Module. Optional modules can be added to the application at any time to meet future needs.

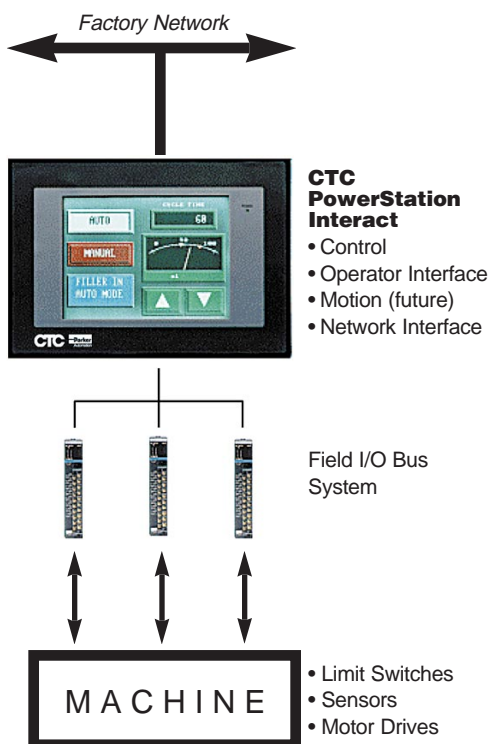
The “No Risk” PC-Based Control Solution

MachineLogic is a new type of control software that gives machine builders a no risk way to move from PLCs to PCs. It combines the reliability, familiarity and cost-effectiveness of PLCs with the open architecture and integrated development features of PC-based packages. MachineLogic is a reliable and affordable alternative to Windows NT/CE soft control solutions.

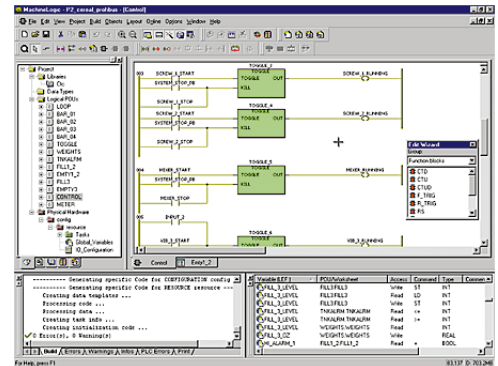
What Is A PC-Based Logic Controller (PCLC)?

MachineLogic is the automation industry's very first PC-based Logic Controller (PCLC) because it gives you the best features of PC-based control software and PLCs. Offering the look and feel of PLCs, MachineLogic isolates the machine operator from the “PCLC” operating system to simplify runtime operation.

As a PC-based solution, MachineLogic effectively delivers the “open systems” advantages of connectivity, integrated development and standardization.



MachineLogic™
Development Screen



Cost-Competitive

MachineLogic brings all of the benefits of PC-based control to the machine builder - without all of the added cost associated with Windows NT systems.

Deterministic

MachineLogic uses a hardware interrupt, running on a true, real-time operating system. Inherently deterministic, MachineLogic does not require Windows work-arounds such as real-time extensions that may be difficult to support.

Fault Tolerant Design

Just like a PLC, MachineLogic's runtime package includes power failure detection and high-speed retentive memory that enables a controlled shutdown and restart during a power down or outage. A watchdog timer disables outputs, in the event of a disruption, to ensure safe machine operation.

Storage Media is Solid State

When bundled with a CTC PowerStation, MachineLogic uses solid-state Compact FLASH storage media. This significantly improves the overall reliability of PC-based-control because it addresses the inherent vulnerability of hard drives in a production environment.

Online Editing Tools

Unlike other soft control products on the market, MachineLogic offers online editing, much like a PLC. Debugging tools make it easy to edit programs - online or offline.

PLC-Proven Runtime Software

By using a software control engine that has been proven in thousands of PLC installations for years, MachineLogic applies a highly reliable PC-based runtime solution on the plant floor.

