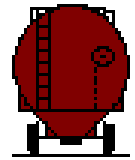
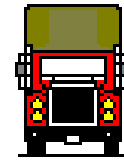
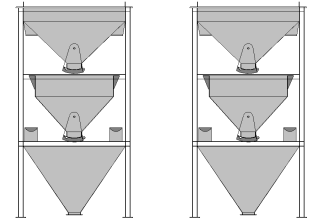


# SUPERIOR

## TECHNOLOGIES

WEIGHING & CONTROLS INC.

ISO 9001  
ISO 9001



Quality Windowed  
Intelligent Commodity  
Controller

**QWICC™** by Superior Technologies is a multi-tasking real time Windows based HMI (Human Machine Interface) controlling package. As Superior Technologies advanced plant control system, **QWICC™** is designed specifically for controlling grain elevator facilities with multiple bulk weigh and truck scales.

Any number of **QWICC™** workstations may be interfaced via a fast Ethernet connection to a Programmable Logic Controller (PLC) to handle all receiving, audit/transfer, shipping, blending and cleaning tasks. The PLC is connected to all electrical input/output devices. Examples of input devices include limit switches, motor overloads, drag tail ends, etc. Outputs are generally motor starters controlling legs, drags, scale/bin gates, distributors, etc. Each HMI workstation is capable of performing multiple shipping, audit, receiving, blending and cleaning functions simultaneously.

The **QWICC™** software offers intuitive tasking screens with fast data entry and lookup lists to start shipping, receiving or audit tasks. All task and ticket information is logged to a database.

### Automation

- Automatically selects and positions intermediate equipment once the operator specifies a source and destination for a task. All equipment can also be operated in a manual mode by clicking the device on the screen. PLC logic interlocking protects equipment and ensures fail-safe operation. Bump-less auto/manual control allows an operator to override critical equipment in an automatic task without special procedures.

### Efficiency

- Maintains a database of all major plant equipment (and their adjustment parameters). Each device can be "tuned" to optimize performance and increase overall operational efficiency. Also incorporates *fast* Producer and Grade code database searches for speedy data entry.

### Alarming

- QWICC HMI provides detailed alarm messaging and logging to assist in troubleshooting plant equipment faults efficiently.

### Graphics

- QWICC HMI graphically displays plant status such as limit switches, high levels, routing paths, equipment operation (legs, distributors, belts, drags), errors and device faults. Separate screens are depicted for the entire plant, cleaner section and overhead view.

