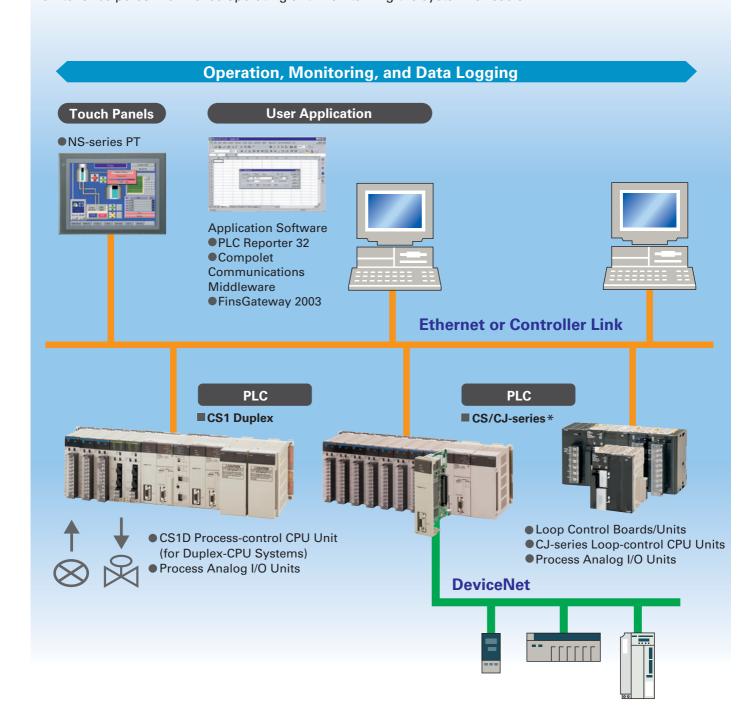
### ess Control

### meet customer needs.

The open nature of the PLCs is joined by integrating hardware, software, and networking to meet your needs.

Increasing amounts of information, standardization, and open standards form the basis for achieving hardware and networking capabilities for process control. A wide range of software that can be easily used by design, development, and maintenance personnel makes operating and maintaining the system far easier.



<sup>\*</sup>For details on the CJ Series, refer to the Loop-control CPU Units Catalog (R128-E1-01).

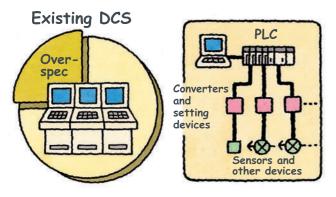
# Going Beyond the Traditional Limits of PLCs with PLC-based Process Control

Reducing the Total Cost of Ownership from Initial Costs through Running Costs. PLC-based Process Control Meets Customer Needs

#### **Existing System Problems**

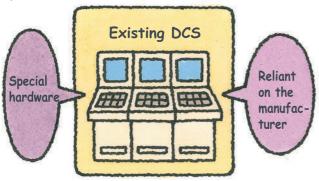
## Systems are large, meaning high initial costs.

The over-spec nature of a distributed control system (DCS) increased costs. PLCs, however, could not provide the required process control capabilities, and signal conversion with isolators and other devices was required for I/O. It was just not possible to achieve the ideal system for a specific application.



# Running costs are high because maintenance and modifications require specialists.

The manufacturer must be relied upon for everything from system construction to maintenance. Even simple changes to parameters cannot be performed in-house. And, it's nearly impossible to use general-purpose devices and software (such as HMI devices or Windows-based software) when modifying the system.

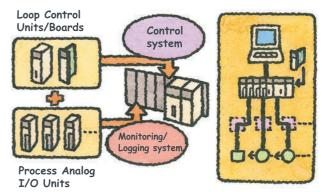


#### **PLC-based Process Control**

#### Down Sizing

#### Cut costs, Save space, Reduce labor

PLCs provide the some of the functions and performance of DCS while also providing the advanced features of PLCs: Open specs, easy maintenance, and cost performance. A wide range of Isolated-type Analog Units helps to save space and greatly reduces system costs.



#### Easy Engineering

## Engineering is simple when you can program with function blocks.

Paste function blocks in a window just like you were creating a flow sheet, and then connect the blocks with the mouse to graphically program a wide range of process control. And with a PLC, it's easy to incorporate general-purpose HMI devices and software (such as touch panels and SCADA software).