Development

- Support for all five IEC 61131-3 languages for programming flexibility
- Integrated development with CTC's Interact HMI software
- Allows gradual movement of control functions from the PLC to MachineLogic
- Has the look and feel of PLCs so migration to MachineLogic is as seamless as possible
- Offline simulation and debug
- Application templates for simplified project creation

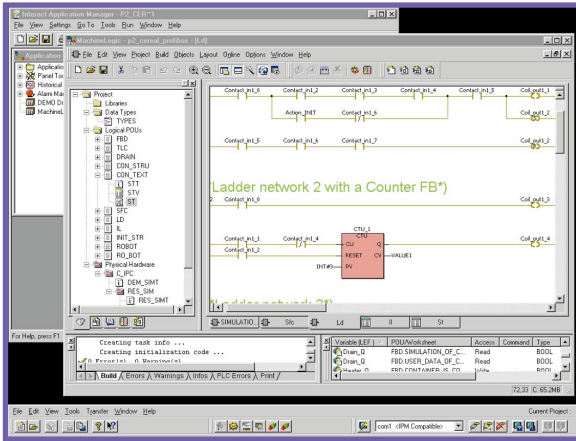
Runtime:

- Optimizes system performance by allowing 16 tasks to be run simultaneously - all at different scan rates (versus one with the PLC)
- Runs on any PC or can be bundled on CTC's full line of PowerStation industrial workstations
- Supports fieldbus I/O (such as Profibus and DeviceNet) and other open topologies for lower cost systems

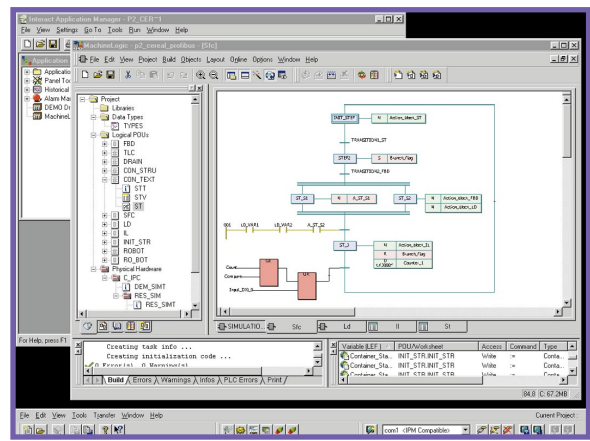
MachineLogic™

PC-Based Control

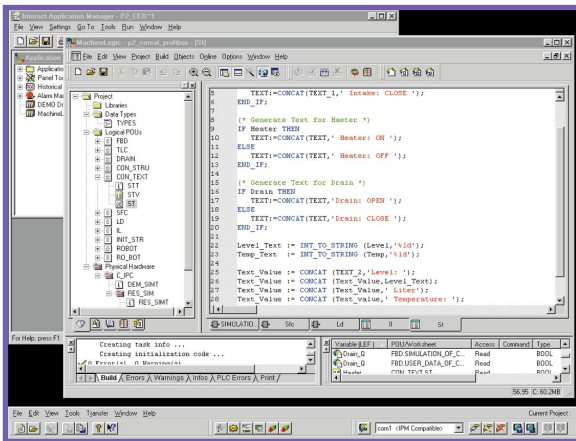
Control Your Machine Using Any or All IEC-61131 Languages