### Accuracy

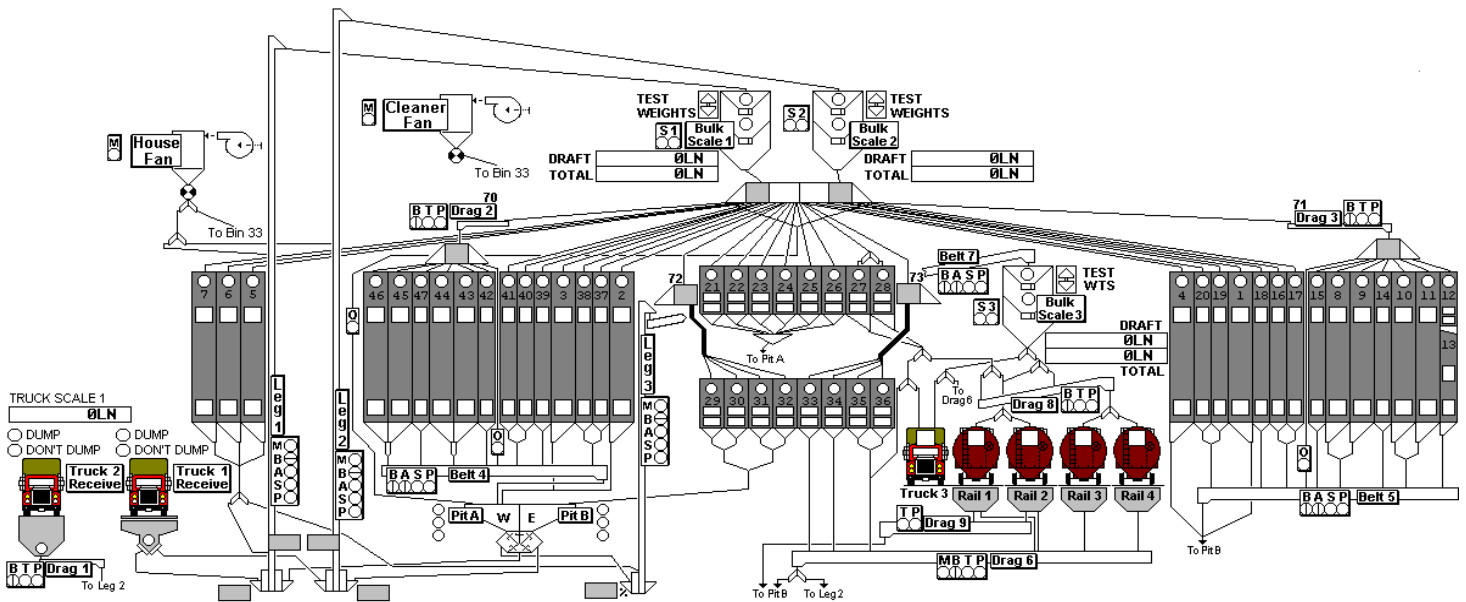
- Our innovative strategy for Bulk Weigh Scale control provides for accurate shipping target weights. In addition, our flow-rate calculation initiates source shutdown to minimize path clean-out.

### Inventory

- "Clicking" on a bin displays pertinent information such as bin description, capacity, product, grading data, available space and clean-out weights. In addition, receiving and audit tasks calculate a weighted average on Dockage, Moisture and Protein variables.

## Control

- Supports Legal-For-Trade receiving and shipping operations.
- Truck Scale Gross-Tare-Net data capture.
- Multiple gate (pit and bin bottom) control including blending via specified percentage gate openings.
- Utilizes two Bulk Weigh Scales to cooperatively receive a load / ship to rail and create a single unified ticket for increased throughput.
- Supports various sampler styles including Cross-Cut, Strip and Probe.
- Cleaner system control including status and system interlocks.
- Leg, drag and conveyor sequencing.
- Dust equipment control.
- Distributor control interface.
- Alarm Event Log and Equipment Usage Monitor to assist in equipment maintenance.
- Remote track-side shipping station(s) can be installed.
- Bin Inventory with product conflict warning.
- Rapid Ship feature saves time when loading consecutive railcars or trucks.
- Interfaces into Temperature Monitoring systems.
- Supports Gate Position Feedback control.
- Allows for Truck Dump Stations.
- Short Ticket Print and Reprint.
- Remote interface via phone or internet modem for support and upgrades.
- Optional Reporting Package.
- Optional Data Transfer to client's corporate software.



For more information please contact:

