

SELECTED CONTROL SYSTEM PROJECTS

Weyerhaeuser Company
(Particleboard Plant Modernization)
Moncure, North Carolina

- ▶ Designed, programmed, and debugged (6) Modicon 584 PLC systems
- ▶ Designed, programmed, and debugged HMI system
- ▶ Designed and drafted control system installation and wiring drawings

Weyerhaeuser Company
(OSB Plant Optimization)
Elkin, North Carolina

- ▶ Modified (4) Allen-Bradley PLC systems
- ▶ Designed, programmed and debugged (2) Allen-Bradley 584 PLC systems
- ▶ Designed and drafted control system installation and wiring drawings

Georgia-Pacific Resins, Inc.
(Resin/Formaldehyde Plant)
White City, Oregon

- ▶ Designed and specified instrumentation for plant
- ▶ Designed and drafted control system installation and wiring drawings for Honeywell PlantScape system

Pope & Talbot Paper Mill
(Mill Maintenance Projects)
Halsey, Oregon

- ▶ Programmed A-B VFAC drives for various conveyors and pumps
- ▶ Programmed A-B PLC's using ICOM software for various systems
- ▶ Programmed A-B Panelview graphical user interface for Lime Kiln burner control
- ▶ Modified various existing Controlview operator interfaces
- ▶ Mill liaison for PLC motor control interface to Rosemount DCS (retrofit from Fisher-Porter panel mount controllers)
- ▶ Project management and design of instrumentation for various systems

Georgia-Pacific Corporation - MDF Plant
(New Medium Density Fiberboard Plant)
Monticello, Georgia

- ▶ Designed fiber optic Ethernet LAN with (7) A-B 5/40E PLC's, (6) P100 HMI's, (2) QC PC's, and (1) maintenance PC
- ▶ PLC and HMI programming with ICOM Wintelligent suite software package
- ▶ Designed MCC's with VFAC drives with remote I/O
- ▶ Power distribution SCADA system using CH-Westinghouse IMPACC series III software
- ▶ Provided debugging and start-up services on site
- ▶ Conducted operator training classes on-site

Weyerhaeuser Paper Mill
(Secondary Fiber Cleaning and Screening Modifications)
North Bend, Oregon

- ▶ Designed A-B PLC 5/25
- ▶ Designed A-B Panelview HMI
- ▶ Debugged, start-up, and commissioned the system
- ▶ Provided operator training

Eljay Corp. (Division of Raytheon) China National Chemical Co.
(New Plant)
Huji Town, Hubei Province, China

- ▶ Designed A-B SLC500 PLC with EEPROM memory module
- ▶ LV MCC with VFAC drives, starters, and PLC integrated into one structure. Program loaded prior to shipment. Start-up and training of Chinese engineers in PLC programming, in China.

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SELECTED CONTROL SYSTEM PROJECTS (continued)

Dow Corning Silicon Refiner (Silica Fume Recovery and Packaging) **Springfield, Oregon**

- ▶ Used load sensor to control VFAC drive which determined the density of compaction of silica fume used to densify concrete to 30,000 PSI
- ▶ Designed and programmed A-B PLC and operator control stations
- ▶ Debugged, started-up, and commissioned the system and later returned to tune-up for delivery of large order for the Denver airport runway

International Paper Co. Paper Mill (Drive Through Truck Dump) **Gardiner, Oregon**

- ▶ Designed A-B PLC and programmed
- ▶ Designed Panel-Mate operator interface and control panels
- ▶ Wrote Operator Training manuals and conducted training classes
- ▶ Provided debug, start-up services, and commissioned equipment

International Paper Co. Paper Mill (Screen Room Revisions) **Gardiner, Oregon**

- ▶ Programmed A-B PLC
- ▶ Designed control panels
- ▶ Provided debug, start-up services, and commissioned equipment

James River Paper Mill (Pallet Inserter for Tissue Line) **Halsey, Oregon**

- ▶ Designed TI PLC program
- ▶ Provided installation drawings

Scott Paper Co. Paper Mill (Screen Room Revisions) **Mobile, Alabama**

- ▶ Upgraded Modicon PLC's to Model 984 for major screen room renovations to mill with nine paper machines
- ▶ Designed 3rd story semi-circular, bay window control room looking out over the entire woodyard
- ▶ Designed 38 foot-long, semi-circular, mimic graphical control panel with seven color CCTV monitors above windows viewing woodyard
- ▶ Programmed two PLC's; one with over 1000 networks of logic and data exchange with DEC supervisory computer network including an operator terminal in control room
- ▶ Provided debug, start-up service, and commissioning of equipment consisting of three months on site and 24 hour coverage after maximum shut-down windows of 4 hours (Silo draw-down time to prevent paper machine shut-down)



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