

Solvent Distribution System

Electronic Component Manufacturer

JNE Automation's scope of work for this project was control system engineering, panel design, contractor supervision, hardware specification and software programming for a new solvent distribution system.

The system controlled the distribution of four solvents to four different tools. Each tool could request a combination of three of the solvents available. The level of the supply totes was monitored so that indication could be made upon the emptying of a tote. The system also monitored the waste produced by the tools. Waste pumped out of the tools was directed into waste drums. These drums were monitored via the distribution system so that once one drum was filled, the system would automatically switch to the next drum. The drums were placed on barrel scales, so that once a predetermined weight was met, indication could be made upon a drum being filled. As an added precaution, a "high-high" level switch was also inserted in each drum as an emergency stop.

The distribution system was interlocked with the four tools. Interlocks from the tools were requests for solutions. Interlocks to the tools were system status interlocks. These status interlocks were used to inform the operators that a solvent supply tote was empty or a waste drum was filled.

JNE Automation was responsible for:

- Engineering design
- Panel design
- Hardware specifications and procurement
- Electrical schematics
- Panel building
- PLC programming (using Matsushita FPWinPro5)
- Installation supervision of contractors
- System commissioning

