

Using the Model 1100 with ETILink™ DDE Server for Dye Process Automation

Eason Products Used:

- Model 1100-M03-A03
- ETILink™ DDE Server

Complimentary Products:

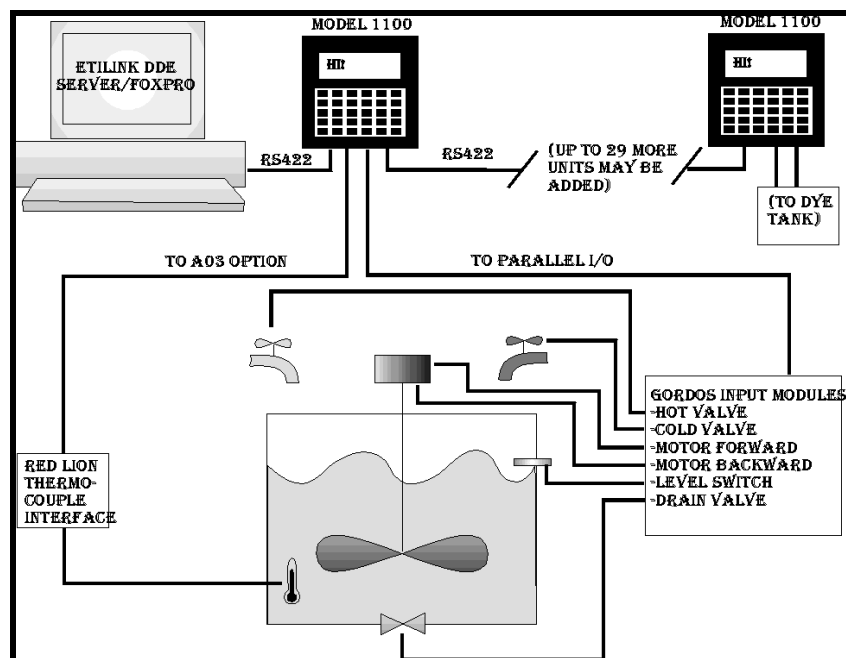
- Gordos Input Modules
- Red Lion thermocouple

Application Background:

The customer wanted to control and monitor the dying process for socks and hosiery. An operator interface at each dying tub would receive a recipe from a central PC and run the dying process.

Machine Objectives & Motion Requirements:

- To coordinate valves and motors via a PID loop.
- To provide a centralized, up to date database.
- To have an easy to use and flexible Operator Interface.



Eason Solution:

Upon start up, the PC would download the recipe from Fox Pro to each Eason Model 1100. These recipe values are stored as a percentage (i.e., 2% chlorine) to be scaled in the Model 1100 based on the size of the tubs. The Model 1100 then runs a PID loop based on the recipes to monitor water temperature, water levels, and to run the agitator motor forwards and back. The water temperature is adjusted with hot and cold valves, while the water levels are monitored with switches and a drain. The motors and valves are controlled through the parallel I/O through Gordos Input Modules. The thermocouple is hooked up to a Red Lion thermocouple interface. The 4-10 ma output of the Red Lion is converted to a set 2-10V signal with a 500 ohm resistor for input into the A03 option.

The operator can monitor the variables (temperature, valve states, current steps, etc.) numerically or graphically, and fine tune the process using the Model 1100 Operator Interface. The process variables for each station can all be monitored by the central PC with the data being logged into Fox Pro.

Eason Benefits:

The customer wanted the ability, flexibility, and ease of setup, as well as the easy installation and maintenance that the Model 1100 offers.

Submitted by:

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