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CUSTOM CONTROL SYSTEMS & PROCESS AUTOMATION

Standard or Explosion Proof

From simple electro-mechanical controls to advanced PC supported control systems, using PLC, CPU, HMI (touch panels), Dantco can tailor a control or process automation package to meet all of your mixing process requirements for standard atmosphere or explosion proof.

- Automation of controls & data acquisition of mixing systems
- PLC, CPU, HMI
- AC Drives and Ethernet Interface
- Flow, weight, temperature, pressure, liquid level sensors, monitors and transmitters
- Timers with start switch and auto shut off
- Dispersers/mixers/agitators electronic motor controls with tachometer, ammeter displays
- Explosion proof (NEMA 7 & 9) and non-explosion proof (NEMA 1, 4, 12) enclosures
- Electric, pneumatic, and hydraulic controls and actuators
- Cabling, thermocouples, wiring

Example of Process Automation: Batch Controller for Mixing System

The PLC will control all logic and communicate speed and other information to the VFD Mixer Motor Drives to control and monitor the process. In addition, the PLC will monitor specified process variables such as tank level, product temperature and tank weight in to control the process. The PLC will use process information to determine when the mixing cycles are complete. The PLC will control product flow between mixers using pneumatic controls for pumps and valves.

The local HMI will allow an operator to select process recipes and monitor process variables and equipment status. The main screen will be programmed to depict the entire mixing process. An alarm log will be included to allow operators to monitor status and fault messages in one convenient place.

A desktop, office duty PC will be provided to allow personnel to view and control process data in the same manner as the local HMI. Data recording will be handled here so that batch data can be stored in Excel or another spreadsheet type program.