

ADM provided detail design, PLC programming, HMI configuration, dryer tuning and commissioning for the control system used in the production of wood pellet fuel.

Our client's goal was to develop a distributed control scheme using Rockwell Automation's ControlLogix PLC platform in various process sections which would capitalize on existing infrastructure to convert their sawmill operation to a wood pellet manufacturing facility.

ADM provided detailed design effort for control system components and produced tender packages for procurement. Constraints for the control cabinet designs included site equipment general arrangement and integration of existing motor control centers. Having completed the hardware and wiring designs, ADM worked closely with OEM's of the material handling equipment, the wood dryer and the pellet extruder machine to start up and commission the new processes.

ADM developed PLC & HMI program applications for the facility based on process narrative descriptions provided by the OEM's. The PLC program was structured to modularize the various process sections to facilitate ease of maintenance and troubleshooting. Communication protocols used between the PLC processor and its remote I/O racks was ControlNet and from the PLC to the RSVIEW control station was industrial Ethernet.

With the dryer system and wood pellet extrusion machine being pilot project designs from the respective OEM's, considerable emphasis was directed to the commissioning and process tuning phases for combustion controls of the dryer system and throughput of the wood extrusion machine.

ADM provides ongoing technical support to this facility.