### **SUPERIOR TECHNOLOGIES WEIGHING & CONTROLS INC.**

1673 Dugald Rd. Winnipeg, MB. Canada R2J 0H3

Ph: (204) 661-6482

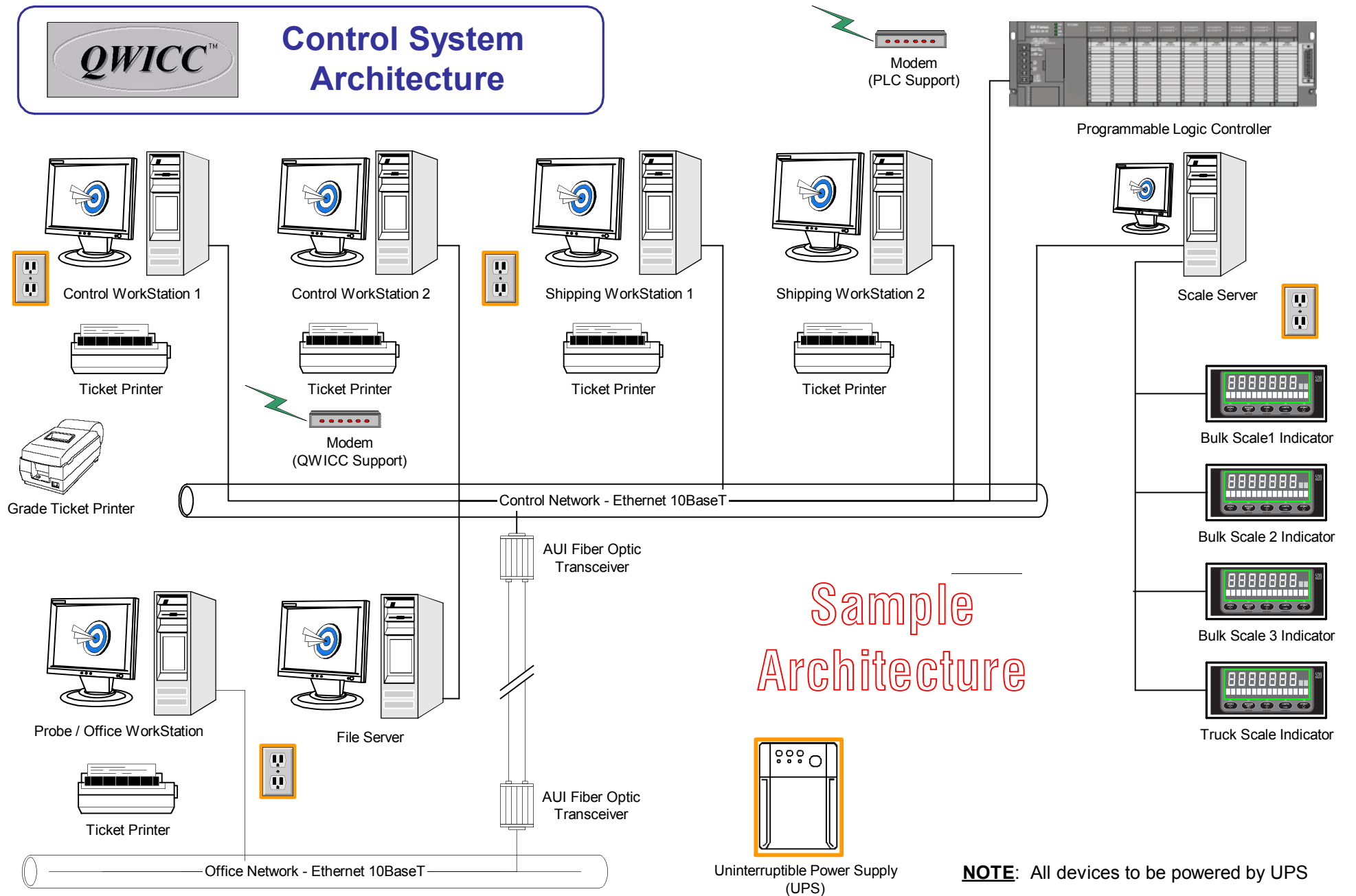
Fax: (204) 663-4934

Email: [info@superiortech.com](mailto:info@superiortech.com)

Web: [www.superiortech.com](http://www.superiortech.com)



# Control System Architecture



**NOTE:** All devices to be powered by UPS

Rev #	Date	Revision Description	Rev #	Date	Revision Description
0	27-Feb-06	Original Release			



CUSTOMER: As Required	
PROJECT: QWICC System	
DRW'N BY: GGF	REV: 0
APPR'V'D BY: RLN	PAGE: 1 of 1
DRAWING #: QWICC_ARCH_SAMPLE	