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Description of application software:

The process programs are designed for 2 level indicators, 2 temperature indicators, 1 flow indicator, 1 level switch alarm, 1 conveyor motor, 1 stirring motor, 1 pump motor, 1 speed drive and 4 hand valves.

Level indicators and temperature indicators measure the value via the hydrostatic level transmitter and the temperature transmitter thus shown on the screen in the control room. The program illustrates 1 analog input signal which is the measurement value.

The electro-magnetic flow transmitter adjusts the value which is also represented in the control room and simultaneously based on that to control speed drive. There is 1 analog input signal which is shown as the measurement value from the flow transmitter. Program gets 1 output into the speed drive and 1 output for the positioning state. Besides that, there is the binary signal for controlling mode.

The speed drive manages the pump motor frequency. It receives the binary input as the frequency unit on/off and another binary input is to set mode as manual/auto. The program obtains 1 binary output signal to adjust the start/stop of the speed drive.

The level switch alarm which has a level transmitter checks the level value inside the powder tank and alarm in case of lower level limit. The input signal is as the level value, 1 output signal for setting alarm off whenever the switch alarm is triggered and 1 output signal for positioning state.

Each handvalve controls the flow rate in its pipe. The open limit state and close limit state are displayed in the control room. The program reads 2 binary input signal as the state being used and 1 out put to control the valve.

The control valve has a sensor in the field for characterizing and representing the state position of the valve to the control room. There is 1 input signal into the program as the sensoring value of position, 1 output for managing the valve and 1 ouput for the position feedback.

The conveyor motor shifts the powder from the powder tank to the mixing tank, otherwise the stirring motor blends the mixture. There is 1 input as the run state and 1 input as the electric center fault. Program sets 1 output to control motor and 1 output for manual/auto mode.

The pump motor is governed by the motor drive.There is also 1 input as the run state and 1 input as the electric center fault. The other is the input of frequency from motor drive for operating motor speed.