



Sunday, April 30, 1995

Submitted to: Wes Sanderson

Philip Morris

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Progressive Design Inc.

Re: Ashland Project Splice Mechanism Speed

This is a follow-up to the acceptance test on 4/21/95. The mechanism was set-up to run 100 meter/minute for the acceptance test. The controls are capable of operating from 50-200 meters/minute. An analog input and a frequency to analog converter will need to be added to the PLC to monitor the line speed. Parameters in the PLC will need to be changed to accommodate the various Daptc speeds. These include but are not limited to:

- Accumulator position setpoint. Higher speeds will require additional accumulated material.
- PID Loop Minimum Output. The initial speed output for the accumulator must closely approximate the speed necessary for the accumulator "UP" speed.
- PID Loop Tuning Parameters. The PID loop utilizes P&I settings. These parameters will change with the speed of the system.
- Servo Restart-position. The servo motor is restarted as the accumulator rolls approach the "Home" position. This is a setpoint that will need to vary with the speed of the Daptc.

As part of the Phase 2 work we will add the additional analog inputs. Data blocks will be used to store the parameters for 50-100-and 150 meters/minute. The PLC will compare the speed of the Daptc and load the appropriate settings.

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