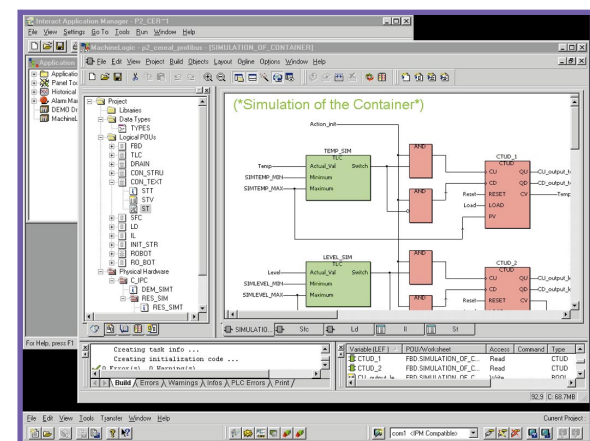
LADDER LOGIC



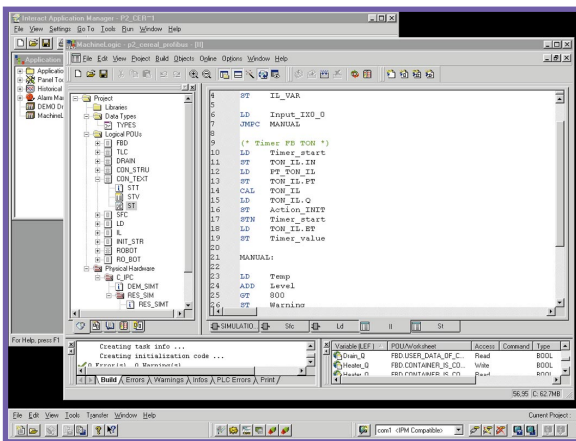
SEQUENTIAL FUNCTION CHART



STRUCTURED TEXT



FUNCTION BLOCK DIAGRAM



INSTRUCTION LIST

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*The Shortest Distance
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CTC PC Based PowerStations



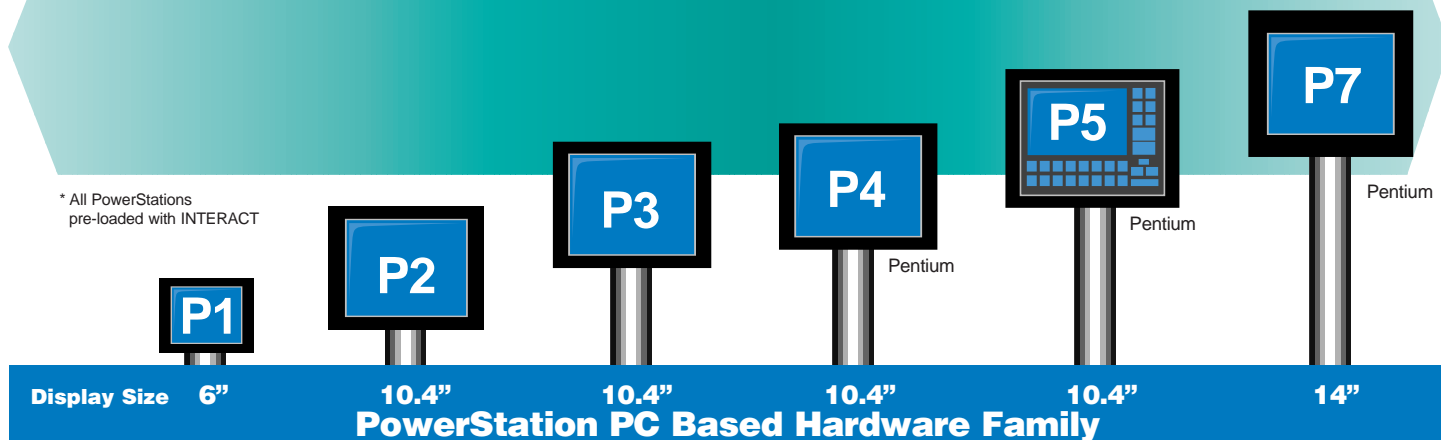
Bundled with CTC software, PowerStations are flexible, rugged solutions for all your machine control needs.

Features common to CTC hardware platforms:

- Compact FLASH storage
- Ethernet network connectivity
- A variety of sizes, displays and CPUs
- Expansion capability
- Industrially tested and rated

PowerStation™ flat panel PCs: a workstation for every machine you build.

The same INTERACT and MachineLogic™ software runs on the same PC, or on the entire family of CTC PowerStations, for every size and class of machine you build.



From the 6" PowerStation to the 14" P7, the PowerStation family has a workstation that suits the needs of your particular application. Whether a low end HMI panel replacement application or a high-functionality HMI/PC-based control application, the PowerStation family's range of processors, display types, expansion and storage capability allows you to select the right PowerStation for every machine you build.

PowerStation RS flat panel monitor and remote PC offers a unique architecture for PC-based HMI and control applications.



PowerStation RS is a flat panel monitor and remote PC bundled solution which offers an alternative topology for PC-based control. Mounting the attractive 12" or 15" monitors on a swing arm enhances the look and usability of your machine. Placing the remote PC in the enclosure, allows you to put the controls in a more moderate environment and closer to I/O limiting the amount of wiring out to the swing arm.

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