



### **Design Consulting**

**PCS Technologies LLC (PCS)** is a professional engineering firm which provides Design and Implementation Consulting services for PLC and HMI based SCADA systems.

**PCS** utilizes strategic business partnerships with engineers and contractors to promote seamless integration of the control system and plant operations.



#### **Consulting Services include:**

Services provided by **PCS** include:

- ✚ *Instrument specification*
- ✚ *Control system architecture design*
- ✚ *Site survey*
- ✚ *P&ID generation*
- ✚ *ISA S5.1 & S5.4 loop diagrams*
- ✚ *I/O list development*
- ✚ *Industrial Ethernet network design*
- ✚ *SCADA system design*
- ✚ *SCADA System configuration services*
- ✚ *Hardware and software selection*
- ✚ *PLC/HMI programming & development*
- ✚ *Test plan development*
- ✚ *Training (Operation, Maintenance, etc.)*
- ✚ *I/O checkout and validation*
- ✚ *System commissioning*
- ✚ *Project Management*

### **Methodology**

A proven project management and execution methodology is used to ensure timely completion of projects within budget and in conformance with specifications.

#### Modular Programming

Modular programming methods are used to streamline programming, testing and debugging.

#### Use of Standards

AWWA, CSIA, IEC, ISA and NFPA industry standards are used to promote consistency throughout projects and to facilitate sharing of information.

#### Documentation

All projects are thoroughly documented. Functional Requirements specifications are submitted to and approved by the Owner prior to development, and Factory Acceptance Test plans and results are provided to the Owner prior to installation. As-built drawings are provided to the Owner at the completion of each project.

### **Industry Experience**

**PCS** has successfully completed major projects for the following industries:

- ✚ *Automotive*
- ✚ *Chemical Processing*
- ✚ *Commercial & Industrial HVAC*
- ✚ *Food & Beverage*
- ✚ *Industrial Wastewater Treatment*
- ✚ *Municipal Water & Wastewater Treatment*
- ✚ *OEM System integration*
- ✚ *Pharmaceutical (S88.1)*
- ✚ *Power Generation*

### **Mission Statement**

*PCS Technologies LLC strives to be the premier control systems integrator to the regional municipal sector by providing quality engineering services, developing strategic partnerships, and assuring high customer satisfaction.*

## Systems Integration

**PCS** has extensive experience implementing control systems for various types of processes, ranging in complexity from monitoring-only systems to fully automated plants. Custom control algorithms are written for each system, based on process control requirements.

Typical control systems are PLC/HMI-based and include radio telemetry and/or Ethernet communication networks. All systems are fully tested prior to commissioning using device and process simulation to reduce field startup time and to guarantee high quality. Factory and site acceptance testing of each system further ensures customer satisfaction.



### Integration Services include:

- ⊕ *Functional Requirements Specifications*
- ⊕ *HMI programming*
- ⊕ *PLC programming*
- ⊕ *OIT programming*
- ⊕ *Custom reports*
- ⊕ *Telemetry /Network configuration and testing*
- ⊕ *Operation and Maintenance training*
- ⊕ *Custom control panels*
- ⊕ *FAT (Factory Acceptance Testing)*
- ⊕ *I/O Checkout and commissioning*
- ⊕ *SAT (Site Acceptance Testing)*



## Expertise

**PCS** has experience with industry leading automation hardware and software products including:

<u>Controllers</u>	<u>Operator Interface</u>
Allen Bradley: SLC 500 Series PLC-5 Series ControlLogix CompactLogix MicroLogix Flex I/O	Allen Bradley: PanelView Classic PanelView Plus
Control Microsystems: ScadaPack Series	GE Fanuc/Intellution: Fix32, iFix iHistorian
GE Fanuc: 90-x0 Series	Rockwell Software: RSView32 RSView32 SE
Modicon: 984 Series Quantum Momentum	Specter: Win911
Square-D: SyMax	SyTech: XLReporter
	Wonderware: InBatch InTouch InSQL

## Industry Affiliations

**PCS** is a member of **CSIA** (Control & Information System Integrators Association) and **ISA** (The International Society of Automation).

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Control system reliability and robustness are critical for plant operations, maintenance and long term value. Our reputation as solution providers is based on delivering quality control system integration services. Using a proven methodology and project management, quality systems can be delivered at a competitive price while fully meeting customer requirements, expectations and schedule. By consistently delivering quality and value, we hope to foster long term relationships with our Clients.

Our goal is to deliver reliable, cost effective *process control solutions*, using the best available *technologies* and engineering methods to meet our clients' long term needs.