ABSTRACT

Along with expanding the industrial automaiton technology, industrial automation system have started to take over manual system and semi manual. Beside that matter required by flexibility and programmable from system of industry automation in order to give amenity in operation and treatment. As well as requiring of amenity in control and monitor production process in a network with real time.

PLC technology (Pogrammable Logic Controller) used to fulfill demand of flexibility and programmability. While monitor conduct of process and machine, data management is during process by PLC, bringing to born concept of SCADA (Supervisory and Data Acquisition), that is system including data communication, data management, monitoring, and conduct to PLC. This SCADA system and PLC become heart form modern industry automation in this time.

In this final project will be design interconnection system of data communication protocol form different types of PLC, such as PLC OMRON with type CSG1-H, PLC SIEMENS with type S7-200, PLC FESTO with type FC20. Each of PLC is connected to serial port in computer control and computer to other computer using TCP/IP format. This system is focused to give amenity to control, monitor, data acquisition and treatment production process in intregrated system. This application is made form Visual Basic 6.0.